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REPORT
OF THE
INDUSTRIAL COMMISSION
ON
TRANSPORTATION

(SECOND VOLUME ON THIS SUBJECT),

INCLUDING

TESTIMONY TAKEN SINCE MAY 1, 1900, REVIEW AND TOPICAL
DIGEST OF EVIDENCE, AND SPECIAL REPORTS ON
RAILWAY LEGISLATION AND TAXATION.

VOLUME IX
OF THE COMMISSION'S REPORTS.

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MEMBERS OF THE INDUSTRIAL COMMISSION.

Mr. ALBERT CLARKE, *Chairman.*

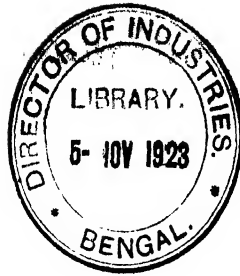
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[Extract from act of Congress of June 18, 1898, defining the duties of the Industrial Commission and showing the scope of its inquiries.]

SEC. 2. That it shall be the duty of this commission to investigate questions pertaining to immigration, to labor, to agriculture, to manufacturing, and to business, and to report to Congress and to suggest such legislation as it may deem best upon these subjects.

SEC. 3. That it shall furnish such information and suggest such laws as may be made a basis for uniform legislation by the various States of the Union, in order to harmonize conflicting interests and to be equitable to the laborer, the employer, the producer, and the consumer.



INDUSTRIAL COMMISSION,
December 5, 1901.

To the Fifty-seventh Congress:

I have the honor to transmit herewith on behalf of the Industrial Commission a report on the subject of Transportation prepared in pursuance of the act of Congress approved June 18, 1898.

This is the second report of the Commission on this subject, the first constituting Volume IV of the Commission's reports. The present volume includes testimony taken since May 1, 1900, together with a review and digest thereof, and special reports on railway legislation and on the taxation of transportation corporations.

The conclusions and recommendations of the Commission on this subject will be submitted in its Final Report.

Respectfully,

ALBERT CLARKE,
Chairman.

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REVIEW OF EVIDENCE.

The following review covers only the evidence of the witnesses whose testimony is printed in the present volume, which has been taken since May, 1900. This testimony should be read in connection with that of earlier witnesses which was published in the preceding report of the Industrial Commission on transportation questions, Volume IV. On many subjects the evidence in the former volume was much fuller than that in the present volume. It has been the aim in the selection of the witnesses whose testimony is herewith published to cover subjects which were less fully investigated previously. A considerable amount of evidence bearing on transportation questions is also given in several other reports of the Industrial Commission. The subject of railway labor is exhaustively discussed in a special report printed in Volume XVII. The taxation of transportation companies is covered quite completely in the special report on the taxation of corporations, printed in Volume XI. Alleged discriminations by the railroads in favor of industrial combinations are discussed more or less extensively in the testimony on trusts and combinations, Volume I and Volume XIII. In the agricultural testimony, Volume X, there are a number of important statements regarding the system of grain elevators and their relations to the railroad companies. Other less extensive statements as to transportation questions will be found, by reference to the digests and indexes, in nearly all of the volumes published by the commission.

CONSOLIDATION OF RAILWAYS AND COMMUNITY OF INTEREST.

Mr. Schiff, of the banking firm of Kuhn, Loeb & Co., Mr. Woodlock, of the Wall Street Journal, and several other witnesses¹ refer to the tendency recently manifested toward the establishment of great consolidated railroad systems and toward community of interest between railroads hitherto competing. These witnesses generally assert that the primary motive in forming these combinations has been to prevent excessive competition, and they attribute the movement more or less directly to the effect of the interstate-commerce law in prohibiting pooling and agreements, and thus forcing the railroads to compete, often to the extent of cutting rates below the line of profit. The method by which community of interest is established is said to be largely by purchase of a certain proportion of the shares of one railroad by another railroad or by its largest owners, while consolidations are frequently brought about by lease or by outright purchase of one road by another.

Mr. Schiff, in particular, thinks that the tendency toward community of interest does not necessarily indicate a further movement toward absolute combination of railroads and the absorption of the smaller companies into the larger ones. He says that it certainly does not indicate a tendency toward a general combination throughout the country; that, for example, the Eastern trunk lines have a territory naturally distinct from that of the transcontinental lines west of the Missouri, and that there apparently is no disposition on their part to secure control of the Western lines. This witness and others allude to the recent purchase by the Union Pacific Railroad of substantial control over the Southern Pacific. Mr. Stubbs, third vice-president of the Southern Pacific, explains that the motive for this movement is to make a continuous line of the Union Pacific and Central Pacific, which latter road is owned by

¹ Woodlock, p. 462; Schiff, pp. 770, 771; Ripley, pp. 289, 291, 294; Greene, p. 478; Stubbs, pp. 757, 764.

the Southern Pacific. The movement toward a consolidation of the railroads in Colorado is also referred to, as well as the struggle of the Union Pacific and the Northern Pacific to secure control of the Burlington during the spring of 1901.

Mr. Stubbs, Mr. Schiff, and several others,¹ mostly representing railroad companies, but including some shippers and independent witnesses as well, are inclined to think that the consolidation of smaller railroads into great unified systems will prove generally beneficial to the public. It will, in their judgment, make possible important economies in operation, will facilitate the prompt handling of freight and passengers, and will tend to improve the physical character of the properties. All these advantages, it is asserted, have already been observed as the result of consolidations recently effected. Many of these witnesses think, also, that the establishment of community of interest and harmonious relations between roads hitherto competing is likewise advantageous to the general public. It does away with the extreme competition which has often led railroads to transact business at a loss—a practice which these witnesses believe can not be to the interest of the public—and especially it removes the temptation to make personal discriminations, which accompanies extreme competition and to some degree also the temptation to discriminate between localities. Several witnesses declare that, in their opinion, it will not be possible for railroads, by combination, to establish excessive rates. There will always be the competition of sections of the country and of different countries with one another for the marketing of products, and the competition of water carriers still exerts a powerful effect. Public opinion is also a strong influence in controlling rates. A representative of a San Francisco board of trade is inclined to think that the establishment of through routes from ocean to ocean will prove advantageous to California by doing away with the motive of the railroads, as at present operated, to build up the cities of the Middle West at the expense of that State.²

Two or three witnesses, however, notably Professors Ripley,³ Adams,⁴ and Parsons, think that the tendency toward railroad consolidation and community of interest, while perhaps in some senses advantageous is likely to result in increased charges because of the absence of competition, and that, therefore, additional control should be given to the Interstate Commerce Commission over railroad rates. Professor Parsons especially lays stress on the public danger of placing such power in the hands of a few individuals, and thinks, accordingly, that Government ownership is desirable.⁵ One representative of the railroads thinks that there will ultimately be, and should be, several great systems in each section, working in some degree of harmony, but still competing. He thinks entire cessation of competition would be bad for the railroads, as well as the people.⁶

POOLING.

The subject of pooling appeared to be of less interest to railroad men and others in 1901 than it was two or three years earlier, when the Industrial Commission first took testimony regarding it. The tendency toward community of interest is said by several witnesses to have made pooling less an object to be sought by the railroads. Two or three representatives of the railroads, however, think that the legalization of pooling, and especially of agreements as to rates, is still desirable,⁷ and two representatives of chambers of commerce, as well as the secretary of the Minnesota Railroad Commission, agree in this point, though they would favor proper regulation of rates if pooling were permitted. Professor Ripley also thinks that pooling and rate agreements might be

¹Stubbs, pp. 757, 764; Greene, pp. 484-487; Thomas, p. 558; McLeod, p. 571; Rice, p. 742; Markham, p. 434; C. F. Adams, p. 829; Jackson, p. 847; McGovern, pp. 682, 683; Langley, p. 874.

²Wheeler, p. 747.

³Pages 281, 289, 294.

⁴Page 386.

⁵Page 149.

⁶McGovern, p. 682.

⁷Thomas, p. 558; Griswold, p. 515.

deirable in order to make rates more steady and more free from discriminations, but that regulation by the Interstate Commerce Commission would certainly be necessary if pooling were permitted.¹

It is stated by one witness, representing the Memphis Freight Bureau, that there is believed to be an arrangement among the railroads at that point for the pooling of cotton business. The representative of the San Francisco Board of Trade thinks also that there is a "gentlemen's agreement" among transcontinental roads for the fixing of rates, which is very effective, although it is so arranged as not to violate the interstate-commerce act.² A representative of the Southern Pacific Company says also that the transcontinental railroads hold conferences as to rates, while Mr. McGovern, of the Southern Classification Committee, says that the rates in the South are made chiefly by agreement among the railroads in the several traffic associations, although no road is bound to abide by the rates established.³

CAPITALIZATION AND REORGANIZATION OF RAILROADS.

Professor Ripley and Professor Parsons assert that American railroads are in many instances largely overcapitalized. While some roads, especially prior to recent consolidations, have kept their capital down to the basis of actual investment or even less in the case of a few lines which had been largely improved out of earnings, in many other cases the capital has been repeatedly swelled without corresponding increase in the plant investment. The recent increase in the capitalization of the Chicago and Alton railroad from \$30,000,000 to nearly \$100,000,000 is instanced as an illustration. It is held by Professor Parsons that the constant motive of privately owned railways is to conceal their true earnings by increasing capitalization, and he considers this one argument in favor of government ownership.⁴

Mr. Woodlock, railroad editor of the Wall Street Journal, and several witnesses representing railroad companies deny that American railways in general are overcapitalized. They compare the capitalization of American railroads, which is said to average about \$61,000 per mile, with that of the British railroads, which averages from \$220,000 to \$240,000 per mile. It is asserted that the British railroads systematically add to capital every possible expenditure for improvement, however slight. These witnesses say also that the increase in capitalization of American roads has in many cases been justified by the improvement of the roads out of earnings. Some of them are also inclined to maintain that earning capacity is the proper basis of capitalization. Those who take this position add that the fall in the prevailing rate of interest has made it possible to issue larger amounts of bonds on a given earning capacity than before, and that the issue of stocks is a comparatively unimportant matter, because they do not create a fixed charge. Mr. Woodlock, however, admits that there have been instances of the abuse of capitalization in recent years; he refers particularly to the Kansas City, Pittsburg and Gulf Railroad, and apparently thinks also that the Chicago and Alton is now overcapitalized. This witness, as well as Mr. Thomas, of the Erie Railroad, are disposed to think that some regulation of capitalization by the Government would be perhaps desirable as a protection to investors. Professor Ripley speaks especially with approval of the Massachusetts law which requires that stocks and bonds of railroads and street railroads shall be issued only on the basis of actual investment and subject to the approval of the State railroad commission. He asserts that this provision has greatly increased the power of the railroad commission as regards rates and other matters, since the railroad companies have frequently to come to it for privileges. The chairman of the Massa-

¹ Ripley, pp. 289, 291, 294; Teleberg, p. 272; Anderson, pp. 639, 642; Wheeler, pp. 748, 749.

² Davant, p. 7; Wheeler, p. 749.

³ Stubbs, p. 764; McGovern, p. 654.

⁴ Ripley, pp. 291, 292, 306; Parsons, pp. 154, 155. See also as to the Chicago and Alton, Woodlock, p. 458; Schiff, pp. 775, 776.

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chusetts commission also expresses approval of the results of this regulation of the issue of securities. He says that securities may be issued for certain specified purposes, and that the board, with expert assistance, carefully considers how much capital may be required for construction or other given objects. Reference is also made to the Minnesota law regulating the issue of securities by railroads in the same way as in Massachusetts.¹

Some of these witnesses discuss also somewhat the proper basis for capitalization. Professor Adams, statistician of the Interstate Commerce Commission, is disposed to hold that actual investment should be the basis. He describes the detailed investigations of a special commission in Michigan regarding the actual value and cost of reproduction of railroads, and declares that it is desirable to make such investigations, not merely as a basis for taxation, but as a basis for estimating proper rates. It is impossible, he says, to decide as to the justice of rates unless we know how much return they secure to the railroads on their actual investment, rather than upon a capitalization which may be inflated. This witness thinks that the United States Government should undertake careful valuations of railroad property for these reasons.² Mr. Woodlock and two or three other witnesses, however, are inclined to think that earning capacity is in general a proper basis for capitalization, and that in any case the amount of capital can not greatly affect rates, because competition of other roads and many other influences of an independent character enter into rates.³ They especially insist that cost of reproduction is not a proper basis for capitalization. Mr. Schiff declares that the amount of securities issued is a matter of little importance, that railroads must adapt themselves to the value of one another in competition, and that investors soon learn their real values.⁴

Reorganization and its effect on capitalization.—The effects of recent railway reorganizations are discussed by several witnesses. It is stated that many railways have long been burdened with large bond issues at high rates of interest. The same influences which depress general business conditions affect railroads severely, and often make them unable to pay interest, whereupon they are put into the hands of receivers. The depression following 1893 resulted in the bankruptcy of a very large proportion of the railroads of the country. In case of bankruptcy, according to Mr. Greene, some of the large security holders usually constitute themselves a committee of reorganization. The endeavor is to simplify the finances of the railroad, to cut off such branches or leased roads as may not be profitable, but to hold the system together as far as possible, and in particular to reduce fixed charges. Witnesses generally agree that recent reorganizations have not usually resulted in a reduction of the total capitalization of railroads, but that they have either lowered the absolute amount of bonds by issuing stocks in their stead, or by securing lower rates of interest, have reduced the fixed charges. In some instances, it is admitted, little restriction has been placed upon the issue of stocks in reorganization, but several witnesses hold that the existence of a large amount of stock, which has no imperative claim on earnings, has little effect upon the prosperity of railroads or upon the general public.⁵ Reference is made especially to the reorganizations of the Erie, Reading, and other roads.

One witness, Mr. Rice, thinks that a mistake is often made in appointing the president of a bankrupt railway as receiver. If his bad management has caused bankruptcy, the mere fact that he is familiar with the system does not justify leaving him in charge of it.⁶

¹ Thomas, pp. 551, 556; Schiff, pp. 772-776; Woodlock, pp. 456, 458-462; Ripley, pp. 292, 293; Teisberg, p. 205; Jackson, p. 843.

² Adams, pp. 381 ff.

³ Thomas, p. 551; Woodlock, pp. 456-458; Talcott, p. 635.

⁴ Page 773.

⁵ Greene, pp. 487, 488; Ripley, pp. 291, 297, 298, 304; Rice, p. 740; Talcott, p. 636. See also as to anthracite coal-roads, post, p. xxxiii.

⁶ Rice, p. 741.

FREIGHT TRAFFIC AND RATES.

Discussion of reasonableness of existing rates.—Several witnesses representing railroad companies assert that railroad rates in the United States have in general steadily and rapidly decreased, and that they are much lower than in most European countries. Comparisons are made as to the grain rates from Chicago to New York, which show that the all-rail rate in 1868 was 42.6 cents per bushel, and that in 1899 it had fallen to 10.23 cents a bushel, while the lake-and-rail rates had fallen in fully as great proportion, and stood in 1899 at 6.63 cents. Mr. Markham presents a table showing that the average receipts per ton per mile for hauling freight in the United States are only 97 cents, while in Prussia the average rates are 1.32 cents per ton per mile, and in other European countries they are still higher. As indicated in another connection, figures presented by advocates of Government ownership show also that the average freight rates in the United States are lower than in European countries; but it is argued that the wide differences in conditions make fair comparisons impossible, and that the longer hauls in the United States especially tend to reduce the cost of transportation.¹

Increase of rates in 1900.—Several witnesses allude to the increase in freight rates at the beginning of the year 1900, and some of them assert that the existing rates, especially in the Southern and Western sections of the country, are excessively high. Mr. Langley, a representative of the Merchants' Association of New York,² states that these advances in 1900 were nearly all made by the process of changing commodities from lower classes to higher classes, and in some instances by the abandonment of commodity rates, lower than the lowest class rates, which had formerly existed, or by raising the commodity rates. This witness declares that out of about 3,000 items in the Official classification, 818 were advanced in January, 1900, and that the average increase in rates on these articles between New York and Chicago, as the result of these changes, was 35.5 per cent. The Western classification committee about the same time advanced the classification—that is, practically advanced the rates—of 240 items, the average increase on them from Chicago to Missouri River points being 47.4 per cent. In February, 1900, continues Mr. Langley, the Southern classification was revised, about two-thirds of the articles being advanced in class, with an increase of rates of from 30 to 50 per cent.

Mr. Langley and two or three others hold that these advances in freight rates were unnecessary and unjustifiable; that the earnings of the railroads during 1899 were much larger than they had been for many years previous, and rendered them fair profits; the increased tonnage growing from the general prosperity of the country sufficiently increasing the revenues of the railroad companies without advances in rates. Mr. Langley complains especially of the employment of the method of advancing rates by means of changes in the classification. He says that this practice is confusing; that many shippers do not understand the manner in which rates have been advanced, and that it results in great inequalities. The action of the railroads in transferring goods from one class to another is entirely arbitrary, and instead of making approximately the same increase in rates for all commodities, certain classes have been discriminated against. Manufactured articles in particular were generally advanced by the classification changes in 1900, while raw products and heavier commodities were left unchanged or advanced to a less degree. Another witness, who consumes large quantities of coke in Michigan, asserts that the advance in the rate on coke from Pennsylvania during the year 1900 was no less than 55 cents per ton. He gives also illustrations of advances in the rates on alkali products manufactured by his company, and complains particularly of the excessive rates from Michigan to various Southern cities. It appears, for example, that it costs \$195 to haul a carload

¹ Thomas, p. 660; Markham, p. 430. See also post, p. XXXVII.

² Pages 860-877.

of bicarbonate of soda from Wyandotte, Mich., to Atlanta, 716 miles, as compared with only \$48 to New York, 700 miles. This witness also asserts that the freight rates in Western territory are very high on the products of his company, as well as on other products. He believes that it would be to the interest of the railroads in these less highly developed sections to reduce freight rates generally, with a view to building up manufactures and other industries, and thus ultimately increasing their traffic and profit.¹

Mr. McGovern, of the Southern classification committee, admits that there were numerous increases in rates in the Southern territory by means of classification changes during the year 1900, although he asserts that the rates on various other articles were reduced. He says that prior to 1900 the classification of freight in the Southern territory was not made by one unified organization, and that there were many inconsistencies and many instances where classifications were unduly low. The establishment of one classification committee for the entire Southern territory made possible a general revision and the adjustment of inequalities. The fact that prices throughout the country had risen greatly, and especially that the prices of articles used by the railroads themselves had so increased as to add materially to the cost of operation, seems to this witness to justify fully such increases of rates as were actually made.

Mr. McGovern asserts further that most of the numerous changes which were made and against which there are complaints were only technically advances. Prior to this time there had been two columns of rates, one for goods carried at the risk of the carrier under ordinary common-law rules, and one for goods carried at the owner's risk by a bill of lading exempting the carrier from liability except for certain faults of its own. As a matter of fact, practically 99 per cent of the business in the Southern territory, as elsewhere, had been carried on bills of lading under the limited liability or owner's-risk system. The lower rates for owner's risk, which apparently had not before been applied even where such limited bills of lading were used, were entirely abolished. About 1,700 articles which had been in the carrier's-risk column only were made subject to owner's risk, bearing the same rates as before. At the same time a new rule was passed providing that if the carrier assumed the risk the rate should be 30 per cent higher. By later action the carrier's-risk rates were reduced, being made 20 per cent higher than the published rates. Mr. McGovern holds that this was only technically an advance, because in practice the higher rates had formerly been actually applied in ninety-nine cases out of a hundred. This witness says further that a later change in classification advanced the rates on 400 or 500 commodities and reduced them on about 100. The changes in many cases were on unimportant articles and the rates on many large classes of traffic are the same as before 1900.

Two or three other witnesses from the South, including a representative of the shippers of Memphis, were inclined also to justify the advance in Southern freight rates for the reasons above stated, and also because the Southern railroads have never in the past been profitably operated. It is also stated that the establishment of cotton factories in the South has reduced the amount of railroad transportation by substituting the less bulky cotton goods for cotton itself, and that for this reason rates should be somewhat higher than before.²

A representative of the Southern Pacific Company declares that transcontinental freight rates have not been advanced recently, but have steadily decreased since 1891. He asserts also that there is no ground for complaint on the part of California fruit shippers regarding excessive charges, though they had complained somewhat regarding the charges for refrigeration on the part of the private car companies.³

One witness also states that while numerous advances were made in the official

¹ Bacon, pp. 74, 77, 80.

² McGovern, pp. 656-662; Dunlap, pp. 2-4; Davant, p. 6.

³ Stable, pp. 100-101.

classification in 1900, an order was soon afterwards issued which reduced by 10 or 20 per cent the rates on many of the articles which had been advanced.¹

Influences affecting freight rates and policy of railroads regarding them.—Several witnesses representing the railroad companies assert that neither is it the policy of the railroad companies to advance freight rates to an unreasonable figure, nor would it be practicable for them to do so, because of the competition of other railroads and of water carriers (see below, p. xxi), and especially because of the competition of different sections of the country and of different countries. This position is especially affirmed in connection with discussion as to the possible effect of the establishment of community of interest between previously competing railroads. It is held that it must always be to the interest of the railroad companies to build up the country through which they operate, and that in order to do so they must make rates which will enable the industries of that country to compete with those of other sections and of other countries in the world markets. The railroad manager who undertakes to put rates at an exorbitant figure because he has an apparent monopoly would soon dry up the source of his business. At the same time these witnesses hold that excessive competition and "rate wars" between railroads are undesirable, that it is not to the interest of the public that railroads should fail to earn reasonable profits, and that rate wars lead to discriminations between places and between individuals.²

The competition of Canadian railroads.—Two or three witnesses allude to the competition of the Canadian railroads as an important factor in the fixing of freight rates in the United States. It is pointed out that the Canadian roads have often demanded the right to charge somewhat lower rates in hauling goods from one part of the United States through Canadian territory to another part of the United States than those made by the roads of this country themselves, on the ground of the greater distance and inconvenience of transportation through Canada. It appears that formerly there was a differential of 10 per cent allowed to the Canadian Pacific Company on transcontinental shipments. The roads in the United States, it is alleged, frequently cut rates secretly in order to do away with the advantage of this differential. Finally, after a prolonged rate war, the Canadian Pacific was forced to abandon its claim to a differential, and its business with San Francisco has been greatly reduced. The importance of Canadian transportation to the prosperity of Boston is especially mentioned by one or two witnesses.³

Freight classification.—Several witnesses describe the system of freight classification, Mr. McGovern, chairman of the Southern classification committee, entering into the subject with especial fullness. There are three general classifications in the country—the Eastern or Official classification, the Southern, and the Western. Each is adopted by a classification committee, consisting of representatives of each important railroad company. In earlier days each railroad made its own classification of freight. Later on various traffic associations made classifications, and only more recently were the present wide-reaching systems adopted. The Southern classification committee had its origin only in 1899. By the system of freight classification commodities are grouped into from five to nine classes, and the rates made by each railroad for articles in one class are the same. In determining the class an article shall take, consideration is given as to its value and ability to pay the rate, and, though apparently to a less degree, as to weight, bulk, and cost of transportation. In addition to the regular classes, there are many heavy commodities, such as usually move in carload lots, which are given special rates, known as commodity rates. The railroads hold that these articles can not afford to pay the regular class rates even of the lowest class. Each railroad determines largely its own commodity rates, the differ-

¹ *Greene*, p. 618; cf. *Markham*, p. 438.

² *Greene*, pp. 581, 582, 584; *Schiff*, p. 774; *Greene*, pp. 484-487.

³ *Greene*, p. 482; *Ripley*, p. 298; *Howe*, pp. 701-702; *Stubbs*, p. 768; *Markham*, p. 442.

ences in the character of goods transported by different railways making it desirable, so it is stated, that these commodity rates should vary on the different lines. Mr. McGovern declares that commodity rates can not be considered personal discriminations since all shippers on a given railroad receive the same rates. Nor are they an injustice as between different classes of shippers. Just as the prices of some classes of commodities must be relatively lower than those of other classes in order to meet competition, so, says this witness, the railroads must put down the rates on certain important commodities in order that they may handle them at all. Even these reduced rates make a profit to the railroad companies.¹

It is admitted by representatives of the railroad companies that the power to put a commodity in a given class is part of the power to make rates, even although the rates upon a given class may be fixed at different figures by the various railroads. Reference has already been made to the complaints of shippers regarding the advance in freight rates in 1900 by means of classification changes.

Two or three witnesses representing shippers favor the establishment of a uniform national classification of freight, subject to some modifications in detail, on the different railways, by means of commodity rates. They assert that the present threefold system of freight classification is very confusing to shippers, especially where goods pass from the territory of one classification to that of another. They hold also that the inequality between rates in different sections, resulting from the placing of commodities in different classes, is in many instances an injustice. It is suggested that an association composed of business men and railroad men, under the general supervision of the Interstate Commerce Commission, should be formed to establish such a uniform classification.²

Representatives of railroad companies in some instances think that greater uniformity of classification would be desirable, but all who testified before the commission hold that the establishment of a single national classification is impracticable. In some sections of the country there may be a very large traffic in a commodity which in other sections is of much less importance to the transportation lines. Under such circumstances, it is asserted, a difference in the classification is imperative. It is argued, especially, that if a uniform classification should be attempted the number of special commodity rates made by the separate railroad companies would necessarily be greatly increased, so that there would really be no simplification as compared with present methods. These witnesses state that there has been a steady movement toward harmony between the railroads in matters of classification and that as the country develops there may be further movement in the same direction; but they believe that any compulsory introduction of uniform classification would be entirely inadvisable. It is also suggested that the matter is of less importance than is often supposed, because each railroad company can make its own rates, whatever the classification may be.³

The suggestion that the Interstate Commerce Commission should itself fix the classification of freight is especially opposed by railroad witnesses on the ground that the commission is incompetent to handle such a difficult and complex undertaking.⁴

Export and import rates.—Several witnesses allude to the practice of the railroad companies in making lower rates on goods destined to foreign countries by ocean routes, and on goods brought from foreign countries to interior points, than are made on the same class of goods for the same haul when they come from or are destined to domestic points. The Supreme Court of the United States has upheld the making of low import rates under certain conditions on the ground of the necessity of meeting

¹ Ripley, pp. 302, 303; McGovern, p. 652 ff.; Talcott, pp. 632, 633; Griswold, pp. 617, 618, 623.

² Bacon, pp. 74, 76, 82, 84; Wilson, p. 698; Wheeler, p. 749.

³ Stubbs, pp. 766, 767; Talcott, p. 633; Griswold, pp. 617-619; Greene, pp. 485, 486; Nicholson, pp. 726-727.

⁴ Griswold, p. 618.

the competition of water transportation direct from foreign countries. Witnesses representing the railroad companies defend the practice chiefly on this ground. They also justify low export rates on the ground that thereby the markets for American products are extended. It is asserted that unless special export rates for American grain were made, it could not be sold in Europe in competition with grain from India, Argentina, and other sources. While the railroad companies could not afford to haul all of the traffic at the same rates which are sometimes made for export and import commodities it is asserted that these low rates do not involve an absolute loss. The amount of traffic of a railroad can be increased without increasing the fixed charges, and even a considerable part of the ordinary operating expenses do not vary much with the amount of traffic handled. If the railroad companies can cover by their rates the actual additional cost of operation necessitated by hauling these goods, with a moderate profit, it is to their advantage to take the traffic, and ultimately the result may even be a reduction of the domestic rates. It is also asserted that ordinarily no city or community is injured by the diversion of traffic from it through export and import rates, since the traffic would not be hauled at all unless such low rates were made. Reference should be made to the preceding volume on transportation for a discussion from the standpoint of the shippers of flour as to the effect of export grain rates on their business.¹

Carload rates.—It appears from the testimony of several witnesses that it is a common practice on the part of the railroad companies to make lower rates on goods carried in carload lots than those shipped in smaller quantities, the difference in some instances being greater than the mere difference in the cost of handling would justify. The merchants of New York² complain of the discrimination between carloads and part carload rates, especially in the Southern territory. The representative of the New York Merchants' Association³ asserts that the changes in the Southern classification in 1900 increased the number of carload ratings, and increased the difference between them and part carload rates. He holds that this makes it in many cases almost impossible for Northern merchants and manufacturers to ship directly in moderate quantities to retail dealers in the South, and gives an unfair advantage to the jobbers in the Southern trade centers, who can bring in goods at the low carload rates and distribute them to the smaller towns in less quantities.

In reply to this it is stated by the representative of the Southern classification committee⁴ that the Southern classification makes fewer carload ratings than the official and Western classifications, and that the Southern railroads have not especially attempted to build up the interior points by carload differentials to the disadvantage of Northern cities.

The fact that the interests of the shippers and merchants in different sections of the country as to railroad rates often differ greatly is evidenced by the attitude of the Pacific coast jobbers, which is precisely the opposite of that of the New York merchants, in that the Western merchants insist that they should be allowed sufficient carload differentials to permit them to control to a considerable extent the jobbing trade of the Pacific coast. This matter is alluded to in another connection.⁵

Subsidiary freight and traffic organizations—Private cars.—It appears from the testimony of several witnesses that the system of fast freight lines is becoming a less important feature of the transportation business than it was formerly. In many instances in the earlier days cars were owned by separate corporations, which operated over several railway systems and which aimed especially to facilitate through

¹ Vol. IV, pp. 69-77 of Digest; Ripley, pp. 299, 301; Thomas, p. 557; Greene, pp. 484, 485, 487; Markham, p. 431; Stubbs, p. 761.

² Langley, pp. 861-863.

³ Langley, pp. 862.

⁴ McGovern, pp. 662-665.

⁵ See below; Wheeler, p. 744; Stubbs, p. 758.

shipments. At present it is stated that most of the so-called fast freight lines are merely cooperative arrangements between the railroad companies for the purpose of conveniently handling through freight and of establishing trade names in the soliciting of business.¹

On the other hand, it is stated² that private shippers in very many instances own cars, especially those of a peculiar character, such as refrigerator cars, for handling their own goods, while in other instances there are important corporations whose sole business is the operation of such special classes of cars. The railroad companies pay rental for the use of these private cars. The shippers of California fruit, in particular, are disposed to complain of the high charges made by refrigerator companies and to favor the operation of refrigerator cars by the railroad companies directly. Mr. Stubbs, of the Southern Pacific Company, however, doubts whether this change would prove as advantageous, either to shippers or to the railroad companies.³

Railway clearing houses.—Mr. Nicholson, manager of the Central Railway clearing house, Buffalo, describes in considerable detail the methods of accounting by that organization, which has charge of the division of revenue as regards through freight on practically all lines passing through Buffalo and Niagara Falls. The system secures great economy and accuracy in the adjustment of balances between the different railroad companies, and also facilitates the keeping of revenue and operation accounts by the separate railway systems. For a further description of the methods employed reference should be made to the digest or the original testimony.⁴

DISCRIMINATIONS IN RESPECT TO PERSONS.

Professor Ripley, Professor Parsons, Mr. Wilson, of the Cincinnati Board of Trade, and two or three other witnesses⁵ assert that the practice of granting personal discriminations of various kinds in favor of certain shippers still exists in many cases, although they admit that the evil is less serious than formerly. Professor Parsons considers the practice of granting discriminations as a strong argument in favor of Government ownership, and asserts that it does not exist in countries where the government operates the railroads. This witness alludes especially to the recent investigation by the Massachusetts railroad commission regarding discriminations on the roads in that State, particularly in local traffic not subject to the interstate-commerce law. He asserts that it was shown that secret rebates and reductions in rates ranging from 10 to 73 per cent had been made, and that the practice was almost universal. Allusion is also made to the evidence as to discriminations in favor of the Standard Oil Company by underbilling of cars, by fixing rates from points where that company has refineries lower than those from the refineries of independent competitors at other points, and in other ways.

Professor Ripley declares that rates on through shipments from New England to the West were being cut very heavily during 1900 and 1901, in part because of the tendency toward the accumulation of empty cars at the seaboard. Mr. Wilson asserts that railway discriminations are much more common than the public believes. A representative of the San Francisco Chamber of Commerce says that the transcontinental railroads formerly cut rates secretly, in order that they might thus overcome the differential of 10 per cent which the Canadian Pacific had forced the railroads to allow. He says that the San Francisco merchants agreed not to ship over the Canadian Pacific and that rate cutting then ceased. An officer of the Southern Pacific Company thinks that the railroads east of the Missouri River may have cut rates in some cases on account of this differential.

¹ Nicholson, pp. 724-731. Griswold, pp. 618-614; Guillaudeau, p. 446; Talcott, p. 635.

² Adams, p. 386.

³ Stubbs, p. 769; Wheeler, p. 754.

⁴ Nicholson, pp. 719-726; Digest, pp. xcvi, xcvi.

⁵ Ripley, pp. 287-289; Telsberg, p. 366; Wilson, pp. 696, 697; Parsons, pp. 126-134; Wheeler, p. 748.

Several witnesses assert that discrimination by railroads is the greatest of all possible evils to shippers, and that it makes less difference whether the rates are high or low than it does whether they are uniform or otherwise. The enormous power of railroads over the prosperity of individual businesses is emphasized. It is also declared that discriminations are nearly always in favor of large shippers, of the strong against the weak, and that trusts and combinations have been especially fostered by them.

The methods of discrimination are referred to by some of the witnesses above named and also by two or three representatives of railroads. It is stated that secret rebates are still made, sometimes by methods which it is impossible to detect. Sometimes the discrimination is by an underclassification of freight or by underbilling. In certain instances shippers deceive the railroads regarding the classification of goods, and railway officers assert that it is very difficult to prevent this practice, although inspectors are maintained for that purpose. Mr. McGovern, a representative of the railroads, holds that railroads seldom connive in underclassification or underbilling of goods. It is also asserted that railroads sometimes agree to pay cartage in order to secure traffic of particular shippers.¹

Mr. Langley asserts that the recent advances made in the various railroad classifications do not apply, in general, to articles made by great combinations, but affect those produced especially by smaller establishments.²

Several railway officers and others maintain that the granting of discriminations has been very greatly reduced, especially within the past year or two, when the prosperity of the railroads, as well as the agreements and community of interest which have been established between them, have tended to minimize the practice. These officers in several cases admit by contrast with present conditions that discriminations have hitherto often existed, even in the face of the interstate-commerce law. The fact that a number of railroad men urge the advantages of the consolidation of railroads, community of interest, and pooling, especially on the ground that such establishment of harmony will do away with the secret discriminations which result from excessive competition for traffic, is also, of course, an admission of the existence of the practice. A representative of the Pittsburg Chamber of Commerce declares, however, that that body abandoned its transportation board, which had aimed especially to prevent discrimination, because there were no complaints.³

DISCRIMINATION BETWEEN PLACES—LONG AND SHORT HAUL RATES.

Generally.—Professor Ripley, Professor Parsons, Mr. Wilson, of the Cincinnati Board of Trade, and one or two other witnesses, criticize the practice of the railroads in making discriminations between places, and particularly in making unduly low rates for larger towns where competition between carriers is active, while maintaining excessively high rates for intermediate places which are not subject to competition.⁴ It is declared by the witnesses above named, and incidentally by some others, that the railroads very generally make the rates to competitive points much lower than those to intermediate points. The interstate-commerce act prohibits railroads from charging more for a shorter haul over the same track than is charged for a longer haul, unless the circumstances be dissimilar. Water competition has been held by the courts to constitute a difference in conditions justifying a lower rate for the longer haul. It is stated by several witnesses that the railroads in many cases, more particularly in the South, make these lower rates for the longer haul to points where there is no water competition, but only where there is competition between

¹ Ripley, pp. 286-290; Griswold, p. 623; Nicholson, p. 726; McGovern, pp. 672-674.

² Langley, pp. 867-870.

³ Markham, pp. 432, 433; Griswold, pp. 614, 615; Talcott, p. 627; Nicholson, p. 728; Greene, p. 487; Woodcock, pp. 463, 464; Anderson, p. 639; Dunlap, pp. 2, 4; Stubbs, pp. 762, 765.

⁴ Ripley, pp. 296, 297; Wilson, p. 696; Parsons, p. 136.

different railroads. It is asserted further that the railroads thus possess an enormous power over the prosperity of communities, and especially that they attempt constantly to build up the larger towns at the expense of the smaller ones. The undue aggregation of people in the cities is considered by some of these witnesses as an evil in itself. One witness argues that under Government ownership of railroads the motive to make such discriminations between places disappears. Others, in alluding not only to the discriminations in favor of larger towns, but to those between certain cities and sections themselves, declare that the railroads assume an unjustifiable degree of paternalism, and that they ought not to deprive cities and sections of their natural advantages of location and resources by making rates which put other less favorably situated places on an equality.¹

Southern basing-point system.—Mr. Wilson in particular discusses the long and short haul discriminations in the Southern States. The railroads, he asserts, have adopted almost universally what is known as the basing-point system, giving lower rates to certain competitive centers than to smaller noncompetitive points, even those nearer the point of origin of the traffic. In theory these basing points have been established by water competition, but in practice unduly favorable rates are given to many towns where there is no water competition, greatly to the detriment of the smaller places. Mr. McGovern, of the Southern classification committee; Mr. Markham, of the Illinois Central Railroad, and two or three other railway officers² admit the existence of this practice in the South, and admit that basing-point rates have been extended to places where there is no water competition. They assert that railroads reaching towns not subject to water competition have insisted on the right to establish rates which will enable those towns to do business with others having water competition. As railroads have been constructed and towns have grown up, these favorable rates have been extended from one to another with a view to creating jobbing centers from which the surrounding territory may be supplied. Mr. McGovern insists that it would not be just to require the railroads to grant as low rates to smaller places as they are forced to make to these competitive points. Mr. Markham presents the same argument, but lays a special stress on the influence of coastwise and river transportation in the forcing of the establishment of low rates to trade centers. He says that although in some instances no boats are operated on rivers reaching these centers, the mere possibility of establishing such means of transportation forces the railroads to make low rates. This witness especially maintains that the intermediate communities are not harmed by the granting of low rates to competitive points. The railroad could not get the through traffic at all unless it made such rates, so that it can not be said that the traffic is diverted from the small towns. The through business may not contribute to the fixed charges of the railroad, or may contribute proportionally less than the local business, but it does leave a profit after paying the added expense of transportation which it actually causes, and by means of this profit the railroads are even enabled to reduce rates to the intermediate points below what they would otherwise have to be.

Alleged discrimination against Middle West in rates to Southern States.—Mr. Wilson, a representative of the Cincinnati Board of Trade, asserts that the railroads leading from the North to the Southern States have discriminated against Cincinnati, Chicago, and other Middle Western cities in making rates. He says that formerly Cincinnati did a very large business in the distribution of goods through the South, but that when more railroads were built competition became active until an agreement was reached in 1879 between the railroads from the Eastern cities and those from the Western cities as regards the Southern traffic. By this agreement the Eastern roads were to maintain low rates on manufactured articles which would favor the cities of the Eastern seaboard, while the roads leading South from the Ohio River were to be

¹ Wheeler, p. 745; Wilson, p. 695.

² McGovern, pp. 678-680; Markham, pp. 436-439; Dunlap, p. 2; Talcott, p. 629.

given control of the traffic in grain, packing-house products, and similar articles. Since 1879 manufacturing business has moved westward, and these Western cities now demand—but, according to Mr. Wilson, demand in vain—concessions in rates which will enable them to compete fairly with the Eastern cities in the Southern markets. The witness gives numerous instances of the wide difference of rates from the Eastern and Western cities to the South. Thus, while the distance from Cincinnati to Atlanta is only 54 per cent of the distance from New York to Atlanta, the rates from Cincinnati to Atlanta are 94 per cent of the New York rates, and still greater differences exist to some other points. A suit brought by the Western shippers before the Interstate Commerce Commission, with a view to securing more favorable rates, is still pending before the Supreme Court of the United States. Mr. Wilson says further that there is some conflict between the interests of some of the Western cities, Chicago and Cincinnati especially acting together, while Louisville and St. Louis seem indifferent to this movement. The witness also holds that St. Louis has been favored in rates on agricultural products to the South, as compared with Cincinnati. It is the hope of Cincinnati people that the lease of the Cincinnati Southern Railroad, a road which was built by the city of Cincinnati to facilitate its Southern trade, to the Cincinnati, New Orleans and Texas Pacific Railroad, which is controlled by the Southern Railway, will do away with the motive on the part of the Southern Railway to discriminate in favor of the Eastern points which it reaches.¹

To these complaints regarding discriminations against Cincinnati it is replied by Mr. Guillaudeau, of the Old Dominion Steamship Company, that the volume of trade from these Western cities to the South is rapidly increasing, and that the Eastern railroads feel that the rates made by the Western lines are even more favorable than those from the Eastern cities. It is also held that the competition of coastwise steamship lines largely determines the rates made by the Eastern railroads.²

Alleged discriminations against Pacific coast cities.—In the spring of 1901 a case was being heard before the Interstate Commerce Commission, involving the freight rates from interior cities to the Pacific coast. The jobbers of St. Louis, Chicago, and other Middle West cities were undertaking to secure an order from the commission directing that the rates from those cities to the Pacific coast should be lower than those from New York and the Atlantic seaboard, on the ground that the distance is shorter. They also demanded that the considerable differentials, which had been made by all of the transcontinental railroads except the Northern Pacific and Great Northern, in favor of carload lots as against smaller shipments, should be reduced in order that the Middle West jobbers might more readily ship goods directly to retailers on the Pacific coast. A third demand was that the rates on certain similar classes of articles, which have hitherto been different, should be made the same in order that several classes might be shipped in a single package at a rate lower than that previously charged on the highest rated article in the package, a change which would also facilitate small direct shipments to coast towns. These demands were opposed by the San Francisco merchants, particularly by the Pacific Coast Jobbers' Association, and also by several of the transcontinental railroads.

Mr. Wheeler, representing the Pacific coast jobbers, and Mr. Stubbs, representing the Southern Pacific Company, were heard before the Industrial Commission, but no testimony of the representatives of the other side of the case was taken. Mr. Langley, of the New York Merchants' Association, testifies briefly on the same subject, agreeing in the position taken by the two other witnesses. Mr. Wheeler and Mr. Stubbs maintain that, although the distance from the Middle Western cities to the Pacific coast is considerably less than the distance from the Atlantic seaboard, the low cost of water transportation justifies a low rail rate from seaboard to seaboard to meet water competition. It is held that the rates from the Middle Western cities to the Pacific coast ought to be even higher than those from the seaboard. At present

¹ Wilson, pp. 687-694.

² Pages 447, 448.

they are usually the same. To make the intermediate rates lower than those from the Atlantic seaboard would be to deprive New York and San Francisco alike of their natural advantages of location growing out of the cheapness of water transportation. These witnesses further assert that the practice of making differential rates in favor of carload shipments to jobbing centers is common throughout the country, and that it is eminently desirable that the jobbing centers of each section should in this way be given the advantage of their natural location.

Both of these witnesses maintain that there is stronger competition on the part of the sea carriers at San Francisco now than there has been for some time before. They allude especially to the establishment of the American-Hawaiian Steamship Line, which makes regular voyages by way of the Straits of Magellan, and carries freight at very low rates, and with promptness and regularity.

These witnesses further argue that the ordinary interpretation of the long and short haul clause of the interstate commerce act by the Interstate Commerce Commission and other authorities, as well as by shippers generally, has been such as to justify the making of lower rates for longer distances where water competition exists. The rates from New York to San Francisco by rail are lower than those to interior points in California and adjacent States, the local rate back from San Francisco to interior towns being added to the through rate. It is maintained that the same principle should apply both ways, and that interior cities in the East should pay as high or higher rates to the Pacific coast than those from the Atlantic seaboard.¹

Alleged discrimination against Denver.—Mr. Griffith, a representative of the Denver Chamber of Commerce, alludes to the case of *Kindel v. The Atchison, Topeka and Santa Fe Railroad*, which is also discussed more fully in the first report of this commission on transportation.² This witness states that the decision of the Interstate Commerce Commission in that case was that the railroads might not charge more from Denver to the Pacific coast than from the Missouri River and more eastern points, and it was believed at the time of his testimony (May, 1901) that the changed rates would very soon be put in force by the railroad companies. Mr. Stubbs, of the Southern Pacific Company, says that the railroads had had no desire to make the rates from Denver so high, but that the Interstate Commerce Commission would not recognize railroad competition as a justification for making the rate for the longer distance less than that for the shorter distance, while the railroads were not willing to admit that Denver was affected by sea competition from the Eastern seaboard to the Pacific coast, and was therefore entitled to a lower rate than other mountain points. To reduce the rates from Denver, without the justification of sea competition, would have meant a reduction of rates from other points in the West also.³

The representative of the Denver Chamber of Commerce states also that manufacturers in Colorado complain that the rates on raw materials from the East are unduly high as compared with those on manufactured products, so that they are placed at a disadvantage. The most vigorous complaint, however, comes from the Denver jobbers. This witness presents figures showing that the rates from Denver to common points in Montana, Utah, and other neighboring States are nearly as high as the rates from Missouri River points to those States, while the rate from Missouri River points to Denver is also nearly as high as the rate from Missouri River to these more distant common points. Denver jobbers are therefore at a great disadvantage, since the rate from the East to Denver, plus the rate from Denver to these common points, is very much higher than the direct rate from the cities on the Missouri River and farther east. This witness thinks that a new base line for making of rates should be established for Denver and cities parallel with it, so that they should have a fair opportunity for becoming distributing centers.⁴

¹ Wheeler, pp. 744-747; Stubbs, pp. 758-760, 763.

² Vol. IV, pp. 251-264.

³ Stubbs, p. 760; Griffith, pp. 849, 852.

⁴ Griffith, pp. 849-854.

*Miscellaneous discriminations between places.*¹—Several witnesses also discuss other alleged discriminations between particular places. Reference should be made to the digest, pages cvii-cxx, for a fuller summary of this testimony. The principal alleged discriminations which are discussed are those in favor of Savannah as against Atlanta, in favor of Birmingham as against Atlanta, and in favor of Norfolk on through traffic over the Southern Railway through Asheville as against Charleston on traffic through the same city. Reference is also made to the differentials established by the trunk lines as between the Eastern seaboard cities. This subject is, however, more fully discussed in the previous report of the Industrial Commission on transportation.² The commissioner of the Memphis freight bureau thinks that the Southern railroads make an unjust discrimination against the cotton mills in North and South Carolina and in favor of those in Massachusetts and the North. The freight rate on cotton from Memphis to cotton mills in New England was stated to be based on a rate of 55½ cents to Boston, while the rate to Carolina mill points was stated at 59 cents. The rates from Memphis to Liverpool are sometimes lower than those to Carolina points. This witness does not believe that the railroads should be forced to reduce their rates to the Southern mills unduly, but thinks that there should be some change.³ Mr. Markham, of the Illinois Central Railroad, says that the rates made by the railroad companies on cotton from Southern centers to the seaports for export shipment are practically determined by the ocean rates, the port which secures the lowest ocean rate to Liverpool fixing the rail rate to all the ports.⁴

GOVERNMENT REGULATION OF RAILROADS.

Powers of Interstate Commerce Commission.—Several witnesses, especially representing shippers, but including two or three railroad officers, the railroad editor of the Wall Street Journal, and one or two others, think that the Interstate Commerce Commission has comparatively little power at present to regulate railroad rates. They are inclined to hold that the commission has exercised a somewhat beneficial influence through public opinion and the publicity which it has given to railroad questions. Two or three railroad officers especially declare that the commission has accomplished all that Congress expected it to accomplish, or that it is wise for the country that it should accomplish. Several other witnesses, however, believe that the powers of the commission should be increased in various directions, and assert that it is now not able to correct numerous abuses which exist, especially discriminations in rates as between different localities. Mr. Jackson sees no reason why the Interstate Commerce Commission should not have all the powers which the Massachusetts Railroad Commission possesses as regards State railroads.⁵

The more general thought of shippers and disinterested witnesses is that, while the commission should not be permitted to prescribe all rates in the first instance, because of the complexity of the problem involved, it should have the power to revise rates, either directly when tariffs are submitted by the railroads, or on complaint, and to put its decisions into immediate effect, pending an appeal to the courts. The long delays resulting from the present system of appeals to the courts are held to work great hardship and injustice to shippers, who are compelled to continue for months or years paying the rates against which complaint is made. These witnesses believe that the burden of appeal should rest upon the railroads rather than upon shippers.⁶

¹ McGovern, pp. 680-686; Markham, p. 441; Langley, pp. 874-876.

² Vol. IV, p. 62 of Digest.

³ Davant, pp. 5-8.

⁴ Page 442.

⁵ Jackson, p. 848.

⁶ Ripley, p. 290; Wilson, p. 690; Bacon, p. 76; Telsberg, p. 872; Haddock, p. 535; Langley, pp. 877-882; Wheeler, p. 735; Davant, p. 6.

Several representatives of railroad companies, together with one or two other witnesses, vigorously oppose the idea, proposed in some quarters, of giving the Interstate Commerce Commission power to fix rates generally, asserting that the commission has not the necessary expert knowledge, especially in view of the wide difference in conditions and localities. They hold that the railroads have many most difficult elements to consider, but that it is to their own interest to make reasonable rates and to build up the country which they reach. It is asserted also that to give the commission general power of revision amounts to giving power to fix all rates. These witnesses, moreover, oppose the suggestion that the decisions of the commission should be enforced pending appeal, declaring that there is much less possibility of recovering damages against shippers because of losses from unduly low rates, if the judgment of the courts is ultimately in favor of the railroad, than there is of recovery against the railroad if the decision is in favor of the shippers. They hold that such an important power as that to decide as to the justice of a rate ought not to be left to any authority less final or less conservative than the Supreme Court.¹

Inspection of accounts.—Professor Adams, statistician of the Interstate Commerce Commission,² thinks that that commission ought to be empowered to require uniformity in the financial accounts, as well as in the operating accounts, of railroads, and to inspect their books directly. There will be some objection, on the ground that the secrets of the railroad might be ascertained, but the last convention of State railroad commissioners approved the proposition, and it is necessary for the State and national commissions to have such supervision of railroad accounts if they would properly perform the duties of regulation imposed upon them. Mr. Greene, of the Audit Company of New York, believes that a greater degree of publicity of railroad accounts is desirable, but he thinks it would be better, instead of having direct inspection by Government officers, to require the examination and auditing of accounts by expert private auditors, under bond, only the results of whose investigations should be made known.³ Mr. Rice, who was connected with an investigation of the Reading Railroad Company several years ago, holds that there are many ways in which the accounts of railroads, though correct on their face, may be deceptive to investors and stockholders. Railroads which have other companies subordinate to them are especially able, if they wish, to make the accounts misleading. This witness, therefore, believes in inspection of railroad accounts by the Interstate Commerce Commission.⁴

Two or three other witnesses, however, do not favor an extension of the powers of the Interstate Commerce Commission in regard to the accounts of railroads. Mr. Schiff, a banker, especially declares that railroad corporations seldom deceive the public in regard to their true earnings and the state of their finances.⁵

State railroad commissions.—Mr. Jackson, of the Massachusetts board of railroad commissioners, says that this board has general supervision over both railroads and street railroads within the State. It has absolute control in reference to questions of grade crossings and all safety appliances. It has control over the issue of securities, and the law requires that they shall be issued only for actual value. It has also power to pass on the construction of new railroads. The board does not audit the books of the railroad companies, but requires detailed reports. Its powers regarding passenger and freight rates are nominally only advisory, but in practice the recommendations of the board are nearly always carried out by the railroads, especially through the influence of public opinion, while in a few instances the board has appealed to the legislature, which has usually passed laws sustaining its position.⁶

¹ Woodlock, pp. 464, 465; Thomas, pp. 557, 558; Griswold, p. 620; Stubbs, p. 766; McGovern, pp. 665-668.

² Pages 384, 385.

³ Pages 479-481.

⁴ Pages 739-741.

⁵ Nicholson, pp. 727, 730; Woodlock, p. 464; Schiff, p. 778.

⁶ Pp. 842-843.

Reference is also made to the powers of the Minnesota railroad commission. The secretary of this commission says that the law permits it to fix rates within the State. Formerly it could act only on complaint, but by an act of 1897 it can proceed on its own motion. Under a decision of the United States Supreme Court it is held that the orders of the commission are subject to review by the courts. The commission has recently made an order regarding the rates on hard coal from Duluth to New Ulm, from which appeal has been taken to the United States Supreme Court, and this appeal was still pending at the time of the witness' testimony. This commission also has power regarding the inspection of grain and the regulation of elevators.¹

WATER TRANSPORTATION.

General importance and influence.—Two or three witnesses point out the great importance of coastwise, lake, and river transportation, both in itself and in its influence on railway rates. Mr. Markham, of the Illinois Central Railway, declares that railway rates throughout the country are influenced by the transportation on the oceans and the Gulf, on the Mississippi and other large rivers, and on the Great Lakes, the tendency in all cases being to bring down rates even between points far removed from actual water routes.² The secretary of the Chamber of Commerce of Pittsburg maintains that transportation by water is not to be considered as an injury to railroads, but that the two classes of transportation are complementary to one another, water carriers being especially adapted to the heavy commodities which require less rapidity of transportation. The general development of industry which water transportation makes possible is a benefit to the railways.³ The influence of water transportation in causing the reduction of rates for long hauls by the railroads, as compared with the short hauls, is especially discussed in another place. (See pp. xv-xvii.)

Coastwise transportation.—Mr. Guillaudeu, president of the Old Dominion Steamship Company, and Mr. Hayne, solicitor of the Merchants and Miners' Transportation Company, two of the leading Atlantic coastwise steamship lines, give testimony regarding the conditions of coastwise transportation, and representatives of railroads, particularly in the South, also discuss this subject.⁴ These witnesses agree in stating that the various railroads operating from the Atlantic coast cities, particularly those south of Baltimore, are to a considerable extent financially interested in the coastwise steamship lines. Nearly all of the steamship lines are either owned altogether by the railroads or are to a certain extent controlled by them. Nevertheless it is asserted by most of these witnesses that there is a very material degree of competition still existing between the Atlantic water lines and the rail lines, and that the water lines largely determine the rail rates as regards certain commodities in certain territory. Mr. Langley, of the New York Merchants' Association, and Mr. Wilson, of the Cincinnati Board of Trade, however, hold that the relations of the water and rail lines are so close that there is practically no competition as regards rates.⁵

The steamship companies are in most instances members of the various traffic associations of the Southern States, and thus have an influence in determining the general basis of freight rates. Differentials are regularly allowed in favor of the coastwise lines, on the ground that the transportation is slower and more subject to risk and that goods must be rehandled in many cases before reaching their destination. Through rates are made by the steamship lines in connection with railroads, the division of receipts being usually on the principle that water lines shall receive

¹ Telsberg, pp. 361-363.

² Pp. 428-430.

³ Anderson, pp. 637, 642, 645.

⁴ Guillaudeu, pp. 442-451; Hayne, 413-425; McGovern, pp. 663-665; Talcott, p. 623.

⁵ Wilson, p. 689; Langley, p. 874, 875.

as much for carrying freight 2 miles as the rail lines receive for carrying it 1 mile, on account of the greater cheapness of water carriage. Witnesses especially assert that there are some classes of traffic, especially in very bulky goods, which belong naturally to the steamship lines, while there are other classes of traffic, especially in perishable commodities, from which they are largely excluded. It is also stated that there is a growing tendency on the part of the coastwise steamers to adopt the same classification for freight, based on value largely, as the railroads, although there are certain conditions of water transportation which make departures from the ordinary methods of classification necessary. Mr. Stubbs, of the Southern Pacific Company, says that in transportation between the Atlantic and Pacific coasts by water the basis is largely that of space occupied, the result being that there are wide differences in the rates on different classes of goods as proportioned to their value, and that transcontinental rail lines are forced to make commodity rates on a somewhat similar basis in order to make water competition.¹

American merchant marine and ship subsidies.—Mr. Howes, a member of the Boston Chamber of Commerce, who has also been largely interested in ocean transportation, makes an argument against the proposed policy of granting subsidies for the construction and operation of American ocean steamships.² He traces the history of the rise and decline of the American merchant marine. The decline, which was brought about in the first place by the civil war, continued on account of the early expensiveness of constructing iron vessels in this country. The witness believes that at present, by virtue of the great reduction in the cost of producing iron in this country, American shipyards can build most classes of vessels nearly, if not quite, as cheaply as foreign shipyards. He charges especially that American iron and steel manufacturers have sold plates and other materials for vessels to English shipbuilders at much lower rates than they make to American shipbuilders. He also holds that American shipyards are relatively better able to compete with those abroad in the construction of high-class vessels, in which a large amount of labor is required³ than in the construction of tramp steamers and other less expensive vessels, where the raw material is the chief cost. Mr. Howes lays great emphasis on the superior economy of American labor, despite the higher rates of wages.

Finally, this witness asserts that the policy of ship subsidies, as practiced in the United States in the early days, was by no means successful, and that no European country except France makes any attempt to subsidize freight steamers. In England the subsidies are altogether in favor of fast passenger and mail steamers. France has undertaken to subsidize vessels, but her merchant marine is declining relatively to that of other countries. Mr. Howes thinks it especially desirable that Americans should be permitted to buy vessels abroad and operate them under the American flag; and he points to the great development of the Norwegian shipping trade, much of which is carried in vessels bought abroad, as showing the possibilities of this practice.

Representatives of the coastwise steamship lines seem to doubt whether the granting of ship subsidies would be of any advantage to them.⁴ A representative of the Mississippi River transportation interests at New Orleans also is disposed to doubt the desirability of ship subsidies. The secretary of the Pittsburg Chamber of Commerce, however, expresses himself as strongly in their favor.⁵

The Nicaraguan Canal.—Two or three witnesses declare incidentally that the construction of the Nicaraguan Canal would be of great advantage to the country.⁶ A representative of the San Francisco Board of Trade argues especially that the canal will be advantageous to California by permitting cheaper transportation of its products to Europe and to Eastern markets. He thinks that this advantage will offset

¹ Stubbs, p. 763.

² Pages 703-709.

³ Hayne, p. 421; Guillaudeau, p. 480.

⁴ Bryant, pp. 399-400; Anderson, pp. 644, 645.

⁵ Bryant, p. 397; Anderson, pp. 638, 644.

the fact that Eastern cities will be brought into more direct relation with the Orient, and will thus tend to deprive San Francisco of some of the trade which it now enjoys. Mr. Stubbs, of the Southern Pacific Company, however, believes that the injury from this latter cause to California's interests will more than offset any advantages that can come to the State from the construction of the canal.¹

Oriental trade.—Mr. Wheeler, of the San Francisco Board of Trade, thinks that there is a great future for the trade of the United States in the Orient. He refers especially to the recent rapid increase in the amount of transportation between San Francisco and Asiatic ports. He says that the trade with the Philippine Islands, aside from that in army stores, is as yet comparatively unimportant, but thinks that as soon as the islands are completely pacified there will probably be a great development in commerce there.²

MISSISSIPPI RIVER TRANSPORTATION.

Amount of traffic—Difficulties encountered.—Mr. Bryant, a representative of the Steamboat Captains and Owners' Exchange of New Orleans, and Mr. Markham, of the Illinois Central Railroad Company, give somewhat extended testimony regarding Mississippi River commerce and its effect on rail transportation.³ These witnesses agree in stating that the amount of transportation by the river has decreased during the past 20 years as compared with rail transportation. Mr. Bryant asserts that there has been some absolute increase since 1890; the census of that year showed 6,401,000 tons of freight carried on the river and its tributaries, while statistics compiled by the witness in 1900 show 7,693,000 tons carried. Mr. Markham presents figures showing that the aggregate tonnage forwarded from St. Louis in 1880 was 1,037,000 tons, while in 1900 it was only 245,000 tons. Both these witnesses point out, however, that the statistics of Mississippi commerce are very unsatisfactory, there being no definite authority for collecting them and no systematic methods of keeping records on the part of the vessels.

The decline of traffic on the Mississippi and its tributaries is attributed chiefly to the great improvements in rail transportation. Mr. Bryant asserts also that the railroads have discriminated in their rates for the purpose of destroying the river traffic, charging extremely low rates between points on the railroad which are reached by the river, while making up the loss thus occasioned by high rates on intermediate traffic. Mr. Markham, on the other hand, while affirming the necessity of meeting river rates in rail transportation, holds that the influence of the river in lowering rates extends, though to a somewhat lower degree than in the case of points actually reached by the river, to practically all territory for a long distance on each side of the river. Mr. Bryant says also that the decline in river traffic is due in part to the greater shortness of the navigable season, which is occasioned by the denudation of the forests and by the confining of the river between strong levees; and that moreover the improvements of the river have not been effective in preventing danger to navigation, while especially the bridges over the river are, in many instances, a great hindrance. Both these witnesses point out that the trade of New Orleans with foreign countries, by way of the river and the ocean, is considerably hampered by the insufficient depth of water at the mouth of the Mississippi. The Eads system of jetties and improvements deepened the channel to 26 feet, but vessels drawing 30 feet or more would come to New Orleans if practicable, and these larger vessels could carry freight more cheaply than those which now enter the river. Mr. Bryant refers especially to the difficulty of navigating the Ohio River, and says that the large coal traffic coming down the river is carried only during very short periods. Two other witnesses speak of the system of dams, which is being established with a view to equalizing the flow of water in this river.⁴

¹ Wheeler, p. 751; Stubbs, p. 768.

² Wheeler, pp. 751, 752.

³ Bryant, pp. 387-400; Markham, pp. 425-440.

⁴ Anderson, pp. 643, 647; Wilson, p. 697.

Effect of river competition on rates.—Mr. Bryant states that the freight rates on the Mississippi River are much lower than the railway rates, in part because of the slowness and risks of river transportation. He asserts also that when the river is low, so that transportation is more difficult, the rail rates are raised. Mr. Markham says that the river competition practically fixes the rates for railroads between all the important river points. Moreover, according to this witness, the influence of Mississippi River traffic affects rail rates from and to points far distant from the river. Chicago, for example, insists upon having rail rates to Southern points which will enable it to compete with St. Louis in the distribution of goods, while other smaller towns insist that the railroads reaching them shall make rates to enable them to compete with Chicago. A similar chain of influences extends through the South and secures to points far distant from the river a reduction of rates. This subject is discussed in another light in connection with the long and short haul discriminations in the Southern States.¹

THE ANTHRACITE-COAL SITUATION.

During 1900 and 1901 there were movements among some of the railroads chiefly concerned in the anthracite-coal traffic toward the establishment of a community of interest. A subcommission of the Industrial Commission took the testimony of a number of officers of the railroads and of coal operators in New York during February, 1901, and two or three other witnesses were afterwards heard before the commission at Washington. See also testimony on this subject in the Mining Volume. (Vol. XII, Digest.)

Relation of railroads to anthracite-coal industry.—The railroads reaching the anthracite-coal fields are the Pennsylvania, the Lehigh Valley, the Reading, the Central Railroad of New Jersey, the Delaware, Lackawanna and Western, the Delaware and Hudson, the Erie, and the New York, Ontario and Western. A very large proportion of the coal produced is transported by these railroads to New York and other tide-water points, apparently not more than 10 or 20 per cent being used in Western and Southern markets.²

Each of the railroads named controls one or more coal-producing companies. In the case of the Reading, the Lehigh Valley, and several of the other railroads, these coal companies are, according to the witnesses representing these interests, virtually identical with the railroads, being organized separately chiefly because of the legal restrictions which prevent railroads from operating coal mines. The accounts of these railroad coal companies are, however, kept entirely distinct from those of the railroads, and they pay the regular freight rates to the railroads. The coal companies controlled by the railroads also buy large quantities of coal from so-called "individual," or smaller, operators.³

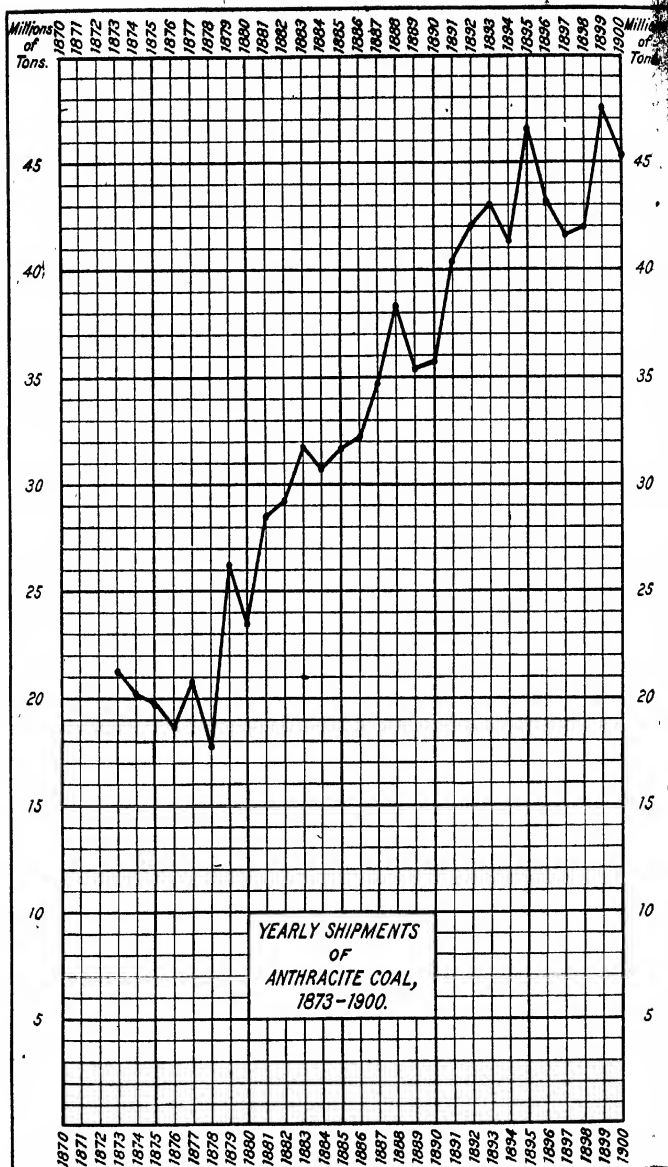
The proportion of the coal produced by the railroad companies has apparently been until recently about two-thirds, the output of individual operators being variously stated by witnesses at from 30 to 34 per cent. Recent purchases, by the railroads, of the mines of independent operators have reduced this percentage materially. The secretary of the Anthracite Coal Operators' Association says that at present the output belonging to independent producers is probably about 29 per cent,⁴ but other witnesses put it at a lower proportion. It appears also that these railroad coal companies hold a very considerable proportion of the undeveloped or reserve coal lands, so that in the future, as present mines are exhausted, their control of the actual output will presumably be greater. It is maintained that the reason why the railroads bought

¹ Page XVI.

² McLeod, p. 562.

³ Seward, p. 508; Harris, pp. 597, 600; Greene, pp. 471, 474; McLeod, p. 561; Starns, p. 570.

⁴ Fleming, p. 636.



--- READING, 1901. --- * ERIE, 1901. ---

up coal lands was the desire to make their transportation business permanent. The operations of individual concerns with small capital were likely to be irregular, while traffic might be diverted from one railroad to another so long as the mines were independently owned.¹ The proportion of coal produced by independent operators and by the railroad companies, respectively, varies considerably in the case of the different railroads. On the Reading, for example, only about 1,000,000 tons out of 8,000,000 or 9,000,000 tons hauled yearly is produced by independent operators. The proportion of the independent operators is largest in the case of the Lehigh Valley Railroad, which in 1900 mined only 2,922,000 tons out of 7,675,000 tons carried.²

Establishment of community of interest.—It appears probable from the statements of witnesses summarized below that the practice has long prevailed among the anthracite-coal railroads of acting more or less in harmony as regards the division of the traffic and the fixing of prices of coal. Apparently it was partly in view of the difficulty of maintaining effective agreements and thorough harmony in the past that the recent movement toward community of interest or ownership has taken place. Witnesses representing financial interests, independent operators, and officers of the railroads concerned all agree that there has been established a certain degree of community of interest, affecting more especially the Reading, Lehigh Valley, Jersey Central, Delaware, Lackawanna and Western, and Erie railroads. These railroads carried in 1900 about 72½ per cent of the entire anthracite shipments. The precise nature of the combination is not made clear, but it seems to have been brought about chiefly by the purchase or interchange of stocks by a few large capitalists, which gives them a powerful influence in the management of all the roads named. J. P. Morgan & Co. have been especially instrumental in this movement. Various men are directors in several of the railroads at the same time. The object is admitted to be to bring about a consideration of the mutual interests of the roads. It is denied that there is any absolute combination or consolidation between these railroads, except to the extent that the Reading Company has recently bought a controlling interest in the Central Railroad of New Jersey, and that the Erie controls the Susquehanna and Western and the Erie and Western, minor roads not reaching to tide water.³

There is a difference of opinion among witnesses as to the extent to which the other leading coal roads besides those last named are being brought under the community of interest. It is suggested by two or three witnesses that steps are being taken to control the Delaware and Hudson, or that it is already more or less in harmony. One witness thinks that the Pennsylvania Railroad also is in general sympathy with the combination, although others assert that there is no community of ownership. The New York, Ontario and Western Railroad is quite generally considered to be independent, and it has about 3½ per cent of the anthracite tonnage.⁴ Coxe Bros. & Co. produce about 3½ per cent of the anthracite output. This company controls a railroad of its own and ships its coal in its own trains over the Lehigh Valley Railroad to tide water. Mr. Stearns, president of the company, holds that it is entirely independent.⁵

It is maintained by several witnesses that the leading anthracite coal roads are not merely tending to come together under a community of interest, but are attempting to absorb a large proportion of the production of coal. It is pointed out that about 3 years ago the independent operators, with a view to securing a lower cost of transportation, proposed the construction of a railroad to tide water. Some of the roads,

¹ Haddock, pp. 521, 522, 531; Stearns, pp. 579, 580, 587, 588; Saward, pp. 508, 509; Greene, p. 468; Harris, p. 600; Childs, p. 503.

² McLeod, p. 583; Harris, p. 600.

³ Woodlock, pp. 451-455; Haddock, p. 526; Stearns, pp. 588, 589; Walter, pp. 545, 546; Harris, pp. 598, 599; McLeod, p. 571; Saward, p. 513.

⁴ Woodlock, pp. 451-455; Harris, pp. 598, 599, 608; Childs, pp. 502, 504.

⁵ Stearns, p. 589.

through the Temple Iron Company, bought up many of the mines which had pledged tonnage to this railroad and forced the abandonment of the enterprise. Afterwards another road was planned by the operators following the Delaware and Hudson Canal to Kingston. The Pennsylvania Coal Company, one of the largest of the independent producers of coal, which itself owned a local railroad, known as the Erie and Wyoming Valley, was a prominent factor in this enterprise. The Erie Railroad has recently bought up the Pennsylvania Coal Company and its affiliated railroad, paying therefor \$32,000,000. This purchase blocked the construction of the proposed line to Kingston. The New York, Ontario and Western has also recently bought up a very considerable amount of coal production. The manager of this railroad says that it was forced to do this in order to assure the permanence of its tonnage. It merely followed the example of other leading railroads. It is, however, stated, even by one or two independent operators, that the operators who sold out were not forced to do so by discrimination or otherwise, but that, being offered a high price, they preferred to sell rather than to run the risks of independent business. It is claimed, however, by these witnesses and others that the motive of the railroad companies was to prevent a diversion of their tonnage as well as to check the disturbing influence of independent operators in the sale of coal.¹

Relation of railroads to independent operators—Percentage contracts and freight rates.—It appears that a very large proportion of the independent anthracite operators have for several years past sold their coal under contracts to the subsidiary coal companies of the railroads, receiving therefor a certain percentage of the tide-water prices. The proportion of the operators who accepted the system differs on different railroads, but on the average, according to statements of witnesses, much more than half dispose of their coal in this way.

Under the contracts in force up to the spring of 1901, in the case of the domestic sizes and larger sizes of anthracite coal, the operator received 60 per cent of the tide-water prices, while the railroad coal company received 40 per cent, out of which to pay the freight to the railroad and to cover the selling expenses. In the case of the smaller sorts of coal, where the price is much lower, the percentage received by the operators was less. Several witnesses, mostly representing railroad companies assert that the operators are generally well satisfied with this system, especially because of the saving in selling expenses and responsibility, and that it was considered a concession to them at the time it was adopted, as compared with the existing freight rates.²

At the time of the investigation of the Industrial Commission, in 1901, a new contract was being proposed by which the operators should receive 65 per cent of the tide-water price of the larger sizes of coal. It is stated that the motive of the railroads in making this concession was to prevent the operators from constructing an independent railroad, and also to secure more effective control of the business, especially by virtue of the fact that the new contracts, at least in most instances, provide that the entire future output of the operators shall be sold to the railroad coal companies.³

In April, 1901, this new contract had not yet been put into force, but the general opinion of all the witnesses was that a large majority of the operators would agree to it. The secretary of the Anthracite Coal Operators' Association, as well as representatives of the railroads, stated that the operators were generally well satisfied with the proposed terms. One or two witnesses thought that the railroad companies

¹ Woodlock, pp. 451-453; Haddock, pp. 521, 522; Stearns, pp. 588, 589; Harris, pp. 603, 604; Thomas, pp. 562, 568; McLeod, pp. 572, 573; Childs, pp. 479, 480.

² Seward, p. 509; Stearns, pp. 577-580; Childs, pp. 496-498; McLeod, pp. 562, 568; Fleming, p. 536; Walter, p. 538; Haddock, p. 522; Woodlock, p. 454.

³ The form of contract submitted by officers of two of the railroad companies contains a provision that the operator shall sell all coal hereafter mined from mines now open, or hereafter to be opened, on the land covered by the contract.

were insisting that practically all the operators should adopt these contracts before putting them into force, but a railway president states that this is not a condition of the contract, although the railroads think that they are entitled to the signatures of a majority of the operators.¹

One witness thinks that not more than 5 or 10 per cent of the operators will, when this arrangement is perfected, be really independent or have any influence in competition in the coal market.²

Freight rates on anthracite coal.—Various witnesses allude to complaints that the rates of freight to tide water are excessive. Some witnesses point out that most of the operators now ship under the percentage contract, so that the question as to the freight rates on ordinary shipments becomes to them of less importance. An advance in prices benefits the shippers as well as the railroads. At the same time the percentage of the tide-water price received by the railroad company may be considered as its freight rate, and that the amount thus received may be discussed as to its reasonableness in the same way as any other freight rates. The few representatives of independent shippers who appeared before the commission made little complaint of excessive rates. The secretary of the Anthracite Coal Operators' Association stated that he was not authorized to make any complaint whatever, though he refused to answer the question as to whether there were any grounds for complaint. Reference was also made by the president of Coxe Bros. & Co. and other witnesses to the suit brought by that company against the Lehigh Valley Railroad in 1899, in which excessive freight rates were charged. It is stated that the decision of the Interstate Commerce Commission was in favor of the complainants, but that appeal was taken to the courts, and that the delay was so great that Coxe Bros. & Co. were forced to forestall matters by constructing a railroad connecting their mines with several tide-water railroads, so that they were able to demand concessions.³

It is generally admitted that the freight rates on anthracite coal are very considerably higher than those on bituminous coal. The precise rate from the coal fields to tide-water varies somewhat upon the different railroads, while the rate per ton per mile naturally differs according to the distance to tide water. Moreover, as regards the operators who ship under the percentage contract, the rate fluctuates continually with the tide-water prices. The freight rates are variously stated by witnesses representing the railroads as from \$1.30 to \$1.75 per ton to tide water. Under the 40 per cent contract the rate paid by the operator, including selling expenses on coal, would be \$1.60 per ton when coal sells at \$4, which was about the price in the winter and spring of 1901. This price, however, is somewhat above the average in recent years. The distance from the anthracite fields to tide water varies from about 145 (D., L. & W.) to 214 miles (N. Y., Ont. & W.). The rate per ton per mile would thus range from 6 to 10 mills.

Several witnesses contrast these rates with those on bituminous coal, which have at various times been as low as 2½ or 3 mills per ton per mile, and which are always very much lower than the rates on anthracite. Representatives of the railroads, however, and several other witnesses, including one independent operator, justify the higher rates on anthracite coal on the ground that most anthracite has to be hauled over the mountains, while bituminous coal in many cases takes its origin at the tops of the grades, and especially on the ground that bituminous coal is all of one kind and can be promptly unloaded from the cars, while the different classes and sizes of anthracite coal have to be kept separate.⁴

¹Childs, pp. 495-507; Thomas, p. 549; Stearns, pp. 577-580; Walter, p. 545; Fleming, pp. 537, 542; Harris, p. 610.

²Haddock, pp. 531, 532.

³Saward, p. 509; Stearns, pp. 576-578, 590; McLeod, p. 573; Fleming, p. 542.

⁴Fleming, pp. 536, 539, 540; Saward, p. 509; Stearns, p. 578; Childs, pp. 496, 497; McLeod, p. 565; Harris, p. 600; Woodlock, pp. 453, 454.

XXVIII INDUSTRIAL COMMISSION:—TRANSPORTATION.

One independent operator complains especially that the operators who sell coal to the railroads under the percentage contract really get better rates than those who ship on their own account and pay the published freight rates. He urges especially that the actual freight rate under the contract system is considerably less than the 40 per cent of the tide-water price, because that percentage includes selling expenses and risks. Operators who ship for themselves and bear selling expenses, ought, this witness maintains, to be placed on an equality by having a freight rate somewhat less than this percentage.¹

Alleged discrimination against independent operators.—Except for the complaint just indicated there is no charge on the part of the independent operators, so far as they appeared before the Industrial Commission, of discrimination in freight rates against them as compared with the coal companies operated by the railroads themselves. Officers of the railroads assert emphatically that the coal companies connected with the railroads pay the full tariff rates on coal. One witness, however, points out that it is claimed that the railroads allow their coal companies to work with little profit, or even at a loss, while making up by charging high freight rates, a practice which amounts practically to taking the money from one pocket and putting it in another. While this matter was not discussed especially by witnesses it is obvious that if the freight rates on anthracite coal are in fact excessive, whether under published tariffs or under the percentage contracts, it amounts to a burden upon the independent operators, which is not felt by the coal companies that are virtually identical with the railroads.²

Allusion was also made by various witnesses to the complaint sometimes made by independent operators that they are not furnished sufficient cars, and that in some cases they are placed at a disadvantage in this regard as compared with the coal companies operated by the railroads. This complaint connects itself closely with the discussion as to the restriction of output of anthracite coal. (See below.) In the case of the operators who sell under the percentage contract, the railroads are given the right to determine how much coal each operator shall ship. The railroads agree to allot the tonnage which can be handled equitably between the different producers, the contract particularly providing that the railroads shall not discriminate in favor of their own mines. Representatives of the railroad companies assert most emphatically that there never has been any discrimination in this allotment, but that the independent operators have, if anything, been allowed to produce more than their normal share of the coal for which there is demand. It is urged that it is impossible for the railroads to buy all the coal which could be produced by the mines working at full capacity, because of the limited demand.

Mr. Harris, late president of the Reading Company, says especially that on that road an expert is employed to visit the various mines and ascertain accurately their productive capacity, and that on this basis the amount of coal which is demanded is apportioned. This witness asserts that any operator is at liberty to increase his productive capacity, and that on showing evidence of ability to produce more coal, relatively to other mines, he will be given a larger allotment. Two or three witnesses, representing the independent operators, likewise state that they have no complaint of discrimination in the supply of cars.³

One independent operator, Mr. Haddock, while making no charge of discrimination against independent operators in the apportionment of output, asserts that he has refused to accept the percentage contract arrangement which gives the railroad companies the right to allot the production, and has insisted upon receiving a sufficient supply of cars. By threats of suits for damages he has been able to secure

¹ Haddock, pp. 523, 532, 534.

² Stearns, pp. 580, 582, 583; Harris, pp. 600, 601.

³ Haddock, p. 624; Stearns, p. 586; Harris, pp. 600, 601; Walter, p. 545; Childs, p. 604; Seward, p. 509; Fleming, pp. 536, 537.

cars, and now practically produces as much coal as he sees fit. He is not willing to have his whole production limited by the arbitrary decree of railroad officers.¹

Restriction of output and allotment of tonnage.—It seems to be quite generally admitted that there is an attempt on the part of the anthracite-coal roads to keep the output of coal within the limits of profitable demand, and that there is at least a certain amount of consultation and agreement between them regarding the proportion of tonnage which each shall handle. In explanation of this practice it is asserted by various witnesses, including some independent operators as well as representatives of the railroads, that the productive capacity of the anthracite mines is very considerably in excess of the consumption of the country. It is said that the anthracite mines could produce at least 60,000,000 tons of coal annually, although one witness at least is disposed to question whether this could be done, in view of the necessity of executing a considerable amount of so-called dead work in order to keep up the production. The actual consumption of anthracite coal has never yet exceeded about 47,000,000 tons in a year. It is urged especially, as indicating the necessity for some limitation of production, that the demand for anthracite coal, most of which is used for domestic purposes, is extremely unequal as between different seasons of the year. During the spring and summer months there is very little consumption of anthracite. During the fall and winter, when the consumption actually takes place for the most part, the demand fully equals, if not exceeds, the capacity of the mines to produce contemporaneously. In order to render themselves able to supply the demand during these active months operators are continually tempted to increase the extent of their workings. If, then, it is asserted, the operators should endeavor to produce to the full limit of this extended capacity throughout the year there would be such an overproduction as greatly to depress prices and practically to ruin the producers.

It is further asserted by nearly all witnesses testifying on this subject that anthracite coal can not be very successfully stored. It would greatly increase the cost to produce at a uniform rate throughout the year and to store the output of the spring and summer months until the fall demand. Not only, it is said, would this involve rehandling and the construction of storage places, but the quality of the coal, especially its brightness, deteriorates when it is stored for a considerable length of time. For these reasons operators do not ordinarily run their mines at full capacity except during the fall and winter months. The average number of days on which the mines have operated during a year has never exceeded 235, and in many years the average number has been much less.²

One or two witnesses, especially Mr. Haddock, an independent operator, understand that the railroad companies have virtually an agreement among themselves as to the proportion of the tonnage of anthracite coal which each shall handle, and that by virtue of this allotment they practically restrict the output and prevent any strong competition. Representatives of the railroad companies deny that there is at present any agreement as to tonnage, although it is admitted by two or three of them that there was such an agreement in 1896, which was afterwards abandoned. Nevertheless these railroad officers admit that there has been very little change in the proportion of coal handled by each road for a considerable number of years, and they also admit that each road tries to conform in a general way to the proportion which it has hitherto carried. They assert that any railroad might, without violation of agreement or of faith, increase its aggregate tonnage and endeavor to encroach on the traffic of its competitors. To do this, however, would be to precipitate a general competitive war, a general oversupply in the market, and a reduction in prices, which would not make it a profitable measure.

¹ Haddock, pp. 524-527.

² Seward, pp. 511, 512; Stearns, p. 587; Childs, pp. 499, 500; Harris, p. 602; Thomas, pp. 555, 556; McLeod, p. 565; Fleming, p. 538.

The present division of output, it is asserted, has been the result of many years of experience and of conflict. Further conflicts are likely to occur in the future as they have in the past, but, apparently, at present, perhaps under the influence of the recent movement toward community of interest, there is less disposition than has been manifested hitherto toward encroachment by any railroad upon the business of the others. One or two witnesses point out also that some of the railroad companies have certain territory naturally tributary to them, or produce to a certain extent a particular class of coal for which there is an especial demand. The frequent use of such phrases as "proper share" and "normal tonnage" as applied to railroads seems to show a recognition by nearly all of their officers that it is not to the interest of any road to compete too vigorously or to endeavor to produce coal to the maximum of its capacity. One witness, Mr. Thomas, of the Erie Railroad, says that there is some consultation among the railroads regarding the output and prices, and other witnesses, as is pointed out below, admit also that there is some consultation as regards prices, which presumably involves likewise a discussion of output. Reference is also made to the fact that the Pennsylvania Railroad has in the past worked less in harmony in this regard than most of the other railroads.¹

The following table shows the percentages of the anthracite tonnage hauled by the respective railroads during the year 1900.²

	Per cent.
Philadelphia and Reading.....	21
Lehigh Valley.....	15. 65
Delaware, Lackawanna and Western.....	12. 57
Central Railroad of New Jersey.....	11. 48
Pennsylvania Railroad.....	11. 32
Erie Railroad.....	11. 51
Delaware and Hudson.....	9. 55
Delaware, Susquehanna and Schuylkill.....	4. 26
Ontario and Western.....	2. 86

Prices and their relation to the alleged combination.—There seems to be a general agreement among witnesses that the anthracite railroads act more or less in harmony as regards the fixing of prices. The evidence, however, is not conclusive as to the extent to which this harmony goes, or as to the effect of the recent movement toward community of interest upon agreements as to prices or upon prices themselves.

No witness affirms that there is any formal and definite agreement among the railroads or the railroad coal companies as regards prices. One or two assert that there have been in the past attempts to establish such agreements, but that they have broken down. Independent operators and others, notably Mr. Seward, of the Coal Trade Journal, believe, however, that there are informal consultations and understandings at the present time, including possibly meetings from time to time of sales agents. It is maintained by these witnesses that the prices made by the different companies are practically the same for given markets and grades of coal, and that changes are made very nearly simultaneously. Mr. Seward suggests that the railroad coal companies may communicate with each other by telephone, and that these informal understandings are better than written agreements, because there is no record or publicity.

Representatives of the railroad companies admit that the prices made by all of the roads are very nearly similar, although they specifically deny that there is any binding agreement on the subject. Two or three of them state that there are occasionally informal consultations between sales agents, such as are necessary in every business. The president of the Reading Company says—and his statement is

¹ Haddock, pp. 525, 527, 532; Seward, pp. 514, 515, Stearns, pp. 578-583, 590; Harris, pp. 601-603; McLeod, pp. 564-567; Thomas, pp. 548, 550, 554; Walter, pp. 543, 545, 547; Childs, p. 500.
² McLeod, p. 571.

corroborated by two or three other witnesses—that that company regularly issues a circular of prices, which has a considerable influence in determining the prices of other companies. At the same time this witness asserts that it is entirely voluntary with the others to make these prices or not, and that they do not always follow them.¹

The president of Coxé Bros. & Co., the largest independent coal operators, stated that the average prices received by that company for the prepared sizes of anthracite coal at tide water from 1891 to 1900 were as follows:

Average prices of prepared sizes of anthracite coal.

1900.	1899.	1898.	1897.	1896.	1895.	1894.	1893.	1892.	1891.
\$3.761	\$3.49	\$3.589	\$3.716	\$3.516	\$3.237	\$3.535	\$3.967	\$3.81	\$3.799

These prices are presumably not far from the average received by other producers during this period. Witnesses do not discuss, however, particularly, the movement of prices during these years in connection with the question as to the effect of combination among the railroads, nor is there any very definite evidence as to the comparison of prices during the past decade with those of earlier years. It is asserted quite generally that the cost of mining has increased, but that the cost of transportation and freight rates have fallen somewhat.

Much discussion was given as to the movements of prices of anthracite coal during the past year, particularly with reference to the effect of the establishment of community of interest between certain of the railroads, and as to the effect of the strike of anthracite miners in September and October, 1900. The following table shows the average prices for prepared sizes of anthracite coal received by Coxé Brothers & Co. for each month during 1900:

1900.

January	\$3.744
February	3.586
March	3.616
April	3.465
May	3.577
June	3.551
July	3.707
August	3.654
September	3.896
October	4.103
November	4.14
December	4.243

It will be seen that prices advanced from \$3.465 in April to \$4.243 in December, or an increase of 78 cents per ton. It is stated by various witnesses that the prices in the fall and winter are always considerably higher than in the spring, on account of the great difference in the demand at the respective seasons. Figures submitted by months by Coxé Brothers & Co. show advances of from 30 cents to 65 cents as between the spring and fall in most years since 1891. The advance in 1900, however, is greater than in any other year for which these figures were submitted.

Several witnesses state that the price of anthracite coal in February, 1901, was from 20 to 30 cents higher than it had been at the corresponding time a year before. The usual spring reduction in prices was made in April, 1901, after which the price of stove and chestnut coal, as announced in the circulars of the railroad companies,

¹ Saward, pp. 512, 513, 517; Haddock, pp. 526, 529; Stearns, p. 582; Harris, pp. 599, 603, 604; McLeod, p. 572; Childs, pp. 499, 505; Thomas, p. 554; Fleming, pp. 538, 539.

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seems to have been \$4 per ton, and the price for broken coal, the largest size, \$3.50 per ton. Virtually all the witnesses agree in holding that this advance in prices during 1900 and 1901 is to be attributed to the reduction in the supply of coal, caused by the prolonged strike of the fall of 1900, rather than to the combination among the railroads. The strike left the country very much depleted of coal, and all through the winter the mines were working at their full capacity.¹

Mr. Haddock, independent coal operator, seems to think that the railroad companies in combination would have the power to advance prices, not being limited by the competition of other producers of anthracite coal, but he, like the representatives of the railroads, doubts whether it would be wise policy for the combination to attempt to maintain excessive prices. Various other witnesses, including especially the representatives of the railroads, assert that there is a very close limit to the price of anthracite coal through the competition of other fuels, and that the producers, however strongly they may be combined, would not find it to their interests to advance prices beyond the present rates. It is asserted that anthracite coal is to a considerable extent a luxury. By far the greater part of anthracite coal is used for household purposes, and if the price is very high it can be replaced in many of its uses. Bituminous coal is being more and more used, so these witnesses state, for producing gas, steam, and hot-water heat, and other forms of heating for domestic purposes.

The smaller sizes of anthracite coal, ranging from pea coal down, which are necessarily produced in connection with the breaking of coal for domestic purposes, can be used only for steam purposes, and there they meet very directly the competition of bituminous coal. It is asserted that because of this competition the price received for these smaller sizes of coal is less than the cost of production, so that there must be a corresponding increase in the prices of the larger sizes in order that there may be a profit on the entire output. These smaller sizes are from 25 to 35 per cent of the total product. Formerly they were largely thrown away, but the old culm piles are now being worked over and sold. Several witnesses maintain that the prices of anthracite coal in the spring of 1901, although somewhat higher than the average for earlier years, were no more than reasonable, and that because of the limited nature of the demand for anthracite coal a reduction in the price would not sufficiently increase consumption to make it profitable for the coal producers.²

Several witnesses assert that it will be possible through combination to reduce the cost of producing and transporting coal so as to permit of a lowering of the price to consumers, while at the same time giving the producers and the railroad companies a greater profit than in the past. The officers of some of the railroads express the belief that it is to the interest of the people that the railroads should act in harmony, and the same opinion is held by two or three other witnesses, notably Mr. Greene, of the Audit Company of New York. Mr. McLeod, former president of the Reading Company, is especially emphatic in the assertion that only great corporations with large capital can economically produce anthracite coal. It is pointed out by one or two witnesses that if the railroads act in harmony it will in many cases reduce the cost of transportation by permitting the supply of particular markets from the nearest and most accessible mines. It is also urged that where each railroad company feels that it must produce and transport as much coal as possible it is tempted to operate mines which are not so economical as those controlled by some other railroads.

The greatest saving, it is asserted, could be effected by the elimination of middlemen in the sale of coal to the consumer. The railroad companies could establish large depots in immediate connection with their tracks from which coal could be

¹ Stearns, pp. 489-491; Saward, pp. 510, 511, 516; Fleming, p. 541; Childs, p. 499; Walter, pp. 543, 546; Stearns, pp. 582, 583, 586, 594.

² Haddock, pp. 528, 529, 530, 531; Saward, pp. 510, 512, 513, 517; Greene, pp. 469, 470; Stearns, pp. 578, 583, 585, 586, 587; Harris, p. 603, 606; McLeod, pp. 562, 567, 569; Thomas, p. 556; Childs, pp. 501, 502; Fleming, pp. 537, 541; Walter, p. 548.

delivered directly to carts hauling it to the consumer. Mr. McLeod believes that a saving from 50 to 75 cents per ton might be effected in this latter way alone, while Mr. Greene thinks that the various economies which might result from a complete consolidation of the railroads would amount to \$1 per ton. These various witnesses think accordingly that a more complete combination than that which at present exists is desirable for the public interest.¹

Capitalization of reserve coal lands.—There is a considerable amount of discussion on the part of witnesses as to the effect upon prices of the large investments made by the Reading and other railroad companies in coal lands in advance of actual production. The Reading Company has the largest supply of coal lands, most of which were bought up during the seventies. At that time it invested, according to the statement of one witness, about \$75,000,000 in these lands. Other companies have also made large investments. It is stated that the motive for this policy on the part of the railroads was to insure permanency in their transportation. One or two witnesses, including especially Mr. Haddock, think that the interest on these investments of the railroads has added to some extent to the price of coal. Reference is made especially to the fact that the recent purchases by the railroad companies have been at very high prices. The Erie issued \$32,000,000 of bonds to buy up the Pennsylvania Coal Company, and the annual interest of \$1,280,000 is equal to 50 or 60 cents per ton on the annual output of these lands. If the Reading lands had cost proportionately as much they would have represented an investment of \$125,000,000. Most witnesses, however, especially those representing railroad companies, do not think that the interest on these investments in coal lands adds materially to prices. They state that the attempt to carry them has led to repeated bankruptcies in the case of the Reading road and that many other railroads have large amounts of stocks which earn no dividends. The stocks of four of the leading roads earning no dividends were stated by one witness as amounting to \$382,000,000. The railroads holding these large investments have been forced to sell coal, it is argued, in competition with other producers not having similar burdens. The various reorganizations of the Reading have reduced its fixed charges, although the president of the company admits that its bonds still represent, in part, investments in coal lands.²

It is admitted by two or three of these witnesses that the capitalization of several of the anthracite roads is excessive, but they hold that the excess is chiefly in the form of stocks receiving no dividends. In various recent reorganizations, such as that of the Erie and the Reading, there has been no reduction of capitalization, but the fixed charges have been reduced, bonds being either issued at lower interest or converted into stocks.³

Duration of coal supply and cost of mining.—Witnesses differ as to the amount of anthracite coal still remaining in the ground. Estimates as to the duration of the supply at present rates of production range from 80 to 200 years. The mines in the Wyoming field, which were the most accessible, are being rapidly worked out, and the great reserve is in the Southern or Schuylkill field, where the Reading Company has very large coal holdings. In this field the coal lies deeper and in thinner seams, and it is much more expensive to mine. The late president of the Reading Company says that one of the chief reasons why it has not developed its lands more rapidly is because the cost of mining was so much greater that coal could not be produced profitably in competition with other fields. In the future the more difficult mines will have to be worked, and the Reading's lands will become more valuable.

In view of these conditions as regards the distribution of the anthracite supply,

¹Walter, p. 544; McLeod, pp. 568, 569, 575; Greene, pp. 468-478; Thomas, p. 556; Harris, p. 599; Woodlock, p. 492.

²Haddock, pp. 523, 534; Greene, p. 472; Harris, pp. 604-606; McLeod, p. 566; Seward, pp. 517-519; Thomas, p. 556; Childs, pp. 503, 504; Woodlock, pp. 453-455.

³Woodlock, p. 456; Harris, pp. 597, 598; McLeod, p. 573.

witnesses agree in holding that the cost of mining has advanced in the past and will steadily advance in the future. The improvements in methods of mining and handling coal do not keep pace with the added difficulties arising from the necessity of mining deeper and less satisfactory seams. The price of coal will necessarily advance hereafter, it is maintained, if it is to be mined profitably at all, although the advance will be slow. One prominent witness doubts whether the output of the anthracite mines will ever be much greater in a year than at present.

It is pointed out that the more easily worked veins have already been exhausted, and that mines now are deeper and in many cases are working much thinner veins of coal. For these reasons there is greater expense in lifting coal, in pumping water, in sinking shafts, and in various other directions. The cost of establishing a working colliery plant is said to have risen greatly, the cost in some cases at present being no less than \$1,000,000. As to the average cost of mining at present, no definite statements were made, several witnesses asserting that it is very difficult to ascertain the costs, and particularly that there are very great differences as between different mines. Mr. McLeod, former president of the Reading Company, says that he estimates the cost at the mine at \$1.59 per ton, while by paying interest on the value of coal lands the cost is brought up to \$1.90 per ton. The average freight rate he estimates at \$1.50 per ton to tide water. The average price at tide water for 20 years has been \$3.48.¹

The anthracite coal strike of 1900.—Mr. Stearns, of Coxé Brothers & Co., explains the nature of the demands of the miners in the strike of 1900. About 1875 there was an agreement between the operators and the miners, by which wages were to rise and fall with the price of coal at tide water. The basis was at the price of \$5 per ton. For every advance or decline of 10 cents, wages were to rise or fall 1 per cent. The price of coal fell so greatly that the operators made concessions, treating the freight rate from the coal mines to tide water as equaling \$2.50, the rate prevailing in 1875, instead of the actually much lower figure. The miners, however, demanded, in 1900, that the entire sliding-scale system be abandoned, and that wages be raised 10 per cent above the existing rates, while the price of powder should be reduced to \$1.50. These demands were finally granted by the employers.

Most of the witnesses do not discuss the strike in any detail. Several officers of railroads and operators think that the demands were, on the whole, just, but others hold that they were excessive, and that the producers can not permanently recoup themselves for the advance in wages by additions to price. It is quite generally admitted, however, that the shortage of coal, caused by the suspension of work in the busy season, permitted the advance of price sufficiently for the time being to benefit the railroads and the operators. One or two witnesses complain of the agitators who came from outside the region and induced the miners to join the labor organization known as the United Mine Workers, and to enter the strike. Mr. Stearns asserts that the men of his mines were satisfied, but that they were assaulted and intimidated until the mines had to close. There is some discussion among witnesses as to the desirability of arbitration in the case of such a dispute as this.²

¹ McLeod, pp. 565, 570, 571; Greene, p. 475; Fleming, p. 540; Thomas, p. 555; Stearns, pp. 584, 594, 595; Walter, pp. 544, 547; Seward, pp. 511, 515; Harris, pp. 606, 607.

² Stearns, pp. 593, 594; Thomas, p. 557; Haddock, pp. 527, 528, 533; Walter, p. 546; Seward, pp. 519, 520; Fleming, p. 542; McLeod, pp. 574-576; Harris, p. 611.

TICKET BROKERAGE.

Mr. Lindenberg, chairman of the committee on hostile legislation of the American Ticket Brokers' Association, gave very extended testimony before the Industrial Commission on the subject of ticket brokerage. Practically no testimony from the railroad standpoint is presented in this volume, and reference should be made to the discussion of the subject in the earlier volume.

General nature of business.—Mr. Lindenberg states that it is the business of ticket brokers to buy passenger tickets from railways and from passengers, and to sell them to travelers below the published tariff rates. The business depends upon the fact that there are differences in rates per mile on different kinds of tickets, and for different distances. Through tickets are sold at reduced rates as compared with local tickets, and brokers handle unused coupons for parts of through journeys. The return coupons of excursion and special return tickets are also bought and sold. One of the chief elements in the business has been the handling of mileage books. Brokers would buy mileage books from the railroads and allow passengers to use parts of them. Many of these books are good in the hands of the bearer, even where printed regulations nominally restrict them to the purchaser or his family. At present, especially in the central and western part of the country, mileage books interchangeable upon numerous railroads have been introduced, and these are so arranged that they can be used only by the actual purchaser, who gets a rebate on showing that he has used up the mileage. This arrangement prevents dealing in these books by ticket brokers.

This witness states that brokers correspond with one another, supplying sheets showing what tickets they have available, so that a broker in one city can make a through rate by using a ticket which he has to a given point, and arranging with a broker there to supply a ticket to the destination. By such practices ticket brokers, through their superior knowledge of rates made throughout the country, often succeed in giving passengers information as to low rates which they would not otherwise be able to take advantage of.

Ticket brokers are able, according to this witness, to save money to passengers selling their tickets and to those buying as well. The claim that railroads redeem the unused parts of their tickets at the full value is only partly true. A ticket from New York to Chicago costs \$17, while the rate from New York to Buffalo is \$8, and from Buffalo to Chicago \$12. The railroad will pay the passenger \$9 for the coupon from Buffalo to Chicago, while the broker would give him \$10, and sell it for \$11. The return coupons on excursion tickets sold for one fare for the round trip have no redemption value.

Support of ticket brokerage by railroads.—Mr. Lindenberg asserts further that the greater part of the business of ticket brokers is carried on with the support and connivance of the railroads. This was especially true before about 1896; since then railroads are so in harmony and maintain rates so strictly that they are less tempted to secure the services of brokers. The motive of railroads in this practice is to get competitive business, and that is perfectly legitimate. Through the brokers they can cut rates secretly, or even without cutting rates they can sell more tickets because of the employment of such agents. The witness does not think that brokers could carry on business profitably without some such support from the railroads.

Legitimacy of brokerage business.—Mr. Lindenberg asserts emphatically that the business of ticket brokerage is entirely legitimate. If a railroad makes a reduced rate for any class of tickets, it ought to make no difference to it who uses the ticket or any part of it. The supreme court of New York has held that this was a normal business, and that if a railroad company undertook to carry the holder of a ticket from one place to another for a given rate, it cost no more to carry one person than another.

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Mr. Lindenberg denies the weight of the charges that brokers sell forged and fraudulent tickets and tickets with altered dates, and that they resort to other illegitimate practices, such as persuading conductors not to cancel tickets, but to sell them. He asserts that instances of fraud are extremely rare, if they occur at all. The American Ticket Brokers' Association, which includes 335 members, has in its constitution a declaration that no member shall engage in any practice which shall bring discredit upon the profession. Unless by specific contract with the passenger in writing, members must guarantee to passengers that their tickets will be honored. Mr. Lindenberg asserts that no member of the association has ever been arrested for fraud or charged with it, and that even railroad officers will certify to the high character of these brokers. He adds that the charges brought against ticket brokers by railroads are not usually specific, and seldom mention names.

This witness denies also that there is any general public antipathy to the business of ticket brokerage. He asserts that the petitions, and the resolutions of commercial bodies, brought to bear by railroad companies in advocating legislation, are secured by great pressure and are not typical. The railroad companies themselves recognize that antiscaiping laws are not popular with the masses. The agitation in favor of antiscaiping laws has been most vigorously carried on by the railroad companies in recent years before Congress and the State legislatures, but they have succeeded in inducing only ten States to pass these laws. In New York and Texas the laws have been declared unconstitutional, and in the other States they are dead letters. The witness asserts that newspapers which attack ticket brokers are directly inspired by the railroads, many of their articles being in almost identical form, and that many other leading papers have defended the brokers. Labor organizations also are almost uniformly in favor of permitting brokerage. The witness would be willing that the Government should require a license for ticket brokers, and submit them to any reasonable regulations, but he does not think that the prohibition of the practice is justifiable or constitutional.

GOVERNMENT OWNERSHIP OF RAILROADS AND PUBLIC UTILITIES.

Prof. Frank Parsons, president of the National Public Ownership League, presented before the Industrial Commission an elaborate argument in favor of the Government ownership of public utilities in general, and with especial reference to railroads, telegraphs, and telephones.¹ The general arguments which he brings forward apply, in his opinion, with somewhat varying degrees of emphasis, to all these classes of public utilities, as well as to gas and electric lighting plants, street railways, and other similar enterprises in cities. Officers of railroads give little testimony on this subject, apparently considering Government ownership of railways not a live question at present. The discussion of telegraphs, telephones, and municipal monopolies in particular in which several other witnesses take part is summarized below.

General principles and scope of Government ownership.—Professor Parsons holds that the relative merits of public and private ownership of railways and other utilities must be judged not merely by rates and costs of operation, nor by financial results, but by the general effect on civilization, government, and progress. He says that under private ownership material interests alone are considered, and that the interests of the owners of the utilities are the first aim, often to the great injury of the public. Not merely do excessive rates result from this aim, but there are many other evils, such as discriminations between individuals and places in the charges and quality of service, overcapitalization and stock speculation, ill treatment of labor, disregard of public safety, etc. On the other hand, under Government ownership, according to this witness, the aim in the operation of public utilities should be

¹ Pages 123-193.

to serve the interests of the whole people and not to make money, and in countries where that system is most highly developed the results have shown that this aim is actually constantly operative in the management.

Rates and costs of operation under Government and private service.—Professor Parsons asserts that the general principle of rate-making under private ownership of natural monopolies is to fix the charges at the point that will secure the maximum profit, which is not usually the point either of lowest cost of operation or of maximum use of the service. Public ownership seeks a lower rate level with a view to reducing the cost to the lowest possible point by increasing the service, the endeavor being to render the maximum service at the lowest cost of profitable operation. The witness points out numerous instances in which governments have taken over the operation of railroads, telegraphs, and other enterprises, and have immediately reduced the charges greatly as compared with those formerly prevailing. He also compares the average rates for hauling a ton of freight a mile in the United States and leading European countries, as well as the average rates per passenger mile. These figures show the rates on passenger traffic in Europe from one-fourth to one-half less than in the United States, but American rates on freight traffic from 40 to 70 per cent lower per ton-mile than in the European countries named.

It is held, however, that the comparison as to freight rates is greatly affected by the much longer haul of each ton of freight in the United States, more than double the average haul in most of the other countries. Terminal charges, being an important element of cost, are proportionately less per ton per mile in the case of the longer haul. The witness declares also that proper comparisons as to charges are entirely impractical because of the extremely wide difference in conditions of cost as between different countries. Even if it be shown that the service is more efficient and cheaper in the United States, this would be largely due to the superior ability of American workmen and business managers, a superiority which shows itself as much in contrast with private enterprises abroad as with public enterprises. The only fair comparisons are within a single country, and the fact that countries which have gone to public ownership are all uniformly satisfied with it and tend constantly to extend its scope shows that it is the best system. Professor Parsons holds also that there are numerous and important economies attached to unified management by government and to coordination between different forms of public service. He believes that by the savings secured in this manner, and by avoiding the payment of interest on overcapitalized securities, the United States could save \$600,000,000 yearly to the people by public management of railroads.

Public ownership in relation to politics.—Professor Parsons believes further that instead of increasing the danger of political corruption Government ownership of public utilities tends to reduce it. He declares that the powers now exercised by quasi public corporations, such as railroads, are essentially sovereign powers. Their charges, not being subject to competition, in many instances are virtually taxes. Their ability to influence the prosperity of individuals and communities, to qualify the effects of a protective tariff by excessively low import rates, etc., shows the necessity of public regulation. Moreover, at present the corporations operating these public utilities are constantly tending to corrupt legislative bodies and public officers, national, State, and municipal, in order to secure franchises and other advantages. Finally, the tendency of private ownership of railroads and other similar enterprises is to build up great private fortunes, thereby introducing a degree of industrial inequality which is inconsistent with democracy in political methods and in education.

This witness does not fear greatly the political dangers arising from an increase in the number of civil servants through an extension of Government ownership. He would apply strict methods of examination for entrance into service and for promotion. While he would favor the granting of very favorable conditions of employment to Government servants, he does not think that this would constitute the

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unjust establishment of a favored office class. He does not believe that the office-holders would be a large enough proportion of the population to exercise a dangerous political influence at the polls, nor that their own liberty would be abridged through the influence of party leaders and superior officers. He points to New Zealand, the English cities, and other governments which have greatly extended government ownership, as showing the possibility of minimizing or eliminating these evils.

Desirability of gradual movement toward Government ownership.—In spite of his arguments as to the benefits of Government ownership, Professor Parsons does not believe that the United States is ripe as yet for public ownership of railroads. We need to become more thoroughly democratic in government, to secure for the people more genuine control over public affairs before greatly increasing Government ownership. It would, however, be desirable at an early day, if not immediately, to acquire the telegraph and telephone, and municipalities should move steadily toward the public ownership of municipal utilities. The witness believes that there is a very rapid growth of sentiment in favor of public ownership, and asserts that in this as in other countries the actual extent of public functions is steadily increasing. In his judgment the best way for the Government to acquire the telegraph or the railroads would be to begin by buying up or constructing a part of the system, and then gradually to extend the scope of the public ownership. He would favor paying to the owners of the present plants the full value of their plants as indicated by the market prices of securities, even although in many instances the enterprises are greatly overcapitalized.

The question as to the proper basis of charges for the service of public utilities is also discussed by this witness. He asserts that it is not necessarily a universal economic principle that the charges should be sufficient to pay the costs. It may be that the great extension of the use of the service would be of sufficient general advantage in promoting intelligence, civilization, and happiness as to justify the reduction of charges below cost while making up the deficit through taxation. The movement of Government service in the past has been steadily toward doing away with the principle of payment by the individual as regards services which are most essential to the general welfare. The witness thinks, however, that in general at the present time the charges for the ordinary so-called public utilities—railroads, street railways, lighting plants, telegraphs, etc.—should, under Government management, be sufficient to cover the cost of operation, and that these plants might even be required to contribute taxes toward the general public administration, as they have done under private ownership.

TELEGRAPH BUSINESS.

Professor Parsons¹ and Messrs. Randall² and Roberts,³ the latter two representing the International Typographical Union, appeared before the Industrial Commission as advocates of Government ownership of telegraphs, while Mr. Hitchcock urges the adoption of the same system, especially in connection with the use of improved methods of automatic operation, such as the system invented by Mr. P. B. Delany. Mr. Clark,⁴ vice-president of the Western Union Telegraph Company, and Mr. Chandler,⁵ president of the Postal Telegraph Company, gave testimony on the same subject.

Alleged excessive capitalization and charges.—It is admitted that the telegraph business of the country is practically all carried on by the two companies just named, and that they work more or less in harmony with one another. While they have no definite understanding or agreement fixing rates, there is an understanding that secret reductions in rates shall not be made; and at the time the agreement was first established, in 1888, certain specially low rates which had previously prevailed were

¹ Pages 179-190 also 884-887. ² Pages 241-265. ³ Pages 266-274. ⁴ Pages 206-241. ⁵ Pages 193-206.

abandoned. Representatives of the companies assert that in most more important places there is, in a sense, competition between them. A table submitted by Mr. Clark, however, shows that average receipts per message have not been reduced since 1888. Mr. Chandler believes that unified ownership of the entire system would be preferable from the point of view of economy, but that the public opposition to monopoly would not make it good policy.

The advocates of Government ownership assert that the charges of the telegraph companies are extortionate as compared with the rates in European countries and as compared with the actual cost of operation. It is charged especially that the Western Union Telegraph Company is enormously overcapitalized. Its present capitalization, including stocks of minor companies which it has guaranteed, is \$135,000,000. These witnesses point out that from time to time since 1858 very large stock dividends have been declared by the company, and they hold that at the time of the various consolidations with other companies the stocks have been increased entirely out of proportion to the value of the new property taken in. They maintain that the growth of the system has been almost wholly paid for out of earnings, while at the same time ample dividends on inflated capitalization have been earned. It is asserted that at the maximum the lines of the Western Union Company could be duplicated for \$30,000,000. In Ohio, when the attempt was made to increase the assessment of the company's lines, it took the matter into court and claimed that the average cost per mile of poles in that State, with all the wires, including stations and equipment, was only \$103, which would make the 190,000 or 200,000 miles owned by the company worth about \$20,000,000. One witness also quotes figures from the reports of the Western Union Company showing the cost of constructing of the total amounts of line added in certain recent years to have been less than \$100 per mile of poles and \$50 per mile of wire. He also refers to statements of telegraph experts to somewhat similar effect.

Mr. Clark denies emphatically that the Western Union Company is overcapitalized. He says that the capitalization of the company amounts to \$645 per mile of poles and \$130 per mile of wire. He asserts that to say that lines could be reproduced for \$120 or \$130 per mile is preposterous. On many lines there are very many, sometimes as many as 200 wires, which greatly increase the cost, while terminals and underground construction in cities are very expensive and must be included. At the same time the witness declares that it is impossible to state the average cost of constructing a mile of poles with one wire because of the great difference in local conditions. The company has spent from \$50,000,000 to \$60,000,000 in renewals and reconstructions since 1866. Mr. Clark also compares the capitalization of the American lines with those in Great Britain, showing that the capital outlay of the British Government is about twice as great per mile as that of the Western Union Company. On this point, however, Professor Parsons remarks that the British Government when it bought out the lines from private companies paid four times as much as they were worth.

The rates for commercial telegrams in the United States are all based on the message of ten words, the address and signature being sent free. The rates between New York and Philadelphia and a few other near and important centers are 20 cents for a ten-word message, with 1 cent for additional words. From New York to adjacent States, within New England, and within many of the more densely populated States, the rate is 25 cents, with 2 cents for extra words. From this, rates range up to \$1.07, to the Pacific coast. The average receipts of the Western Union Telegraph Company, for messages of all lengths and covering all different distances, during 1900 were 30.8 cents.

The rate per word for messages in Great Britain, from any point to any point, regardless of distance, is stated to be 1 cent, the minimum charge being 12 cents, and the average receipts for messages of all lengths actually sent being 15½ cents.

The rate in France is 1 cent per word, minimum charge 10 cents, and average receipts for all messages 15½ cents. In Germany the ordinary rate per word is 1½ cents, and the minimum charge 12 cents. The rates in Belgium and Switzerland are very much lower still, while those in Austria are practically the same as in France.

Mr. Clark gives practically the same statements as to actual rates as witnesses who favor government ownership. He claims, however, that by sending the address and signature free the Western Union Telegraph Company handles on the average 21 words for a 10-word message, and that the rate for an equal number of words in European countries, where every word is charged for, would be usually about 21 cents, while in many parts of the United States, including distances as great as can possibly be reached within many of the European countries, the rate is 25 cents. He asserts especially that the average distances to which messages are transmitted in these foreign countries, with their dense population, are much less than in the United States, and that distance is an important factor in estimating cost, especially because of the interest on the lines. On this latter point Professor Parsons asserts that the interest can not greatly affect charges, on the basis even of the high capitalization of the Western Union Company. He also declares that the proper basis of comparison is not the cost of sending a possible 21 words on a 10-word rate—though he quotes earlier statements of telegraph officers to show that the average number of words sent in the United States is considerably less—but the number of words actually sent per message. The average number for all messages in Great Britain is only 15. The actual average receipts for all messages, he says, are at least twice as great in the United States as in most European countries.

Mr. Clark also calls attention to the fact that the British Government's telegraph has been operated at a deficit constantly, the aggregate deficit since 1870 being nearly \$40,000,000. This deficit he attributes to the unduly low rates, and especially to the attempt to reach small and inaccessible places where business does not pay. To this it is replied that there is no certainty as to the correctness of the division of expense between the British post-office and telegraph departments; that the deficit is largely explained by the excessive price paid for the lines bought out by the Government, entailing a heavy interest charge; and finally that the British Government has added each year to the operating expenses the cost of extensions and improvements, which are represented, in the case of the American companies, by new capital. If these expenses for construction be omitted, according to this witness, the total British deficit is very small, and in many years there has been a profit.

Mr. Clark also compares rates from various European capitals and leading cities to leading cities in other countries and shows that they are much higher than rates for certain corresponding distances in the United States. Other witnesses, however, declare that comparisons of international rates, where messages must pass over the lines of different countries, are not fair, but that only internal rates should be compared with internal rates in the United States.

Mr. Clark declares finally that the Western Union Telegraph Company has constantly endeavored to reduce rates as rapidly as possible with due regard to earning a reasonable profit. He points out very great reductions in rates, especially to more distant points, since 1866, attributing this reduction especially to the consolidation of previously separate lines. A table submitted by Mr. Clark shows the average tolls received per message by the Western Union Telegraph Company since 1868. These figures are obtained by dividing the total receipts of the company from ordinary messages by the total number of ordinary messages, so that the average includes messages of all lengths sent for all distances. The average tolls received in 1868 were \$1.047 per message. By 1875 the average had fallen to 54 cents and by 1880 to 38.4 cents. The average receipts in 1885 were 32.1 cents; in 1887, 30.4 cents. The receipts

rose in 1890 to 32.4 cents. Since 1895, when the average receipts were 30.7 cents, there has been practically no change from year to year.

Mr. Clark declares that while further reduction in rates would doubtless increase business, it would not be profitable, because the wires are already being used at their full capacity. It is asserted, on the other hand, that Postmaster-General Wanamaker was led to believe that a uniform 25-cent rate throughout the country would be largely profitable to the telegraph companies and that a 10-cent rate would be possible under Government ownership by operation in connection with the postal system. One witness also asserts that the manager of the former Baltimore and Ohio Telegraph Company said that it operated at a profit while charging only 10 cents for many shorter distances and 15 cents between New York and Chicago.

General argument for Government ownership.—The advocates of Government ownership, Mr. Randall, Mr. Roberts, and Professor Parsons, base their argument chiefly upon the possibility of reducing rates if the Government should take over the service and consider the interests of the public rather than the earning of dividends on an excessive capitalization. They maintain that it is the constitutional right, and even duty, of the Government to control the means of communication by telegraph as well as by the mails. They assert especially that there would be great economy from combining the telegraph with the post-office, since the offices could be in the same buildings and, in many cases, the same employees could carry on both classes of service. It is held that the success of the Government in administering the postal system is sufficient evidence of its ability to manage the telegraph, and that the experience of leading countries the world over, nearly all of which have brought the telegraph under Government operation, is in favor of the introduction of that system here.

Mr. Chandler, of the Postal Telegraph Company, is disposed to think that the Government could probably operate the telegraph successfully, and that this would be especially true if it were able to secure an efficient civil service. Mr. Clark, on the other hand, believes that Government operation would result, as it has in Great Britain, in a deficit, and that the service would be unsatisfactory. He asserts that there is a marked difference between the post-office and the telegraph. The post-office authorities make use of private means of transportation, so that little capital is involved, while the extension of the telegraph involves a large capital investment. This witness holds that there would be little economy from combination of the post-office and the telegraph, since in most small places the postmasters would not be skilled operators. There would be a constant temptation under local pressure to extend lines to places where they would not be profitable, while the increase in the number of employees in the civil service would lead to abuses.

Witnesses who favor Government ownership assert that most of the Postmasters-General since 1844 have favored the postal telegraph.

Alleged discriminations and other abuses.—The advocates of Government ownership further maintain that the Western Union Telegraph Company is mainly responsible for the alleged news monopoly possessed by the Associated Press. It is charged that the telegraph company serves the papers of the Associated Press at very much lower rates than it serves individual papers or small groups of papers on a circuit, and that no newspaper can secure the services of the Associated Press without the consent of the newspapers in the city or town which are already members of the association, so that virtually a monopoly is maintained which reduces the number of newspapers published and thus injures the public and especially the printing craft. Mr. Randall and Mr. Roberts of the Typographical Union especially insist on this point.

Replying to these charges, the vice-president of the Western Union Company asserts that newspaper rates are of different classes in consideration of the time and character of the service and especially of the number of papers in a circuit and the

distances. He asserts that every newspaper or association of newspapers has the same privileges as others under similar conditions. If there be any monopoly in the handling of news, it is the fault of the Associated Press itself and not of the telegraph company.

Witnesses also complain that the telegraph company discriminates in the handling of messages, favoring especially the brokerage business and in some cases the newspaper business. Instances of long delay in the transmission and delivery of private messages are presented. It is replied by the officers of the telegraph companies that there is no precedence given to any class of business except Government business, but that many brokers and others have leased wires over which the telegraph companies have no control.

The advocates of Government ownership further maintain that the system of granting franks to public officers is a serious abuse, tending to influence the action of such officers in regard to the telegraph business. They also assert that there are personal discriminations in giving telegraph franks to private individuals. Mr. Chandler admits that franks are given to many public men in the national, state, and local governments, and that he would be glad to see the system done away with. Mr. Clark asserts that these franks to public officers are granted merely as a matter of personal courtesy and do not represent any *quid pro quo*.

It is also argued by advocates of Government ownership that the Western Union Telegraph Company tends to suppress progress in the telegraph business by refusing to make use of new inventions in many instances, and by practically preventing, through its monopoly, the introduction of such improvements by others. Reference is made especially to the systems of machine telegraphy which have recently been invented, and which transmit messages at extremely high speed. To these charges the vice-president of the Western Union Company replies that the company has steadily improved its service, and that it makes use of all inventions which are really advantageous and profitable.

Labor conditions in the telegraph business.—Mr. Clark holds that the higher cost of labor in the United States materially increases the cost of handling the telegraph business in this country as compared with other countries. On the other hand, the advocates of Government ownership maintain that the Western Union Company pays extremely low wages and treats its employees very badly in every way. They assert especially that many women are employed, and that, because of the oversupply of female labor, the company pays them very much lower rates than are paid to men for the same service. It is said, further, that a very general strike of telegraph operators in 1883 was caused by the low wages, but that it was unsuccessful, and that wages have since remained unchanged. These witnesses further assert that the Western Union Telegraph Company is strongly opposed to labor organizations; that after the strikes of 1870 and 1883 it required its employees to take oath that they were not members of such organizations, and that practically the same attitude is maintained at present.

Mr. Clark declines to discuss the attitude of his company toward labor organizations, but says that the company is always ready to deal with its employees directly, and he supposes that they are satisfied. He says that wages were not reduced during hard times, and have varied little since 1883. He holds that women are paid as much as men where they do the same work, but that they can not usually do as heavy work as the men. Mr. Chandler, of the Postal Company, says that the average salaries of operators of that company are about \$60, and that wages have changed little in fifteen years. He says that a first-class operator in Great Britain receives about \$65 per month, but that he begins at very low rates and that the increase is slow.

THE TELEPHONE SYSTEM.¹

Professor Parsons, in his general argument in favor of government ownership of natural monopolies, refers to the telephone system, holding that all the arguments which apply in favor of Government ownership of telegraphs apply to the telephone as well. This witness believes that the trunk lines of telephones should be operated by national governments, while the local systems could, perhaps, be most conveniently operated by the municipalities. The vice-president and general manager of the American Telegraph and Telephone Company submitted an affidavit to the commission, tracing the history of the development of the telegraph and discussing somewhat the question as to the reasonableness of existing rates. The general manager of the New York Telephone Company, Mr. Bethell, presents an elaborate discussion of telephone rates and the character and amount of service in this country and in foreign countries.

It appears from the testimony that the American Telephone and Telegraph Company has now practically absorbed the Bell Telephone Company, having exchanged two shares of its own stock for each share of the stock of the Bell Company. The American Telephone and Telegraph Company is popularly known as the Long Distance Company, and prior to the amalgamation with the Bell Company its business was apparently confined chiefly to trunk-line service. The capital of the American Telephone and Telegraph Company on July 1, 1901, consisted of \$94,237,500 of stock and \$15,000,000 of collateral trust 4 per cent bonds. The receipts of the company in 1900 were \$9,534,499, of which \$3,846,821 was from the dividends of subordinate companies, \$2,427,037 from the rental of instruments (royalties chiefly), and \$3,027,171 from telephone traffic, the latter item apparently representing practically the receipts from the long-distance business. The company paid in 1900 a dividend of \$4,078,601 and carried \$1,407,456 to reserves and surplus. It is also stated that the entire expenditure of the American Telephone and Telegraph Company and of the various licensees operating under it for the construction of plants has been \$168,474,517.

Professor Parsons asserts that the telephone rates in the United States are very generally excessive, especially where the system is controlled by the American Telegraph and Telephone Company and its subordinate companies. He states that the rates in New York City range from \$90 to \$240 per year for the use of the telephone, while in Berlin the unlimited rate is only \$36 (lately advanced to \$45). Washington, D. C., has rates ranging from \$36 to \$135 (1898), while the average rate in Stockholm, a city of about the same size, is \$20. The average rate in Paris is stated by this witness to be \$78 (500 francs), while Mr. Bethell says that the Paris rate is about to be reduced to 300 francs. Professor Parsons also says that an independent telephone company in Boston and adjacent territory is operating at about half the rate charged by the Bell Company; that a small cooperative company in Grand Rapids, Wis., with 300 subscribers, charges only \$1 per month for residence service and \$2.25 per month for business service, while paying large dividends to the subscribers, who are also the shareholders, and that other independent companies are making low rates.

This witness holds that from \$8 to \$15 per year is a fair charge for telephone service in a small town. It is recognized that in larger cities a higher rate is necessary, although he believes that in many cases it would be wiser for the telephone companies to reduce their charges with a view to the economy of increased service, since up to a certain limit the amount of service can be increased without requiring additional apparatus and operators. He declares further that one reason for the excessive charges of the telephone companies is that they are greatly overcapitalized. The Bell company which operates in Boston and other Massachusetts cities has a capital of more than \$300 for the line of each subscriber, whereas the independent company

¹Parsons, pp. 173-179, 883, 884; Bethell, pp. 777-816; Hall, pp. 817-823.

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above referred to has an equally good system at a capital cost of less than \$100 per subscriber's line. With regard to long-distance service this witness states that the rates in Europe are much less than in the United States. While it costs \$1.25 for a five-minutes' conversation between Philadelphia and Washington, for a corresponding distance in England the charge would be 48 cents, and in France 30 cents; and corresponding differences exist for longer distances.

The representatives of the telephone interests present evidence in defense of the reasonableness of American telephone charges. It is stated that the long-distance rates are usually on the basis of three-fifths of 1 cent per mile for a conversation of 3 minutes. In the local exchanges the system of message rates is gradually supplanting that of unlimited rental rates, and these witnesses hold that it is much fairer to subscribers that they should pay a certain minimum amount per year, with an added charge for each message above a certain number, rather than that all subscribers should pay the same rates. Message rates are considered especially desirable in large cities. It is asserted also that the constant changes in telephone methods necessitate numerous reconstructions and other expenditures. In large cities, especially, the growth of the business makes frequent modifications in the plants essential to the successful operation, while at the same time the increase in the number of subscribers increases the running expenses in much more than equal proportion. In New York City, for example, it becomes necessary to have numerous branch exchanges connected with one another by trunk lines, and the process of connecting one subscriber with another becomes highly complicated, requiring an elaborate plant and a large amount of labor.

Witnesses representing the telephone companies also hold that comparisons with European countries are likely to be misleading. They assert that the lower wages and lower costs of material in European countries must be taken into account; and they hold furthermore that in none of the European systems is the service equal in quality with that in the United States. Mr. Bethell declares that by the adoption of the message-rate system in New York the average cost of telephones to subscribers has been reduced, and now amounts to only about \$85 a year, although the unlimited rate for business telephones is still \$240. This average rate of \$85, according to this witness, is the proper rate to be compared with the European charges which are nearly all on the unlimited system. It is replied to this, however, that the average is obtained by counting each separate telephone on the many small private branch exchanges, which have usually only a single line, while European figures ordinarily relate to the separate line service.

Mr. Bethell enters into a detailed discussion of the system in each European country, stating the rates and the nature of the service. He asserts that in no European country has the telephone service been extended as widely as in the United States, and he attributes this fact largely to the government ownership of the European systems. There are 20 American cities with a population of 200,000 or more, and in these, on an average, there are 21 telephones for each 1,000 people. In Europe there are 44 cities of corresponding size averaging only 13 telephones per 1,000 people. The development of the telephone in many of the European countries is confined almost altogether to the capital and a few of the largest cities. To this argument it is replied, however, that the most favorable examples have been chosen for comparison, and figures as to other American cities are given which compare less favorably with those abroad. Great Britain is the only European country in which private operation of the telephone exists, and Mr. Bethell asserts that the Government has so interfered with the operation of the private company in many ways that its success can not be properly compared with that of other systems. The London rate charged by the private company for a business service is \$100 flat, and the residence rate is \$60. It appears that the British Government is on the point of opening a public exchange in London, and has authorized municipalities to establish their own plants. Glasgow is about to install a municipal telephone system.

MUNICIPAL PUBLIC UTILITIES.

Prof. Parsons,¹ in connection with his general argument in favor of Government ownership of railroads and other public utilities, especially advocated the municipal ownership of gas, electric-lighting, and street-railway systems and similar public utilities. Prof. Bemis² also presented arguments in favor of municipal ownership before the commission, while Mr. A. D. Adams,³ a civil engineer of Boston, undertook to show that the municipal electric plants in Massachusetts have worked more satisfactorily than private plants. Mr. Foote,⁴ editor of *Public Policy*, is inclined to oppose municipal ownership, but to favor the auditing of the accounts of private corporations for the purpose of securing complete publicity and uniformity of accounts.

The argument in favor of public ownership, as stated by the witnesses above named, is based on the assumption that such municipal public utilities as street railways, gas and electric light, and water supply are natural monopolies, and that they furnish such necessary service as to make them essentially public in character. Efforts to maintain competition in furnishing these services, it is held, have failed in almost every city, and they are now supplied by great consolidated corporations. There is even a tendency, these witnesses assert, for single corporations to get control of different classes of utilities in the same city, while in other cases a single corporation controls plants of the same class in many different cities. It is argued that under these circumstances there must either be thoroughly effective regulation of the private corporations operating these utilities, or public ownership.

In support of these assertions these witnesses maintain that the capitalization and charges of private corporations furnishing these services are usually excessive; that there is little or no connection between the capitalization and the actual cost of constructing plants, capitalization being based upon the power to earn dividends at excessive charges. It is pointed out that the statistics show that the capitalization of street railways in Massachusetts, where careful restrictions exist to prevent the watering of stock, is from one-half to two-thirds less than in the other States of the Union. On this subject, however, Mr. Foote says that there are very great differences in the costs of construction in different places, so that comparisons are apt to be somewhat misleading. Professor Bemis declares also that a capitalization of \$3 or \$4 per 1,000 feet of annual product of gas is considered ample to cover the real value of plants, but that the average capitalization of gas companies in large cities in the United States is about \$9 per 1,000 feet.

As regards prices, it is asserted that the statistics of the United States Department of Labor show that the average operating cost of manufacturing gas is only 46 cents per 1,000 feet, while if taxes, depreciation, and interest be added, on the basis of legitimate capitalization, the cost will be brought up to 86 cents, whereas the average price charged by the large gas companies is \$1.14. Witnesses also maintain that the cost of electric lighting by municipal plants is much lower in most instances than the charges made by privately owned plants. Statistical comparisons covering the municipal plants in Chicago, Detroit, and Allegheny and other cities are submitted to prove this statement. An elaborate comparison between municipal and private plants in Massachusetts is made by Mr. Adams. He declares that, if the municipal plants be credited for electric light furnished for public purposes at the average rates paid for public lighting to private companies in Massachusetts towns of corresponding population, it will be found that the municipal plants make earnings, after providing for depreciation and all operating expenses, equal to 12.7 per cent of the actual investment. In all the cities of the State (with a few minor exceptions) having private plants, the earnings amount to only 10.2 per cent of the capitalization, and this witness believes that, because of the regulations of the Massachusetts laws,

¹ Pages 123-138, *passim*.² Pages 86-103.³ Pages 275-285.⁴ Pages 103-123.

the capitalization of these plants represents actual investment. Private plants in cities of smaller population, more nearly corresponding to those having municipal plants, show a still smaller proportion of earnings to capitalization. Mr. Adams believes that these statistics indicate greater efficiency in the operation of municipal plants than of private plants. He also shows that the actual cost of arc and incandescent lights per lamp hour in public plants is very much lower in most instances than the charges of private plants in cities of the same size. These figures are based on a careful calculation of interest and depreciation.

It is also stated there has been a very rapid development in municipal ownership and that it has proved highly satisfactory, charges being reduced greatly and the operation being in many cases thoroughly economical.

Mr. Foote criticises all such comparisons as those above set forth, on the ground that the accounts of corporations and municipalities are kept in such varying fashions as to make the results very uncertain. He asserts that municipal plants frequently fail to take proper account of depreciation and other expenses, and that no allowance is made for the taxes which must be paid by private plants.

It is pointed out by witnesses that municipal ownership of public utilities has advanced much further in Great Britain than in the United States. They assert that the results in that country have been usually very satisfactory; that there is almost entire freedom from corruption and extravagance in the operation of municipal plants; that the conditions of labor have been improved, and that the charges have been reduced. The fact that monopolies can borrow at lower rates of interest than private corporations enables them to introduce improvements even more rapidly than private corporations. The low fares on the street railways of Glasgow are especially referred to as illustrating the advantages of municipal ownership.

Mr. Foote declares that the one object to be gained in the management of public utilities is the greatest benefit to the people. He would favor public operation precisely to the extent that it can be shown that it is more economical to consumers than operation by private corporations. He does not, however, believe that it is possible to obtain the same loyal and energetic effort on the part of public officers and employees as is displayed by the officers and employees of private corporations. He holds in general that the motive of private profit makes a corporation more efficient in its management than a public body, and that, if a proper system of regulation based on thorough publicity of accounts of private corporations should be introduced, the interests of the public could be properly safeguarded, allowing the corporation a reasonable profit on its actual investment. Before public operation is undertaken on a large scale, in the opinion of this witness, a system of uniform and public accounting, both on the part of private corporations and of municipalities, should be introduced, on the basis of which accurate comparisons as to costs of construction and operation will be possible. If then it shall become manifest that private corporations can not be effectively regulated and that public operation will, therefore, be more economical, this witness would favor municipal ownership.

Mr. Foote, for other reasons as well, lays great stress on the desirability of uniform accounting and of supervision and examination of accounts by public authorities, both in the case of private corporations engaged in quasi-public service and in the case of all of the grades of public administration itself. Such a system, he declares, would prevent many frauds and abuses and would permit of accurate comparison between the results accomplished by different institutions. This witness holds, and the others testifying on the subject agree, that the essentially public nature of such enterprises as street railways, electric, gas, and water plants gives to the people the right to demand the most thorough publicity from private corporations controlling them. The experience of Wyoming, which has established a State examiner with power to inspect the accounts of all public bodies and institutions of Massachusetts in regulating gas, electric, and street-railway corporations by means of commissions which

require uniform reports and which have a considerable degree of authority over the issue of securities and over the charges,¹ as well as that of England, are referred to as showing the advantages of this system.

Professor Bemis, in particular, thinks that the steps toward municipal operation should be taken gradually and with caution. The desirability of bettering the political conditions in cities, and the necessity of great improvements in the civil service, are emphasized. Two or three witnesses are inclined to hold, however, that the greater responsibility placed upon municipal governments will in itself tend to improve them. They assert that at present no little corruption in city government results from the interference of private corporations seeking franchises or privileges, while, on the other hand, politicians often exercise a demoralizing influence in the appointment of employees of private corporations performing these services, and otherwise interfere with their successful and economical operation. Were these public utilities operated by the municipality, continues the argument, the citizens would feel the greater importance to their own welfare of good government, and would insist on improvements in political methods, and particularly in the civil service.

Street-railway development.—Hon. Charles Francis Adams, of Boston, who was recently chairman of a commission in Massachusetts of street-railway systems, expresses the belief that the introduction of electricity has so greatly changed the nature of street-railway traffic as to demand entirely different legislation and methods of granting franchises, and different methods of operating railroads from those which have existed in the past. Electric roads will more and more operate between different cities and through rural districts; they will use larger and faster cars and must therefore be usually built on private rights of way and not on the highways as at present; they will tend more and more also to carry freight traffic. Franchises must therefore be granted by State authorities in many instances. The witness thinks that probably indefinite franchises, subject to revocation at any time by proper authorities, will produce less friction than those which expire at definite times. He also states that European street railways are far behind those of the United States, and that whatever progress they make is in the way of copying American methods. He attributes this in part to the undue restriction upon the private companies imposed by municipal authorities.²

RAILWAY LABOR.

The subject of railway labor is discussed almost exclusively, so far as the present volume is concerned, by Mr. Fuller,³ the legislative representative of the brotherhoods of railway employees. For statements of railway officers as to labor conditions reference should be made to Volume IV of the Reports of the Industrial Commission (Transportation).

Conditions of entering employment—Blacklisting.—Mr. Fuller states that some of the rules of the railways as to the terms of entering employment are very unjust. In some cases, despite legislation prohibiting it, the railways discriminate against labor organizations. They frequently require severe physical examinations, and reject applicants for minor defects often caused by injuries received in faithful service. The witness especially complains that the practice of blacklisting still exists, although perhaps slightly reduced in extent by legislation. After the great strikes of 1894 many employees were blacklisted. At present, according to this witness, it is the practice of the railroads, before engaging a man, to write to his former employers as to his record, giving him in the meantime, perhaps, a probationary employment. Railway officers, he asserts, often pursue their former employees vindictively purely

¹ See especially testimony of J. F. Jackson, pp. 842, 843.

² Adams, pp. 826-830.

³ Pages 8-71.

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on personal grounds. Mr. Fuller thinks that legislation should be enacted prohibiting railroad companies from furnishing any record of an employee to another company, whether by private letter or otherwise.

Mr. Fuller also believes that railroad officers often treat their employees unjustly in the matter of discipline and discharge, and that legislation should provide that employees be permitted to see and hear evidence against them, and that specific reasons in writing should be given for their discharge.¹

*Relations of employers and employees.*²—Mr. Fuller states that the more skilled railway employees are organized in strong brotherhoods, some of which include nearly all of the employees on many railroads. By means of these brotherhoods much better conditions of labor have been obtained. The less strongly organized employees, like the telegraphers, have lower wages and worse conditions. Railroad companies usually deal with the officers of the brotherhoods regarding wages and other conditions of labor, and often enter into joint written agreements. These organizations have tended to reduce the number of strikes and to make their conduct more peaceful. The witness thinks that the judiciary has often been unjust in the treatment of railway employees in connection with strikes, and that unfair advantage is taken by the railroads of the fact that they transport the mails.

Mr. Fitzpatrick,³ of the Brotherhood of Railroad Trainmen, testified before the commission in April, 1900, regarding alleged discriminations on the part of the Reading Railroad Company against organized labor. He stated that this company had always been opposed to the railroad brotherhoods and had refused to deal with their officers. The employees of the railroad have not generally been organized, though a few have secretly belonged to the Brotherhood of Railroad Trainmen. Shortly before the witness's testimony, he declares, a number of these members were discharged by the railroad, and also a number of men who were about to form a new lodge at Shamokin. The officers of the Reading Railroad refused to discuss with the men the reason for their discharge. They also stated to the Industrial Commission that they had no affidavits to present on this subject.

Employers' liability.—Mr. Fuller asserts that the common-law doctrine regarding employers' liability, as interpreted by the American courts, is particularly unjust to railway employees. In a few States legislation has been enacted which extends the liability of railroads somewhat, particularly providing that certain classes of employees shall not be considered fellow-servants in the determination of liability. The witness believes that these laws do not go far enough. The common-law doctrine, which exempted the employer from liability for injuries caused by the acts of fellow-servants, has, in the opinion of Mr. Fuller, become absolutely unjust under present conditions where the employee knows nothing of the character of the hundreds and often thousands of fellow-employees, many of whom, especially on railways, are engaged in entirely different branches of the service from himself. The witness cites numerous decisions of the courts, particularly in Pennsylvania, holding various classes of employees to be fellow-servants rather than vice-principals of the employer. He believes that there should be no discrimination between passengers and employees as regards the liability of railroads for injuries. The laws and court decisions in different States are exceedingly conflicting and unintelligible, and Mr. Fuller holds, therefore, that Congress should enact legislation greatly extending the liability of interstate railways for injuries.⁴

Railway relief associations.—Mr. Fuller makes an elaborate attack upon the system of relief departments maintained by several railroads, notably the Pennsylvania, Baltimore and Ohio, Reading, and the Plant System. These departments are supported in whole or in large part by the payments of employees, deducted from their salaries by the companies. They pay benefits in case of injury or death from accident. The witness asserts that while membership in these organizations is claimed by rail-

¹ Fuller, pp. 10-17.

² Fuller, pp. 10, 11, 69-71.

³ *Ibid.* p. 833-840.

⁴ Fuller, pp. 35-41.

way officers to be voluntary, it is, in fact, practically compulsory. The forms of application for employment on two of the railroads, submitted in evidence by the witness, make membership in the relief department a condition of entering employment, while replies from numerous lodges of railway employees on these railroads assert that those who were in service at the time the system was started were put under pressure to become members. Similar replies from organizations on the railroads, which do not absolutely require membership in the relief department as a condition of employment, assert that the applicant is virtually given to understand by the oral remarks of officers that he must join the department. The secretary of the Chamber of Commerce of Pittsburg, however, asserts that membership in the relief department on the Pennsylvania lines is entirely voluntary.¹

Mr. Fuller especially complains that it is unjust for the railroads to require, as they invariably do, that the employee who accepts compensation for injury from the relief department must sign a contract to exempt the railroad company from all other legal liability for damages on account of injuries. He asserts that the one motive of the railroad company in establishing these departments is to save money by freeing themselves from damage suits. The employees, he says, pay at least five-sixths of the cost of insurance, and sometimes all of it, and it is unjust, therefore, that they should be required to release the railroad company from financial liability. In support of his statement regarding the cost of insurance in these departments the witness compares in detail the rates charged by the Plant System for insurance in its relief department with those charged by an old line accident insurance company and those of the Brotherhood of Locomotive Engineers. These comparisons tend to show that the Plant System charges much more for equal benefits than either of the organizations compared.

Mr. Fuller further asserts that the system of relief departments is strongly opposed by railroad employees, and particularly by the organized brotherhoods. The employees feel that the system is not only unjust in the particulars already mentioned, but that it tends to prevent membership in the brotherhoods, since the employees can not afford to carry two policies of insurance, while some of the brotherhoods require that members shall take insurance. Moreover, it is asserted that the employee who has contributed to a relief department, and who will lose the benefit of insurance if he leaves employment, is more dependent upon the railroad company and less able to push demands for better conditions.

In support of his argument on this subject the witness submits many resolutions from railroad organizations and extracts from their journals, together with a tabulation of replies from the local lodges of the Brotherhood of Railroad Trainmen along the Baltimore and Ohio and Pennsylvania railroads, to a schedule of inquiries covering many of the above points.²

CONDITIONS OF LABOR IN WATER TRANSPORTATION.

*Ocean and coastwise transportation.*³—In the preceding volume on transportation (vol. iv, pp. 685 f f) the testimony of the representatives of the ocean sailors' organization, the International Seamen's Union, is given. In the present volume a small amount of testimony is given by another officer of the same organization, Mr. Penje, while representatives of the two leading coastwise steamship companies—Mr. Hayne, of the Merchants and Miners' Transportation Company, and Mr. Guillaudeu, of the Old Dominion Steamship Company—testify particularly with reference to conditions of labor in their employment. These two witnesses assert that the conditions in the coastwise trade are generally more satisfactory than in the transoceanic traffic,

¹ Hayne, pp. 414-426; Guillaudeu, pp. 422-451; Penje, pp. 408, 409.

² Fuller, pp. 43, 50-68.

³ Anderson, p. 637.

INDUSTRIAL COMMISSION:—TRANSPORTATION.

said that most of the conditions which the Seamen's Union desires to have required by legislation are already equalled or excelled by the conditions on these vessels. The men are employed under written contract, which is read over to them when they sign it, and coastwise vessels find little difficulty in securing help. The sailors are engaged by the month, but may leave at any port immediately after the ship lands. The shipping articles contain a provision to protect the sailors against unfair results from too strict enforcement of contract on the part of the employer. These witnesses also assert that sailors have ample remedy in the courts for any violation of contract or abuses.

The wages of common sailors in the coastwise trade are stated by these officers to be usually \$25, those of firemen \$40, and of coal passers \$30. The representative of the Seamen's Union also says that wages are about \$25 for seamen as compared with \$20 in England. Under the law of the United States, only American citizens may be employed as officers, but it is stated that the lower grades of employees on vessels are usually foreigners, especially Scandinavians, and that the sea life has less attractions for Americans than formerly.

One witness suggests the desirability of amending the laws of the United States as regards larceny committed on vessels.¹

The representatives of these coastwise lines state that the work of loading and unloading the vessels is done wholly by stevedores and not by men employed on the vessel. In the South most of the stevedores are negroes. Wages in Norfolk and other more Southern ports are about 15 cents per hour, and in Boston and most Northern ports 20 cents per hour, although in New York the Old Dominion Company pays 25 cents per hour.

Labor on vessels on the Great Lakes.—Mr. Penje, the secretary of the Lake Seamen's Union,² asserts that the members of that organization, about 3,000 in number, are chiefly employed on schooners, the organization having little control over the employees on steamers on the Great Lakes. On the schooners the members are mostly all officers and skilled seamen. According to this witness most of the work on these vessels, and even on steamers, is done by deck hands, who are far from being skilled laborers, and who are more and more replacing the old skilled seamen. The conditions of labor on the lakes are so bad that competent men have sought other occupations. The deck hands are largely men who can find no other employment, and who remain on the vessels only as long as they are forced to, often quitting at the first port they touch. This witness asserts, further, that the wages of seamen under this competition of deck hands have declined. Ten years ago they sometimes reached \$4.50 per day toward the end of the navigation season, but in 1900 they began at \$1.50 and ended at \$2.75 per day, the average income for the season being about only \$300. The wages of deck hands have increased from about \$15 to \$20 per month. The hours of labor are stated to be excessive, both for seamen and deck hands. It is said that men often have to work 24 hours at miscellaneous labor and afterwards 6 hours at the wheel.

Mr. Penje complains, further, that the quarters of sailors and deck hands are too crowded, especially on the older vessels, and that in practically all cases they are so dirty and ill kept as to be entirely unfit for human occupation. The food is also said to be very poor. The contracts call ordinarily for a cost of 7 cents per meal, and the supply is insufficient if the vessel is detained beyond schedule time. This witness also asserts that both sailing and steam vessels on the lakes are very generally insufficiently manned, and that smaller vessels are recklessly overloaded, these practices resulting in great danger to employees and to passengers when they are carried.

*Longshore work on the Great Lakes.*³—The conditions of labor on the docks of the

¹ Hayne, pp. 414, 415, 421; see also his supplementary statement, p. 824.

² Penje, pp. 400-402.

³ Burt, pp. 306-317.

Great Lakes seem to be very much more satisfactory than those on vessels. Mr. Barter, the secretary of the International Longshoremen's Association, which has its strength chiefly along the Great Lakes, declares that there has been a very great improvement in the condition of longshoremen there during the past few years, and attributes it almost wholly to the development of that organization. The association has about 20,000 or 25,000 members on the lakes, while there probably are not more than about 1,500 nonunion men engaged in longshore work. This witness thinks that wages have risen 50 per cent since the organization was formed—in 1892. It has won the respect of the dock managers, and is more and more replacing the old system of contract work in loading and unloading vessels by a system under which the local unions undertake to do the work cooperatively. Under the old system the boss stevedore or contractor was often a saloon keeper, who expected the men to spend much of their wages on liquor. Wages were extremely low, and there were many serious abuses. At present the International Longshoremen's Association has an annual agreement with the managers of the ore and coal docks on Lake Erie, providing for uniform rates of wages and conditions of labor for the loading and unloading of vessels directly by the union. This agreement also provides for the arbitration of disputes.

The wages of longshoremen are stated to range from 30 to 60 cents per hour, the work of course being confined chiefly though not wholly to the navigation season. Under the agreements with dock managers the hours of labor are usually limited to 12. The secretary of the Longshoremen's Association maintains that the character of the men has greatly improved under the influence of the organization. Formerly there was a great deal of drunkenness, and physical contests between gangs under different boss stevedores were frequent. The union now has strict rules against the use of intoxicants during work, and the men enforce these rules vigorously; while the recognition of the union and its scale of wages has done away with the broils which formerly occurred.

MISCELLANEOUS EVIDENCE.

A considerable amount of evidence regarding other than transportation matters is submitted by various witnesses in this volume. For a summary of their evidence regarding most of these minor topics, reference should be made to the digest, pages CCLXXXIX—CCLXXXVII. A few of the more important subjects may be briefly discussed here.

Capitalization and promotion of corporations.—Mr. Greene, of the Audit Company of New York; Mr. Rice, a promoter of corporations, and one or two other witnesses discuss this subject somewhat fully.¹ Mr. Greene asserts that earning power is in general a proper basis for capitalization, and that there is a "good will" in connection with every prosperous business which makes it worth more than the mere tangible value of the plant and property. Tangible value may properly be represented by bonds or preferred stock, and the remaining certain or possible earning capacity by common stock. At the same time this witness thinks that it is a mistake for a corporation, because of unusually high earning capacity, to water its stock. It would be more desirable that it should simply increase dividends. Mr. Rice thinks that the amount of capitalization of a corporation, so long as it is in stocks, is unimportant, since the market will discover its real value. Overcapitalization in bonds, however, leads to bankruptcies.

These witnesses also discuss the subject of publicity in regard to the organization and promotion of corporations. They think that some legal regulation would be perhaps desirable, but assert that business men themselves are taking more and more pains to protect themselves in their investments in corporations. These witnesses

¹ Greene, pp. 476, 482-491; Rice, pp. 732-735, 740; Woodlock, pp. 466.

scarcely think it necessary that the reports of corporations at their inauguration should show separately the costs of promotion, which must necessarily vary greatly according to the conditions.

Mr. Rice refers especially to the exploitation of patents, with which he has been intimately connected. He says the capitalization of a company based on an undeveloped patent must necessarily be fixed solely on the basis of the anticipated profits. The preferred stock should be issued to obtain cash for actual development, and the common stock should represent the estimated value of the patent as such. The witness thinks that the granting of patent monopolies is a great benefit to the public. He alludes especially to the experiences of the Consolidated Rubber Tire Company regarding patents.

Publicity of corporations and protection of stockholders.—The witnesses¹ just referred to discuss also the desirability of requiring greater publicity of the affairs of large corporations generally. They are all inclined to agree that some added legal requirements as regards publicity, both at the time of the establishment of corporations and from year to year thereafter, would be desirable, although they do not favor making public too much information, especially regarding corporations engaged in competitive business. Mr. Greene, in particular, thinks that in many cases the best way to protect the public would be by requiring the examination of corporations by expert auditors, who should make only the general results of their examinations public. This witness also discusses in some detail the precise nature of the information which might properly be set forth in public reports.

Mr. Greene and Mr. Woodlock (of the Wall Street Journal) likewise discuss the rights of stockholders in corporations.² They assert that in general the rights of stockholders, even those of minority stockholders, are relatively well protected by existing laws and court decisions. They see no reason why a bona fide stockholder should not at all times be permitted to see lists of all the stockholders; but they assert that stockholders should not have the right to demand access to all of the financial accounts of corporations, because this would give competitors and enemies of corporations the opportunity, by buying and becoming holders of a small amount of stock, to get information regarding their affairs.

Export prices.—Mr. Greene and Mr. Howes (of the Boston Chamber of Commerce) think that the practice of American manufacturers in selling goods abroad at lower prices than at home, in order to get rid of a surplus, is entirely justifiable, and that the same practice is followed by manufacturers in all countries.³

Reciprocity with Canada.—Mr. Howes⁴ presents a somewhat extended argument in favor of a reciprocity treaty with Canada. He declares that Canada is even now the very best customer for the products of the United States, and that the two countries are naturally almost an economic unit. He maintains, however, that because of the existence of tariff barriers against the sending of Canadian goods into the United States, Canada not only retaliates with other protective duties, but is in general disposed to carry on trade with England and other countries as much as possible in preference to the United States, and that a greatly increased trade with this country would result from a reciprocal reduction of duties. Mr. Howes thinks that free entrance of coal from Nova Scotia and British Columbia would be of great benefit to New England and the Pacific coast States, while our Middle States could export large amounts of coal to Canada. The lumber interests are those which are the most strongly opposed to letting down the tariff barriers, but this witness thinks that it would be a great advantage to New England especially if she could get free lumber from Canada.

Grain elevators and inspection.—The subject of grain elevators and the alleged

¹ Greene, pp. 492, 479-492; Woodlock, p. 466; Rice, p. 736. ² Greene, pp. 484, 487, 494; Howes, p. 716.

³ Greene, pp. 477, 478; Woodlock, pp. 466, 467.

⁴ Pages 713-718.

monopoly in some of the Western States was discussed with considerable fullness in the first report of this commission on transportation. (See Vol. IV, pp. 77-88 of Digest.)

In the present volume Mr. Teisberg, of the Minnesota Railroad and Warehouse Commission, enters somewhat into the subject. He does not think that there is anything in the nature of a combination of elevators in Minnesota, or an agreement to fix the prices of grain. He says that by virtue of the law of that State, giving any person the right to take land on a railroad right-of-way by condemnation for the purpose of building an elevator, many independent elevators have been established, and that moreover farmers can often load their grain directly into the cars. This witness also discusses the system of grain inspection under the Minnesota law, as well as the practice of mixing different grades of grain.¹

¹ Pages 367-371, 372.



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TOPICAL DIGEST OF EVIDENCE.

I. RAILWAY FINANCES GENERALLY.

(See also *Inspection of accounts*, p. CLXX.)

A. Capitalization of railroads (see also *Capitalization of corporations*, p. CLXXII).—1. *Are American railways overcapitalized?*—Professor RIPLEY says that in some roads the capitalization is greatly swollen and in some roads it does not represent more than actual investment. In some roads capitalization covers not only the first cost, but all improvements in the road. In others it does not. The old Chicago and Alton, for instance, was so conservatively financed that the capitalization represented only 60 per cent of the value of the property. The relation between the capitalization of a road and the value of its property should lie at the basis of the determination of what rates are reasonable. A road is not always entitled to earn a living interest in dividends upon its capitalization, because a part of that capitalization may be fictitious. (291, 292, 306.)

Professor Ripley says that while the selling of bonds at a low figure to persons who carry through a deal and the reselling of these bonds at a high figure is not technically stock watering, yet it has the same effect. He cites the case of the Chicago and Alton. Its volume of securities was increased from about \$42,000,000 to something like \$120,000,000, a large part of the increase going in profits to the persons who had the deal in charge. (304.)

Professor PARSONS asserts that the tendency of the great railway corporations is to build up capitalization all the time, adding together the cost of the original plant and the cost of all improvements, reconstructions, etc., until, even with honest book-keeping and without any stock watering, the capitalization comes to be 2 or 3 times the worth of the plant, and the face value of the stock and bonds of these corporations is very much more than the cost of the plant or what it could be duplicated for. In all the corporations there is more or less watered stock.

The system of watering railway stocks originated with Vanderbilt when he consolidated the various railway properties now constituting the New York Central system and increased the capitalization from \$54,000,000, which was a little more than the actual cost of the roads, up to \$103,000,000.

The total capitalization of the railways of the country is a little over \$60,000 a mile, while the cost of reproduction would be under \$30,000 a mile. The cost of reproduction of a plant is a fair test of what it should be capitalized at. There is a total difference of policy under governmental ownership, where there is no water or inflation, but exactly the opposite policy of reducing the capitalization from year to year. One of the reasons given by the Swiss Federal Council for going over to public ownership was that they were surrounded by countries that were aiming to reduce rates to the least possible figures, and that the Swiss roads would pile up the capitalization so high that they would not be able to compete. (154-155.)

Mr. TEISBERG, secretary of the State railroad and warehouse commission of Minnesota, states that a district court in his State found that the cost of reproducing the Great Northern road, some 1,385 miles, in Minnesota would be an average of \$32,000 per mile. About one-third of this amount was the cost of the terminals. The supreme court found this to be exorbitant. (365.)

Mr. SCHIFF, of Kuhn, Loeb & Co., bankers, does not believe there is such a thing as excessive capitalization. The market value of the stocks and bonds of one transportation company adapts itself to that of another company which may have an entirely different capitalization. The market value of competing lines adapts itself to a relative level, whatever the capitalization. In the case of the acquisition of the securities of one road by another there is not necessarily any danger that the purchase may be made at a high figure, which may afterwards be carried in the capitalization of the two roads. That would depend upon the good judgment of the railroad managers. During the past year or two acquisitions of this sort have been made

on much lower figures than now exist. The worth of a stock is its earning power. Every other value given is speculative. If a road overissues stock on presumptive earnings or extensions or by vote of the board of directors the water in the issue is nearly always practically eliminated by the rating which the market puts on the stock itself. Very few companies or boards of directors can increase their capital stock without a vote of the stockholders, and any unjust increase would necessarily be done by the owners of the property themselves. Every intelligent shareholder nowadays acts independently, and if anything is proposed by the larger shareholders that is not approved by the smaller ones they make themselves very readily and very forcibly heard.

As a general proposition it would be impossible to say offhand whether it would be a proper proceeding for two roads, each of which had a fair capitalization, to combine and double the total capitalization of the two roads in the new line. (772-776.)

Mr. THOMAS, president of the Erie Railroad, asserts that the capitalization of American railroads is low as compared with that of English roads. Some of the English roads have a capital of \$350,000 per mile. There is a cry against the Erie Railroad because it has a bonded debt of \$70,000 per mile, but the property could not be reproduced for the amount of that debt with a very large sum in addition. The witness doubts much the correctness of estimates as to the cost of building railroads, while the value of terminals is a very important factor. Besides its bonds, the Erie Railroad, according to Mr. Thomas, has \$43,000,000 of first preferred stock, \$16,000,000 of second preferred stock, and \$100,000,000 of common stock. The Erie has been through several bankruptcies, which have reduced the rates of interest and fixed charges. The witness does not assert that the stock has been reduced by reorganizations, but says that the amount of stock makes no difference if no dividends are paid upon it.

Mr. Thomas does not think either that heavy capitalization of a railroad tends to increase the speculation in its securities. The contrary is probably the case. (551, 559.)

Mr. WOODLOCK, railroad editor of the Wall Street Journal, does not believe that American railroads generally are overcapitalized. The stocks and bonds of American railroads combined average only \$61,000 per mile of road. This is an increase of about \$8,000 above the figure 15 years ago. In some instances, however, recent reorganizations of railroads have increased securities unduly. This was the case, for example, with the Richmond Terminal, the Erie, the Reading, and the Chicago and Alton. Various junior securities have been issued which could not be expected to get any dividends. Thus Mr. J. P. Morgan, in most of his reorganizations, estimated the minimum earning capacity and based the fixed charges, going to bonds and preferred stocks, on that, but as regards securities dependent upon future prospects people could pretty much help themselves. (456.)

Mr. Woodlock says that the capitalization of British railroads is between \$220,000 and \$240,000, per mile, as compared with \$61,000 per mile for American roads. When British roads were being built, from 1840 to 1850, land was worth a great deal more than it is here, and more than it is worth in England now. Moreover, the English roads have capitalized every amount, however small, which has gone into improving the lines. Mr. Woodlock seems to imply that the policy was intentionally to increase capitalization as much as possible. The best English roads pay from 5 to 7½ per cent dividends on this high capitalization. (461.)

2. *Proper basis of capitalization* (see also under *Taxation*, p. CLXXXIX).—Mr. TALCOTT, assistant to the president of the Seaboard Air Line, says that the question of the proper basis for capitalizing a railroad is the hardest problem that was ever propounded to him. He does not see how the physical value of the property can properly be disregarded, and yet the public and the financiers appreciate a property only for what it will earn. The value of a property and the value of a franchise are two different things; but Mr. Talcott thinks, apparently, that both should be considered in fixing a value or in fixing a capitalization. (635.)

Mr. Woodlock does not believe that overcapitalization has any effect on earnings or rates. Earning capacity is the final test of capitalization itself. All other influences tend to favor overcapitalization, but earning capacity tends to keep it down. Rates of transportation are governed by conditions into which capitalization does not enter at all.

Mr. Woodlock does not agree with the position of the Interstate Commerce Commission that in estimating a reasonable rate the original cost of the road should be considered. It is fairer to consider as a basis the cost of duplication, including not merely the physical plant, but the terminals, the acquisition of business, and everything which makes an operating railroad. The cost of duplication is a very different thing from the original cost. Railroads have naturally become very valuable because

of the growth of population, which in many cases has been the result of the presence of the railroad, and which has increased especially the value of land for right of way and for terminals. Moreover, large amounts of money have been diverted from earnings for the improvement of the railroads, and often no account has been made of this fact in the capital investment.

Mr. Woodlock believes, in fact, that the existing capitalization of railroads in general represents no more than the actual cost of the roads. The cost of a road includes many matters not strictly of construction. For example, there is the discount on bonds in many cases, which must be considered a part of the cost. It is true that sometimes contracts for construction are given to construction companies, often composed of officers of the road, at very high figures. But after the whole road is laid it is not finished. Money must be spent on it for years.

Mr. Woodlock concludes with the statement that the capitalization of the railroads as compared with modern industrial combinations is, in general, exceedingly conservative. In some instances railroads have been capitalized at an absurdly low rate. (456-458.)

3. *Stock dividends.*—Mr. SCHIFF testified that as a general proposition he does not believe stock dividends are advisable, but there may be exceptions if the stock dividend represents cash value or earnings actually retained in the course of years from the shareholders. He says:

"For instance, if I own to-day a line of road from New York to Albany, and want to build a branch, say, from Albany to Saratoga, and if, instead of issuing new capital, I take my earnings, or the earnings of the shareholders of the company, to build that new road with, I should be justified, after that road is completed, in returning to the shareholders their money which has been used for new capital in the form of new shares." (774.)

4. *Depreciation in value of property.*—Professor RIPLEY says that, in computing the value of the tangible property of railroads in Michigan, consideration is taken of depreciation in value over first cost. In addition to figuring out the cost of duplication, the worth of the road for scrap is also estimated. For instance, the cost of the steel rails used by the railroads is estimated, how much those rails are worth as scrap, and how long is their normal life. If the normal life of the rail would be twenty-five years, the assumption is made that one twenty-fifth of the difference between the cost of the rails and the scrap disappears in each year. Then if the road has been built for three years, three twenty-fifths of this difference in value should rightly be deducted in order to determine how much the road is worth at the present time. (306.)

5. *Betterments of railroads.*—Mr. TALCOTT, assistant to the president of the Seaboard Air Line, says that the cost of additional facilities for handling business is charged by some Southern roads to operating expenses, generally with a note that the amount has gone for betterment, and by other roads, if the improvement is of any magnitude, to the construction account. New equipment is generally paid for out of earnings, because the usual way to buy it is on the car-trust plan, making payments monthly or quarterly. (635.)

6. *Capitalization of the Chicago and Alton Railroad.*—Mr. WOODLOCK speaks especially of the Chicago and Alton Railroad as an illustration of modern methods of railroad financing. For eighteen or nineteen years, until very recently, the road did not increase its capitalization nor extend its lines. It paid dividends of 7 or 8 per cent on its common stock regularly. Its net earnings were about \$2,900,000 per year. The road had \$22,000,000 of stock and \$8,000,000 of bonds. The interest on the bonds and rentals required \$1,100,000 yearly, leaving \$1,800,000 for dividends. Mr. Harriman finally bought out the road, paying \$175 per share for common stock and \$200 per share for preferred stock, the entire stock costing him more than \$40,000,000. He knew that a first charge on the net earning capacity of \$1,800,000 could be floated at 3½ per cent interest or less. Accordingly he issued more stock and bonds, so that the present capitalization is \$54,000,000 of bonds, partly 3 per cent and partly 3½ per cent, and \$40,000,000 of stock. Mr. Woodlock contends that the road is perfectly able to pay interest on the bonds and dividends on preferred stock. Mr. Harriman made, of course, a very considerable profit. He bought it on practically a 6 per cent basis. It is believed that the syndicate which bought up the road made a profit of 16 or 18 per cent, but there were other profits not going directly to the syndicate. The railroad has meanwhile increased its length by buying up a short line, increasing the mileage from 847 miles to 900.

Mr. Woodlock contends that the capitalization of the Chicago and Alton is scarcely excessive, as regards its effect on rates, for the reason that, though there is plenty of money available for profitable enterprises, no one proposes to build another road from Chicago to St. Louis. Another road could not make lower rates than those existing. There was a project to build a short line, known as the St. Louis and

Northern, up to Chicago. The other railroads did not want another Chicago line; there was no need for it. They simply bought it up, and the Alton now owns this line. Nevertheless the witness thinks that those who buy Alton common stock at 40 are likely to get left. (458-460.)

Mr. SCHIFF declares that the recent financing of the Chicago and Alton road by his firm was simply a readjustment and not a reorganization. The old organization had become so heavy that it was impossible to expand the possibilities of the road, and the stockholders decided they would readjust the finances of the company. His firm were large stockholders. The charges for dividends and interest in the new corporation do not vary 5 per cent from the charges and dividends of the old corporation. He is not aware that the capitalization was increased from about \$30,000,000 to something over \$100,000,000, including stock and bonds. He remembers very clearly that under the old financing the charges for dividends and interest were something like \$2,600,000 and under the new scheme they were only something like \$2,700,000, notwithstanding the fact that about \$10,000,000 new money had gone into the road. The amounts of stock and bonds were increased, but the dividends, which for 30 years had been 7 per cent, were reduced to 4 per cent. There is no more temptation to increase dividends from 4 to 6 per cent than would have existed before if it had increased the old dividend from 7 to 10 per cent and it would not necessarily excite public comment any more to do so. (775, 776.)

7. *Financing of the Kansas City, Pittsburg and Gulf Railroad.*—Mr. WOODLOCK speaks especially of the financing of this road. It was started by Mr. Stilwell, who aimed to build a line directly from Kansas City to the Gulf of Mexico, establishing a deep-water port on Sabine Lake, with a ship canal from the Gulf to the lake. He raised the money for the road mainly in Amsterdam. The terms of the mortgage permitted the issue of bonds at the rate of \$25,000 per mile, both for main track and for yard and terminal tracks. Whenever the road found itself in need of money it would lay five or six tracks alongside the main track, call it a yard and get \$25,000 per mile of bonds. Ninety or 100 miles of such unnecessary yard track were laid. These bonds were mostly sold at from 65 to 70 cents on the dollar, and an equal amount of common stock was thrown in as a bonus. It was obvious that the property could not bear such heavy capitalization and it finally went into bankruptcy and has been reorganized. (461, 462.)

8. *Effect of high capitalization on price of stocks.*—Mr. WOODLOCK points out that stock bearing a low interest sells at a relatively higher price than one bearing high interest. If a 6 per cent income is divided between a 4 per cent stock and a 2 per cent stock, the two can be sold for much more than a 6 per cent stock, because there are always "prospects." (400.)

B. Regulation of capitalization.—1. *Generally.*—While Mr. WOODLOCK does not believe that overcapitalization is likely to have any special effect upon the public as regards rates, he does believe that it may injuriously affect speculators and investors. At the same time it would be very difficult to protect them. The investor refuses to be protected; "He wants to gamble." Mr. Woodlock seems to hold that it would be a good thing to have Federal legislation, effectively enforced, restricting capitalization of railroads closely to actual investment. The Massachusetts legislation on this subject and the English legislation are both good and should be either enacted in a general way by Congress or woven into the interstate-commerce law. (460-462.)

Notwithstanding his statements that American railways are not usually greatly overcapitalized, Mr. THOMAS thinks that legislation should restrict excessive issues of securities by railroads. This would be advantageous both to the railroads and to the public, certainly much more advantageous than regulation of charges and other interference. Corporations should be controlled chiefly through their financial machinery. The witness would approve the extension of the powers of the Interstate Commerce Commission in this direction. (551, 559, 560.)

2. *Massachusetts law.*—Professor RIPLEY says that the corporation laws of Massachusetts are so strict that no railroad in Massachusetts can issue a dollar's worth of stocks or bonds, can lease another road, can build another spur of side track or do anything of that kind without getting the prior approval of the railroad commission. The result is that the roads feel that unless they accede to the recommendations of the railroad commissioners in matters of rates it will happen that, when they wish to carry through some financial operation, the railroad commission may withhold its consent. The railroad commission is not empowered to determine rates, though some years ago, when the Housatonic Railroad refused or neglected to comply with a recommendation of the commission for the reduction of rates at certain points, the commission reported the facts to the general court, which was then in session, and the general court immediately authorized the railroad commission to fix rates on that road.

Under ordinary conditions the power possessed by the railroad commission which enables it to pass upon all financial operations is sufficient for making the railroads acquiesce in such suggestions as are made. Such power in the hands of the Interstate Commerce Commission over interstate roads would give to it the hold over those roads which the Massachusetts railroad commission now has over Massachusetts roads. The Massachusetts corporation laws also operate to prevent stock watering and to hold down capitalization. The law specifically says that no corporation shall issue stock except to the amount of actual investment in tangible, physical plant, and Massachusetts corporations do not incorporate for anywhere near the aggregate amount of par value of stock and bonds per mile which is customary in other parts of the country. (292, 293.)

Mr. F. JACKSON, a member of the Massachusetts State Board of Railroad Commissioners, says that the policy of the board in respect to capitalization is one of restriction. Its theory is that it is right that the people who furnish the income to the stockholders in the way of rates should pay profits only upon actual expenditure. The statute describes the purposes, in a general way, for which stock and bonds may be issued. Then the board has to decide whether the particular purposes of the company fairly fall within the general purposes as described by the statute. Next it decides the amount of capital which is fairly required for that purpose. If a street railway desires to equip its road the board has a skilled expert to determine what the fair cost of such equipment would be; if a road is to be built, the board has an expert engineer examine into the cost of construction; if real estate is to be bought, the board determines the fair amount to be paid for the property.

There is a statutory distinction and there are distinctions in practice between bonds and stock in fixing the amount of capitalization. The bonds must not be in excess of the capital stock, and, in practice, the board never allows bonds to be issued until the enterprise has reached the stage of completion. Before approving an issue of mortgage bonds the board examines the assets and liabilities of the railway or railroad, determines the value of the property, and sees that it is at least equal to the amount of the outstanding capital and indebtedness. In determining the value of the property the board does not take into account the value of the terminals. (843, 844.)

Mr. JACKSON says also that stock and scrip dividends are prohibited by statute in Massachusetts. (844.)

3. *Minnesota law.*—Mr. TEISBERG, secretary of the State Railroad and Warehouse Commission of Minnesota, says that an act was passed in his State in 1887, requiring that all stock issued by new railroad companies should be fully paid, and that no increase of stock should be made without the consent of the Railroad and Warehouse Commission. Since that time the witness believes that 3 applications for permission to increase capital stock have been made. All have been granted, after full hearing. The regulation of stock issues does not apply to the Great Northern Company, which holds a charter dating from 1856, nor to the Northern Pacific. It applies only to a few roads incorporated under the general incorporation law. (385.)

4. *Sinking funds.*—Mr. RIPLEY says that the only difficulty he sees in the proposal to require roads to set aside a sinking fund to liquidate their bonds is that the status of those sinking funds would be highly complicated if the roads went into the hands of a receiver before the final burden of the securities was paid off. (306.)

C. Bankruptcy and reorganization of railroads.—1. *Effect on capitalization.*—Mr. GREENE, of the Audit Company of New York, says that the same causes which make hard times in manufacturing business make hard times for the railroads, so that bankruptcy and reorganizations are more or less periodical, depending on the fluctuations in business.

It is not always true that railroads with heavy capitalization are most subject to bankruptcy. It depends on the situation of the corporation and the nature of its business. It can not be said that the reorganizations of recent years have usually resulted in cutting down the aggregate volume of the securities of the railroad companies. They have generally reduced the bonded indebtedness, or in any case, on account of the lower rate of interest, reduced the fixed charges upon bonded debt. In not a few instances the stocks have been increased. Often preferred stocks have been created, sometimes in place of a part of the former bonds. It is one of the objects of recent railway consolidations to enable the companies to earn some interest on these preferred stocks, which, while they have no legal claim upon the earnings, have a moral claim. Nevertheless an increase of securities of this kind is a less serious burden upon the corporation than an increase of bonds. The bonds must be within a reasonable limit or bankruptcy will some time occur.

The usual way in which reorganization is effected is by a meeting of persons who either own or control a large portion of the bonds. They often act in connection with a friendly receiver of the railroad. They study the situation to find out what the road

can do, and how its earning capacity can be increased, and ascertain where money can be obtained. They have to decide what bonds can be scaled down and what exchanged for preferred stocks. The witness does not think that these committees, while apparently self-constituted, are able to endanger the interests of minority stockholders. The courts are more and more inclined to protect the minority. They have felt that the first consideration was to preserve the public service of the railroad. For this reason they have tried to keep the various railroad systems together in the case of reorganization, instead of allowing them to become broken up into separate roads, with varying classes of obligations and securities. This is the policy of the courts during the receivership and in connection with reorganization movements. The managers of railroads often take pains to have receivers appointed who are not hostile to their interests. There may be abuses by receivers, but to the honor of the courts there has been little complaint on that score. It is true that in deciding, in connection with reorganization, whether some lines shall be dropped or others retained, the interests of members of the reorganization committee in the separate lines may be a factor, but generally the real interests of the entire system are considered. Some branches are merely suckers instead of feeders, and these are generally cut off. If the minority feel themselves injured by these processes, they have recourse readily to the courts. (487, 488.)

Professor RIPLEY says that most of the reorganizations which have been had, although intended to cut down capitalization, have had exactly the reverse effect. While the road comes out of the reorganization with a lessening of its fixed charges, the aggregate par value of stock and bonds is, however, almost always greater than it was before. The Atchison road, which has been reorganized three times since 1889, has, after each reorganization, had a greater capitalization. The reason for this increase in capitalization seems to be that persons who are represented by all of the eight or ten different securities resting on a given line are not willing to accept in place of their securities others of a lower par value than those which they formerly possessed. The result is that many people are satisfied to get a large amount of stock in par value which does not sell for much on the exchange, rather than get a few shares of something which perhaps will sell higher. They all wish to be remembered in the organization by a certain amount of stock which they hope will go up toward par later.

Reorganization is generally intended to wipe out the complexity which results from a large number of different classes of securities. In the case of the Union Pacific reorganization, perhaps two or a single class of securities applied over the whole line. By the reduction of the number of classes of securities, the problem of determining how much capitalization a road has and what the relation of its capitalization is to its earnings is greatly simplified. In most cases reorganization has resulted in a considerable cutting down of fixed charges. Financiers are enabled to issue new classes of bonds at lower rates of interest, etc. The roads can refund practically for $3\frac{1}{2}$ per cent or even $3\frac{1}{4}$ per cent where formerly they had to pay on those fixed charges 6 or even 7 per cent. (291, 294, 298.)

Mr. Ripley says also that a great many of the roads in this country are reducing their bond issues and substituting stock, for the reason that dividends on stock need not of necessity be paid in times of depression, while bond charges must be met regularly or else there is bankruptcy or receivership. The difficulty in such substitution is that it is only an exceedingly strong road that can issue stock. (304.)

Mr. GREENE, of the Audit Company of New York, says that there has been a great reduction in the rates of interest on the bonded debts. The general basis has been reduced from about 7 per cent in 1890 to 4 per cent in 1901. The bonds of the New York Central now bear 7 per cent, but could be refunded at $3\frac{1}{2}$ per cent. (486.)

2. *Effect of recent reorganizations on physical character of roads.*—Mr. RICE, banker, believes that the financial condition of American railroads is very much better now than it was in 1893. Through the various reorganizations which followed the bankruptcies of that and the following years an enormous amount of cash has been put into the railroads. Thus the Southern Railroad is made up of a number of small lines, which were very poorly constructed. Large assessments were levied on the stockholders, and the combined road has improved greatly in physical conditions. The same is true of roads in other sections. While 15 years ago the English railroads were superior to ours in their physical conditions, the opposite is true at present. (740.)

3. *Receiverships.*—Mr. RICE says that he secured the introduction of a bill into Congress several years ago on the subject of receiverships. It has been the practice whenever the president of a railroad had bad luck to put it into bankruptcy and appoint him receiver, on the ground that he was most familiar with the road. The witness thinks that if the familiarity of the president brought on the ruin of the road it would be better to have some one else act as receiver. (741.)

Mr. TALCOTT, assistant to the president of the Seaboard Air Line, thinks that the principal cause of the receiverships, which were so numerous several years ago, was that the managers in their anxiety to build up big systems bought properties and paid more for them than they were worth. In the case of the Richmond Terminal, for instance, an exceedingly valuable stock was diluted by adding weak properties to it until its back was broken. This company was not actually insolvent when it was put into the hands of a receiver. It was not in default even on a note. Rate-cutting had nothing to do with the failure of this company, nor with that of the Norfolk and Western, though there have been many cases of failure due to reckless competition. (636.)

D. Speculation in railway and other securities.—Mr. WOODLOCK, railroad editor of the Wall Street Journal, expresses the opinion that the majority of transactions on the New York Stock Exchange are purchases of stocks on margin. By this system, if a man has \$1,000 to invest, he can buy 100 shares, par value \$10,000. He gets whatever profit there is from an advance, and is liable for the loss if the shares go down.

Mr. Woodlock does not believe that speculation in stocks has any permanent effect on their value at all. The real earning capacity determines the prices of stocks in the long run. Temporary fluctuations, even of considerable amount, may take place without any real change in permanent value. This may be due to sympathy with other stocks or to the necessity which compels some large holder to sell out rapidly. Thus, even in the case of the Great Northern, which is on a splendid financial basis, there have been fluctuations of as much as 20 points in a day.

Mr. Woodlock asserts further that the stock exchanges have very strict requirements as regards stocks which are formally listed. The companies have to furnish much information at the outset, and make periodical reports. There are some companies, such as the American Sugar Refining Company, which are not willing to furnish the information required for listing. The stock exchange allows some of these, known as unlisted securities, to be dealt with on the floor of the exchange, but with the understanding that greater risk is involved. Unlisted securities are mostly "industrials." The witness believes that, if possible, legislation requiring the furnishing of adequate information regarding corporations should be enacted. (465, 466.)

Stock gambling.—Professor PARSONS states that one of the evils of overcapitalization in private monopolies is that it creates a mania for speculation and stock gambling in New York and other cities, which is very detrimental to the industries of the country and also detrimental in its effect on young men especially. If these industries were controlled by the public the opportunities for stock gambling would be done away with. (155, 156.)

Mr. GREENE, of the Audit Company of New York, asserts that the trade on the New York Stock Exchange is all legitimate. No member is allowed to resort to bucket-shop practices—simply betting on the market, without actual buying and selling. (483.)

Wall street and banking houses.—Mr. SCHIFF testifies that "Wall street" in the sense in which it is generally used means the stock exchange, which is something entirely different from the banking business. Large banking houses have only to do with Wall street in so far as it represents a market for securities. Speculation is an entirely different thing. The enormous rise in values which has lately taken place (1901) has to a great extent been the result of market speculation. "People went insane and went into what is popularly termed Wall street and bought on margins, and naturally something had to occur, as it always does, to bring down these unreasonably inflated prices, and it did occur."

American wealth and prosperity will keep prices to their natural level. Legitimate capital and property can never be used to build up a level of prices which is not justified. The American banker did not come to the aid of the speculator, but merely saved the legitimate owners of securities from being compelled to sacrifice them at any price. (776.)

Northern Pacific Railroad corner.—Mr. RICE says that he understands that an injunction was issued to compel the holders of the stock of the Northern Pacific to settle with the short sellers on a basis of \$150 per share, on the ground that where there is a physical impossibility of performing the contract it can not be enforced. (742.)

E. American securities held in Europe.—Mr. SCHIFF testifies that nobody can estimate correctly the proportion of American securities held in Europe, but he believes the amount is exceedingly small and the greatest protection to the welfare and prosperity of this country, the great strength of the country, lies in the fact that Europe holds so few of our railroad securities. (776.)

F. Recent increased earnings of railroads. (See also, in relation to rates, p. LXXIV).—Mr. GREENE, of the Audit Company, of New York, says that there is a very great increase in the earnings of railroads in the last few years as compared with their earnings during the period of depression, and even before 1893. This increase is due, first, to the general prosperity of the country and the greater amount of trade shipped, and, second, to the improved methods of the railroads. They have been forced to learn how to do business better—for example, to increase train loads in a way that was thought impossible 10 years ago. The lower rates of interest on bonds will also leave more for the stockholders than formerly. (486.)

Mr. NICHOLSON, manager of the Central Railway Clearing House, testifies that there has been a general increase month by month in the railway business of the country for the last year, 1900-1901. The maintenance of rates and the general prosperity of the country have brought this about. (727.)

Mr. RIPLEY says that some of the roads at the present time are paying a low rate of dividends because they are turning a large amount of surplus earnings back into the property in straightening curves, putting up new stations, and developing terminals. (304.)

Economy of operation.—Mr. NICHOLSON testifies that the railroads are attempting to increase the service of each car. One way in which this is done is by demurrage charges being applied to stations holding cars. The clearing-house system contributes to this end, the cars being moved quicker. (728.)

Southern railroads—physical condition.—Mr. TALCOTT, assistant to the president of the Seaboard Air Line, says that railroads in the Southern States have greatly improved in recent years in every respect, as to track, weight of rails, capacity of engines and cars, and equipment generally. They are improving every year. (635.)

II. CONSOLIDATION. COMMUNITY OF INTEREST. POOLING.

A. The movement toward consolidation and community of interest.—1. *Generally.*—Mr. WOODLOCK declares that community of ownership and railway consolidations were the direct outcome of the restrictions upon less formal agreements and combinations between railroads. The movement goes back to the interstate-commerce law, prohibiting pooling. One by one the decisions of the courts have made impossible the other forms of organization which took the place of pooling, the trans-Missouri decision taking away the last method possible. Mr. C. P. Huntington seems to have been the first to develop the community-of-ownership principle. It has always been the case that seven or eight groups of bankers were in a position to control 75 per cent of the railroad mileage of the country. They have simply come together in an informal manner. Thus the Vanderbilts and the Pennsylvania Railroad Company agreed as regards their respective systems to "keep everything quiet," and cease excessive competition, rate cutting, discriminations, etc. This is at least what is supposed to have taken place. In any case the trunk-line situation has become quiet, and the same is true of the soft-coal situation. In other cases it has seemed to the railroads necessary to secure actual control one of the other, as in the case of the purchase of the Southern Pacific by the Union Pacific. (462.)

Mr. SCHIFF, a member of the banking firm of Kuhn, Loeb & Co., of New York City, testifies that his firm has had leading interests in the reorganization of the Union Pacific Railroad and to some extent the Baltimore and Ohio Railroad. He says the community-of-interest idea arose in the desire of the railroads to protect themselves against the demoralization and depression in the values of their properties, which was brought about by antipooling legislation. The cutting of rates brought about by competition demoralized the railroad interests and was not beneficial to shippers. This competition resulted in a gradual coming together of the railroad interests and induced them to buy into one another's properties—that is, the competing lines bought stock, directly or through large stockholders, in the other competing roads. This process has been going on on a large scale, and while not yet completed it will naturally bring about some protection to the properties and will be of great benefit to the laboring man and will give security to the shipper, as well as be beneficial to the owner of railroad property. The final result will be a "community of interest between railroads, shippers, and labor." (39.)

Nothing like general consolidation of railroad properties is intended by this proceeding. There will not necessarily be an absorption by one company of another. The establishment of a community of interest does not necessarily involve any struggle for the transfer of control from one party to another. Ordinarily these processes have been accomplished by direct acquisitions of stocks, by the railroads or large owners, but not necessarily of controlling interests in the stock. The object sought

is not higher rates, but uniform, equal, steady rates, and when the general public understands the situation there will be no fear as to the result and no misapprehension as to the wisdom of it. The community-of-interest idea can not be applied to all the railroad property in the country. All that can be expected for the present is to bring certain great competing systems into harmonious action. The trunk lines and the transcontinental lines are likely to be embraced. (770-771.)

2. *Pooling and consolidation.*—Mr. GREENE, of the Audit Company, of New York, says that people interested in railroads are rather glad that the law authorizing pooling did not pass, because, being prohibited from pooling, the railroads have been forced into consolidation with its attendant advantages. The pool keeps the methods of business of the separate roads essentially unchanged. It merely sustains prices. Consolidation permits economies in operation. (473.)

Mr. WOODLOCK declares that even if a law were passed allowing the railroads to form pools they probably would not do so. The community-of-ownership method has been found the safest solution of the problem of railroad competition. None of the former associations were of any great value. There were disputes and rate cutting half the time. Now the same people happen to be directors of many of the railroads, and if one road makes special rates or discriminations it can be reached at once by men who control other roads. (463.)

3. *Control of Interstate Commerce Commission as affected by consolidation of railroads.*—Mr. GREENE, of the Audit Company, of New York, thinks that the movement toward the consolidation of railroads may make necessary additional control by the Interstate Commerce Commission. It may be that the present tendency will finally lead to just the condition which the Interstate Commerce Commission has been seeking. (473.)

Professor ADAMS, statistician of the Interstate Commerce Commission, says that probably the present tendency toward contractual consolidation is in part due to the inability of the roads to pool. If that is true Government control over these great consolidations is just as important as increased control would have been if Congress had legalized pools. (386.)

4. *Combination of trunk lines and transcontinental lines.*—Mr. SCHIFF says that he does not know of any financial interests trying to control any two of the great transcontinental lines west of the Missouri River. He says the great railway systems of the country are divided into two divisions—the lines to and those beyond the Mississippi or Missouri River. East of that division line are the great trunk lines and west of it are the transcontinental lines. He does not believe that the trunk lines have any desire whatever to extend their lines and thus control the transcontinental lines, or to construct additional lines west. There is always a limit to the freight business which one system can handle, and traffic questions in the different sections of the country are different. The heads of the trunk-line systems on one hand and the transcontinental systems on the other are very wisely desirous of keeping apart. Any of the transcontinental lines would prefer to have every trunk line come to it on equal terms and use its facilities of transportation. (772.)

The witness has seen a statement in the paper that the remaining \$60,000,000 of bonds of the Union Pacific Road out of the \$100,000,000 authorized were to be assumed to secure the purchase of stock in the Northern Pacific by the Union Pacific interests, but preferred not to make any statement with respect thereto, saying that it was a leading question. (776.)

5. *Railway consolidations and agreements in Colorado.*—Mr. GRIFFITH, representing the Denver Chamber of Commerce, says that he understands from newspaper reports that the Colorado Southern Railroad has acquired a half interest in the Colorado Midland, and also in the Rio Grande Western, which runs from the Colorado line to Salt Lake City. It is also claimed that the Missouri Pacific has acquired control of the Denver and Rio Grande, and a half interest in the Rio Grande Western, and that it is trying to get control of the Colorado Southern. There is also a report that the Union Pacific is trying to control the Colorado Southern. The witness does not know what the effect of such consolidation would be upon rates, although they would certainly reduce competition. (855.)

Mr. GRIFFITH thinks that the fact that the 5 railroads reaching Denver from the east have all maintained the same rates firmly would indicate that they must have some agreement for the maintenance of rates. (856.)

6. *Combination of Union Pacific, Southern Pacific, and Central Pacific.*—Mr. WOODLOCK says that the Union Pacific Railroad Company has recently substantially bought control of the Southern Pacific. It will be possible, however, for the two systems again to separate, and it may not be unlikely. The Union Pacific was originally designed as a continuous line with the Central Pacific from Ogden, and the ownership of the

Central Pacific by the Southern Pacific forced the Union Pacific into the combination. The Southern Pacific may now sell to the Union Pacific the stocks and bonds of the Central Pacific, in which case the occasion for the control of the Southern Pacific by the Union Pacific will largely have disappeared. (462.)

Mr. STUBBS, third vice-president of the Southern Pacific Company, says that this company is a Kentucky corporation, which has authority to own and operate railroads and do sundry other things which railroad companies ordinarily can not do. It controls by ownership of a majority of all of the stocks a number of separate railroads which make up what are known as the Atlantic system and the Pacific system of the Southern Pacific lines. Originally the Atlantic system included all lines east of El Paso, the Pacific system all west, including the lines as far as Portland, and the Central Pacific line from San Francisco to Ogden. The laws of Texas forbade the leasing of Texas roads, which necessitated the separate operation of the Texas lines, so that nominally the Atlantic system now lies east of the Texas State line. (757.)

Mr. STUBBS asserts that from the first construction of the Southern Pacific and Central Pacific railroads they worked in entire harmony, being under common control, though not under strictly common ownership. Since about 1885 the Southern Pacific Company has held a lease of the Central Pacific. Quite recently there has been further combination, amounting to a merger of interests, concerning which this witness is not familiar.

Mr. Stubbs denies that there has been any tendency to divert traffic from the Central Pacific to the Southern Pacific lines, because of the fact that the Southern Pacific owns other lines to the east, and thereby would get a longer haul than over the Central Pacific west of Ogden. He says that the Central Pacific connects at Ogden with the Union Pacific, and through this and the Rio Grande Western with the Burlington, Missouri Pacific, the Chicago and Northwestern, and numerous other railroads. All of these more eastern railroads have well-equipped soliciting agencies in San Francisco and Los Angeles, and solicit business going over the Central Pacific lines. The Southern Pacific has also a soliciting agency, which tries to get freight for the southern route, and this practice on its part is the only foundation for a complaint that there has been a discrimination against the Central Pacific which tended to decrease the value of the Government's securities based on that rate. The witness supposes that the Southern Pacific has the legal power to direct the route which freight shall take, but it has not exercised that power except in the case of oranges, where it was done in order to break up a system of rebates by Eastern connecting lines. (757, 764.)

7. *Pennsylvania and Baltimore and Ohio railroads.*—Mr. SCHIFF testifies that he is very certain that the Pennsylvania Railroad does not own a controlling interest in the Baltimore and Ohio. He is quite certain that only the smallest percentage of the directors of the Baltimore and Ohio are in any way connected with the Pennsylvania Railroad system. Any company owning less than 50 per cent of the stock of another company can not be said to have a controlling interest in the latter company. He does not know how the cooperation of the Pennsylvania system with the Baltimore and Ohio has been reached. (771, 772.)

8. *Northern Pacific stock flurry.*—Mr. SCHIFF testified in May, 1901, that he was not aware that there has been any contest in respect of the Northern Pacific and Union Pacific stocks. There may have been some Wall street speculation. He explained the phenomenal rise in Northern Pacific stock on the ground that somebody had sold something he did not have, and could not get it when he wanted it. He never listens to rumors, and knows nothing about Wall street gambling. (772.)

9. *Large and small railroads in the Southern States.*—Mr. DUNLAP, who is the receiver of the Gainesville, Jefferson and Southern Railway, a line 65 miles long, and the general manager of the Tallulah Falls Railway, 20 miles long, declares his belief that short railroads such as these can no longer operate profitably, and that they will more and more tend to become absorbed in large systems. One of the two roads named is insolvent and the other makes no money. The large systems are at present (1900) all prosperous. The Georgia railroad commission fixes the same maximum limit of rates for the short lines in sparsely settled territory as for the trunk systems, and the short lines can not afford to carry on business at these low rates. Nevertheless a special arrangement is made by the commission in favor of the Tallulah Falls road because it is so short and poor. On the Gainesville road, however, the rates are the same as the local rates on the Southern Railway. (1, 2.)

B. Effects of consolidation and community of interest on rates and the public.—1. *Generally.*—Mr. GREENE believes that consolidation of railroads will result in great economies, and therefore ultimately in lower rates to the public. Even community of interest without absolute combination effects some economies, though to what extent it will have that result in the future is a matter of

guesswork. As yet there is little absolute common ownership among railroads, such as we find in the case of industrial combinations. By common ownership of railroads it will be possible to eliminate the expensive ticket offices of competing lines in the cities and to reduce the number of employees and officers in various ways. In fact, one of the serious results will perhaps be the displacement of railroad officers.

Mr. Greene feels confident that the reduction in expenses through consolidation will ultimately lead to reduction of rates. There is a constant demand for low export rates and special rates on the part of large industries. Such low rates are necessary in order that the business can be carried at all. When low rates are made for these special reasons, other persons observing the fact will demand lower rates and ultimately will succeed in getting them. Anything that will enable a railroad to do business more cheaply will ultimately benefit the public. All the conditions in this country tend to enforce lower railroad rates. Accordingly, although the reason for railroad combinations is selfish, the hope of profits being the main lever in this as in all business movements, it is a step in progress for the entire community. Mr. Greene believes that the movement toward consolidation will go still further. (484, 485, 487.)

Mr. THOMAS, of the Erie Railroad, believes that by consolidation great economies can be secured, and that charges are sure to be lessened wherever economies are introduced. The Erie Railroad was formerly made of three separate corporations. By combination the expense of maintaining two sets of officers and organizations has been eliminated, and the public has benefited by the saving. (559.)

Mr. MCGOVERN, of the Southern classification committee, says that there is a strong tendency toward the consolidation of railroads and he can not foresee what the final outcome will be. He does not favor consolidation beyond a limited extent, but thinks there should be several large systems, with healthy competition. He believes there will be eventually 5 or 6 separate systems in the South, which may all work in harmony to the extent that the separate owners of the properties may agree among themselves and in a general way maintain rates. The Georgia Central and the Southern Railway are competing systems, and will be so until they are actually taken under one management and have the same traffic officials. Consolidation without competition would be a bad thing for the roads, as well as for everybody else. It would not be a good thing for the railroads of the United States to be under one management. Competition brings about a fair relative adjustment, which the carriers believe is to the interest of the patrons and of the roads themselves. Rebates and such like discriminations, however, would be very much diminished by consolidation and might be wiped out entirely. (682, 683.)

Hon. CHARLES FRANCIS ADAMS, of Boston, says that railroad consolidation is a thing which should be left to work out its own results in its own way, with as little hampering as possible. It is found that the large corporation, while its political power is undoubtedly great, has proportionately increased responsibility, and it is far easier to handle it. It gives better and more satisfactory service than a number of small corporations. (829.)

Mr. McLEON, in connection with his views regarding the desirability of community of interests among the anthracite coal roads, declares his belief that the community of interest principle in general is an advantageous one. Whatever will make railroad rates reasonable and stable will increase the prosperity of the country. Such combinations can not tax the people, not only because of competition, but because of public opinion. "You can't get any combination of capital that is big enough in this country to rob the people." (571.)

Mr. SCHIFF declares that the law of competition will be preserved. Capital is becoming so strong and so easily obtained that the moment compensation for any service is demanded at a higher rate than that at which it can be produced competition will set in. He doubts if any additional transcontinental lines will be built, but believes that if a consolidation of those lines of road should be effected it would result, perhaps, in bringing about the construction of another line. (777.)

Mr. WOODLOCK believes that railway consolidations and community of interest will certainly tend to prevent disturbance of rates. Rates are already more stable than they have been for 30 years. The witness thinks, further, that the new combinations will not raise rates. It will be to their interest to economize in management and to keep rates stable rather than high. (463.)

Mr. LANGLEY, of the Merchants' Association of New York, thinks that the community of interest plan may eventually be of some benefit to New York in eliminating the differential which exists in favor of the Southern seaboard cities. The merchants of New York have never objected to a direct increase in rates. They are particularly interested in having each merchant or each shipper secure the same rate, so that no one shall have any advantage over the other. The difference in the rate of freight

practically has the effect of giving one man such an advantage in business as to drive out a competitor who does not secure the same rate. The community of interest will perhaps abolish these practices of differentials and discriminations, because there will be no longer any reason to put out these inducements or to indulge in secret practices. The community of interest is likely to deprive the people of the advantage of the cheaper shipments by water. Every merchandise line on the lakes is owned by the railroads; the same with the Erie Canal. (874.)

Professor PARSONS states that in this country there have been about 5,000 railway corporations, but that by consolidation the number has been reduced to 2,037. Only about 863 are independent operating companies, the others being subsidiary companies leased or controlled. These figures show a tremendous movement toward concentration and coordination even under private ownership. Coordination naturally would result in the very greatest economy if the whole railroad system of the country could be run under one harmonious plan and in full coordination with the telegraph, telephone, and postal service. It would get rid of unnecessary stations, accounting offices, etc. However, to bring about consolidation under private ownership would result in establishing so colossal a power in the hands of a few men that it would be more dangerous than the present system, and the only way to get the benefits of consolidation is through public ownership. (149.)

Mr. RICE, banker, believes that legislation to prevent the consolidation of railroads, or the lease of control of one railroad by another, would be a great mistake. Consolidations such as that which has resulted in the Southern Railway have improved the service and benefited the public. It will not be possible for all the railroads of the country to go under a single control. There are too many people who have other interests. The difficulty of consolidation has recently been shown in the attempt of the Northern Pacific to secure the Burlington. The witness does not know, however, but that there may be some limit to the wise combination of railroads. (742.)

Mr. GRISWOLD, general freight and passenger agent of the Western Maryland Railroad, does not think that the influence of competition on the traffic lines centering at New York would be eliminated even if their competition with each other were destroyed by consolidation and community of interest. The roads could not even then raise rates arbitrarily unless they wanted to go out of business or to shut out certain classes of business. Though there were no other lines running to New York, there would be other lines running to other markets. Any arbitrary raising of rates would turn a very large amount of profitable business over to those other markets and other lines. Mr. Griswold does not think that the plea for consolidation has been that rates have been reduced below the proper paying point so much as that the established rates have not been maintained, and that consolidation would increase economy of management. (624, 625.)

2. *Effect of consolidation on capitalization.*—Mr. RICE alludes to the fact that certain recent railroad consolidations, such as the absorption of the Chicago, Burlington and Quincy and that of the Central Railroad of New Jersey, resulted in the exchange of stocks of the roads absorbed for bonds of the absorbing road. He believes that it is always a mistake to convert stock into bonds, thereby creating a fixed charge, in the inability to pay which the corporation must go into bankruptcy. (740.)

Professor RIPLEY says that in many cases where one road has leased another the controlling road pays dividends both on its own capitalization and on the stock and bonds of the leased road, though the arrangement entered into depends entirely on the terms of the lease. (297.)

3. *Effect of consolidation of Southern railways.*—Mr. WILSON, of the Cincinnati Board of Trade, believes that if the Eastern and Western roads leading into the South should be consolidated the rates would perhaps be adjusted more satisfactorily. There would be no excuse to offer on the ground of competition. Cincinnati suffers now because the Southern Railway is controlled by interests which are dependent upon the prosperity of the Eastern territory for their income. A consolidation of the Pennsylvania system with the Louisville and Nashville would not injure Cincinnati. (694.)

4. *Effect of a community of interest or of a consolidation of the Atlantic Coast Line Railways.*—Mr. MARKHAM states that if the Atlantic seaboard lines should become practically operated under one policy and community of interest, or by a consolidation, it would have a very salutary effect upon the course of business. The trouble with the cutting of rates to-day is not in diminishing the revenues of the railways so much as it is in exterminating business men of all kinds excepting the large enterprises that get better rates than the small individuals. With a community of interest or a consolidation, the first thing that would be done would be to give to every

one equal rates. The benefit to the railroads would come from the fact that they would not be obliged to make the reductions because of the action of unscrupulous lines which can not get business in any other way. If there were a community of interest it would be impossible for any railroad to withstand the reasonable or legitimate demands of any town or community served by it; the interests of the railroads and the communities are mutual. (432.)

5. *Effect of consolidation of transcontinental railroads.*—Mr. WHEELER, of the San Francisco Board of Trade, expresses the belief that the establishment of ocean-to-ocean railroads would be a good thing for the Pacific coast. For this reason he is inclined to approve the combination of the Union Pacific and the Southern Pacific under the Vanderbilt interests, which at the same time control the Chicago and Northwestern and Eastern trunk lines, giving them a through route. He does not know that the combination of the Great Northern and Northern Pacific with the Chicago, Burlington and Quincy will particularly help the coast. It merely extends somewhat the terminal points in the East of these railroads. If, however, as will probably be the next step, these railroads acquire the Erie or some other trunk line, securing an ocean-to-ocean system, advantage to the coast will probably result. This advantage of transcontinental lines would come from the fact that the railroads would no longer have the motive of building up the Middle West cities at the expense of the cities on the Eastern seaboard and of San Francisco and other Pacific coast cities. At present the railroads seek, by making lower rates from Chicago and other inland cities than prevail even from New York, in the face of sea competition, to build up those cities and secure traffic at the points of origin of the railroads. With lines extended to the Atlantic seaboard there would be no object in this policy but the railroads would get the hauls as readily directly from the Atlantic coast. They could then say that each city must stand on its own natural position, and would not try to rob the Atlantic and Pacific coast cities of the advantage which water transportation gives them. (747.)

Mr. STUBBS, of the Southern Pacific Company, does not think that the recent community of interests between the Union Pacific and Southern Pacific railroads ought to have any effect on their rates or operation. He does not even think that if a combination were made between these two roads and the Northern Pacific these three lines would be in a position to control rates aside from sea competition. There would still be the competition of the Santa Fé, Great Northern and other roads, and no rate could be enforced which was not agreeable to all of the lines. Mr. Stubbs, however, believes that the establishment of a community of interests between railroads in the Western States or in any other given section is the only effectual way in which unjust discriminations and constant fluctuations in rates can be prevented, and that such a control over rates would be of great benefit to the public. He does not think that a combination of this sort could or would increase freight rates. The companies operating the railroads are endeavoring to promote every industry and every class of commerce in order that their tonnage may be as great as possible, and they can not resist the influences tending to keep down or to reduce rates. (765.)

6. *Effect of New England consolidations.*—Mr. HOWES testifies that the New York Central Railway has acquired, by lease, the Boston and Albany Railroad, and the Boston and Maine Railway has leased the Fitchburg road, both of which are large grain-carrying roads, and he thinks that the effect will be beneficial to Boston as an export center. The splendid terminal facilities of the Boston and Albany Company at Boston have been acquired by the New York Central, and they will be greatly enlarged by the lessee company. (702.)

Mr. JACKSON, a member of the Massachusetts State board of railroad commissioners, states that the leasing of the Boston and Albany to the New York Central and of the Fitchburg to the Boston and Maine has generally been considered to be to the public advantage. The result of the lease of the Boston and Albany to the New York Central has been an advantage to the extent that under the statute preliminary steps have been taken to issue stocks and put in more capital for terminals. The terms of the lease prescribed by the legislature required the road to do that. The operation of the road and its maintenance is just as fully under the supervision of the State board as before, and the State's right to purchase the road is still retained.

In the case of the absorption of the Massachusetts Central Railroad by the Boston and Maine, the board was asked to fix the purchase price which the Boston and Maine ought to pay. In doing this, it considered the value and history of the property. There had been a practical agreement between the owners of the preferred stock and the Boston and Maine, and the board did not disturb that agreement. It fixed the price of the common stock at 21 after having looked into the structural value of the railroad, its actual cost, and the cost of duplication. (847.)

C. Minnesota law as to railroad consolidation.—Mr. TEISBERG, secretary of the State railroad and warehouse commission of Minnesota, says that Minnesota has had a law since 1887 forbidding the consolidation of parallel or competing railroads. At the time of the reorganization of the Northern Pacific, about 1896, a scheme was on foot for the securing of a majority of its stock by the Great Northern. Suit was brought to test the validity of the law forbidding such a consolidation, and the United States Supreme Court sustained the law. In the summer of 1900 the Northern Pacific absorbed the St. Paul and Duluth Railroad Company, owning a short line between St. Paul and Duluth. The railroad commission instituted proceedings to prevent that consolidation, but the Northern Pacific entered into an agreement providing that for all time the St. Paul and Duluth should be considered a separate entity in any case that might arise between the State and the company, and the case was dismissed without prejudice. It might at any time be reopened. (364, 365.)

D. Pooling and agreements.—1. *Discussion of policy.*—Professor RIPLEY says that pooling would probably have the effect of making rates higher, but that the rates would be steady. The existence in a very large portion of the Southern States of what is practically a pool makes the freight rates into and out of those Southern States considerably higher than in those parts of New England where competition still prevails. The amalgamation of the Boston and Maine road and the Fitchburg road has resulted in making rates appreciably higher for a number of places which formerly had the benefit of low competitive rates. The experience of Peterboro, N. H., is a case in point. Peterboro was a competitive point at the junction of the Boston and Maine and the Fitchburg roads. So much lower were the Peterboro rates before the amalgamation of the roads that all the goods for the stores in Jaffrey, a town 6 miles from Peterboro and served by one road, were hauled a number of miles by horse in order to take advantage of the competitive rates of Peterboro. Since that territory has ceased to be competitive, freight is no longer hauled by horse, because the Peterboro rate and the Jaffrey rate are just the same. Mr. Ripley lays emphasis on the fact, however, that though the rates under pooling would be somewhat higher, they would certainly be steadier. Pooling would make a fixed rate which the manufacturer and the public could rely upon and which they could feel was paid by everybody.

Pooling is likely to result in the offering of poorer facilities in the territory to which it applies. The people are often obliged to be content with slower trains, with fewer trains, and with many other inconveniences. That is the situation in the territory now reached by the Boston and Maine and the Fitchburg. In the territory, however, which is reached by the Boston and Maine and the Eastern road, the train service to almost all competing points has been largely increased and the comfort of the public is vastly greater since the amalgamation of the roads than was the case many years ago.

Any proposition to legalize pooling should have inextricably bound up with it some increase of regulative power to the Interstate Commerce Commission, as the giving to railroads, in conjunction with the right to pool, absolute control over the rates would place the public still more in the power of the roads than they are to-day. Pooling is being practically accomplished to-day by the financial consolidation of roads, and this makes it still more imperative that the Interstate Commerce Commission should be given power to prescribe reasonable rates. (289, 291, 294.)

Mr. THOMAS, of the Erie Railroad, declares that the Supreme Court of the United States has held that the railroads have no power to make agreements. The witness holds that they ought to be allowed to make agreements just like other commercial bodies. He believes that the prohibition of pooling has increased the number of railroad consolidations. There is no effort being made now to secure legislation permitting pooling, but power to make legal agreements ought to be conferred upon them. Such agreements could be very properly made subject to the approval of some governmental commission, and should not be permitted to be oppressive to the public. (555.)

Mr. TEISBERG, secretary of the State railroad and warehouse commission of Minnesota, says that the Minnesota law forbids pooling in the same terms as the interstate-commerce act. The State commission, about 1889, unanimously declared itself opposed to any change of the pooling clause. Mr. Teisberg believes, however, that if the question were now presented to them the commission would be in favor of legalizing pooling. If consolidations by a community of interests come on there will soon be no necessity for pooling. (372.)

Mr. ANDERSON, secretary of the Chamber of Commerce of Pittsburg, thinks that pooling agreements should be legalized under the requirement of publicity and under the control of the Interstate Commerce Commission. He is afraid that the forbidding of pooling will force the railroads into bankruptcy. He also thinks it a cause of the tendency toward consolidation. (639, 642.)

Mr. GRIAWOLD, general freight and passenger agent of the Western Maryland Railroad, thinks that the best plan to stop rate cutting and unfair competition among railroads would be a physical division of the business. He doubts, however, whether that is possible, and would consider the alternative to be pooling and dividing the earnings. Control of the Baltimore and Ohio Railroad by the interests that control the Pennsylvania would have the same effect so far as their rates are concerned. (615.)

Mr. WHEELER, of the San Francisco Board of Trade, says that the legalization of pooling, under the supervision of the Interstate Commerce Commission, would be desirable in order to do away with secret rebates and discriminations. It is greatly to the interest of shippers that they should know that they stand on the same basis as their competitors. The witness believes that such pooling agreements should be made enforceable before the Interstate Commerce Commission and the courts, but that whatever agreements were made should be entirely subject to the supervision of the Interstate Commerce Commission as regards the rates and other conditions. (748, 749.)

Mr. Wheeler thinks that railway consolidations do not do away with the necessity for legalized pooling. They affect the matter only to the extent that any agreement is more apt to be maintained if there are fewer parties to it. (748.)

Mr. BACON, of the Michigan Alkali Company, declares himself opposed to pooling. (82.)

2. *Southern Railway and Steamship Association.*—Mr. TALCOTT says that the Southern Railway and Steamship Association, of which he was at one time commissioner, was composed of the Southern rail lines and the steamship lines between the northern and the southern Atlantic ports. It did not take in the Gulf ports. Its purpose was to prevent fluctuation in rates and rate cutting. When it was first organized its plan was to give full authority over rates to the commissioner. Later it was found that some better guaranty was needed, and a pool was resorted to. The commissioner made allotments of business to each line, and if his allotments were not satisfactory there was an appeal to a regular board of arbitration appointed by the association. Business was divided on a tonnage basis. Lines which carried an excess received a very small compensation. It was made small to give no inducement to get an excess. When the interstate-commerce act was passed forbidding pooling, the form of the association was necessarily modified. The method of operation then adopted was to have copies of all manifests on competitive business sent to the commissioner. In his office a record of the business done by each line was kept, and his reports showed to the executive committee just how business was divided. The working of the association under the pool system had been very successful and satisfactory. Soon after pooling was prohibited rates began to be disturbed, and disturbed conditions continued at least as long as Mr. Talcott had direct knowledge of the matter—a period of some two years. (626, 627.)

3. *Pooling on cotton business from Memphis.*—Mr. DAVANT, commissioner of the Memphis Freight Bureau, understands that there is an arrangement among the railroads at that point for a physical division of the cotton traffic. If a railroad receives consignments greater than its share under the pool it turns over the excess of goods to some other road. The witness believes that shippers are not able to insist that their goods shall go over a given road. He believes that this system of pooling works to the detriment of shippers, although the fact is worthy of consideration that by this plan rates are made stable and equal to all shippers. (7.)

4. *Existing transcontinental rate agreements.*—Mr. WHEELER says that there is what is known as the Transcontinental Freight Bureau, including all roads which operate from Chicago and Missouri River points to the Pacific coast. This bureau has an office in San Francisco, to which shippers apply for remedies in the transcontinental rates. The rates are maintained under this arrangement by a "gentlemen's agreement" only. In order to get around the decision in the trans-Missouri case which was directed against the agreements regarding rates, the rules and tariffs stipulate that each company has the power to change its own rates and regulations without consulting others. Thus the roads can prove that there is no combination, but they are bound in honor and the effect is practically the same. If, however, a road should show itself without honor there would be no way to enforce the agreement. (749.)

Mr. STRUBBS, of the Southern Pacific Company, says that the transcontinental roads make practically the same commodity rates in competition with water carriers. They are made by conference. (764.)

5. *Southern rate-making organizations.*—Mr. MCGOVERN testifies that in the territory of the Southern Classification there are rate-making associations, composed of railroads which are members of the Southern Classification Committee generally. The Southeastern and Mississippi Valley Association takes the territory bounded by a

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line drawn from Cincinnati down the Ohio and Mississippi to New Orleans, and a line drawn from Cincinnati down through Middlesboro, Chattanooga, Birmingham, and Montgomery to Pensacola, Fla. The Southeastern Freight Association takes in the territory east of that, going as far as Gainesville, Athens, and Augusta, Ga., and Charleston, S. C. The territory east of that is known as the territory of the Associated Railways of Virginia and the Carolinas. These three associations make the rates on all the competitive traffic in their respective territory. Their organization is somewhat similar to the Southern Classification Committee, any transportation line which desires to do so being permitted to join. Together with the Classification Committee these associations constitute the rate-making power.

No articles of association can deprive any line of its right to make its own rates. That was decided in the trans-Missouri decision. These associations are not pools. (654.)

III. FREIGHT TRAFFIC AND RATES GENERALLY.

A. Existing freight rates—Recent movements.—1. *Reasonableness of American freight rates.* (See also under *Government ownership*, p. cxviii, and, as to differences between through and local rates, p. cvff).—Mr. THOMAS, president of the Erie Railroad, declares that freight rates are very much lower now than twenty years ago. At that time the Erie road got from 1 cent to 1½ cents per ton per mile. At present the average rate is 5.59. Local rates have also been reduced, though not in quite the same proportion as through rates. There is more competition in the case of local rates. (560.)

Mr. MARKHAM, of the Illinois Central Railroad, says that railway rates have been constantly on the decline for many years.

The following table shows the reduction in grain rates from Chicago to New York since 1868:

	Lake and canal	Lake and rail.	All rail.
	<i>Cts. per bu.</i>	<i>Cts. per bu.</i>	<i>Cts. per bu.</i>
1868.....	22.79	29	42.6
1878.....	9.15	11.4	17.7
1888.....	5.93	11	14.5
1899.....	5.65	6.63	11.13 10.23

Mr. Markham also submits a table showing the reduction in rates from St. Louis to New Orleans and other Southern cities since 1882, ranging from one-fourth to one-half. He also compares rates in the United States in 1892 with those in European countries as follows: (430.)

	For passengers per mile.	For freight per ton per mile.
	<i>Cents.</i>	<i>Cents.</i>
United States.....	2.14	0.97
Prussia.....	2.99	1.32
Austria.....	3.05	1.56
France.....	3.36	1.59
Belgium.....	2.25	1.39

2. *Increase in freight rates and classification changes, 1900.*—Mr. BACON, of the Michigan Alkali Company, objects strongly to the increase in freight rates made by the railroads in January, 1900. He declares that this increase was an outrage on both manufacturers and consumers, and that consumers ultimately have to bear the burden. As an illustration of the increase in freight rates, he states that the rate on coke to Wyandotte, Mich., has been increased 55 cents per ton above the rate in 1899. This amounts to an added expense to the Michigan Alkali Company of \$55 per day, or \$20,075 per year. It is also understood that the rates on coal will be increased. The rates on the various alkali products of the company have also been raised. When the company protested to the traffic association in New York City, January 22, 1900, the chairman of the Central Freight Association and the chairman of the Official Traffic Association made entirely different answers as to the reason of the increase, and neither touched a point in the protest. The year 1892 was considered a very pros-

perous one among the railroads. Business depression followed, but the railroads did not reduce their rates to protect the manufacturers. The rates of 1892 should be high enough now, but they have been raised at the beginning of 1900. The railroads in 1898 earned enormous dividends, while in the year ending June 30, 1899, the gross earnings exceeded those of the previous year by \$59,927,186. The railroads defend their action on the ground that they want a share in the prosperity of the country, but the witness believes that their increased business as a result of their prosperity would have been sufficient to earn them ample profit. Prosperity is not stimulated by the raising of freight rates but by increasing the volume of business. The further argument of the railroads that the cost of materials has advanced, is offset by the well-known fact that by hauling heavier loads and in other ways the cost of operation has been decreased.

The witness anticipates that there will be ultimately a great railroad trust. He refers especially to the alleged combination of the eastern trunk railroads, and its effect upon rates and profits. He quotes an article from the New York Commercial Advertiser of March 12, 1900, to the effect that the increased profits on the hauling of coal alone by Eastern lines, as the result of advanced rates already announced and others to be made on April 1, 1900, will be no less than \$16,000,000, and that the increased rates on other products will make a total of added profits of fully \$31,000,000. The average advance on coal was estimated to be 15 cents per ton, on other bulky freight 10 cents per ton and on manufactures and merchandise 25 cents per ton. This increased profit of \$31,000,000 will be equal to more than 3 per cent on the capital of the 9 leading Eastern trunk lines. (74-77, 84.)

Mr. LANGLEY, of the Merchants' Association of New York, says that on January 1, 1900, the Official Classification Committee made wholesale advances in their classification without notice to shippers. Eight hundred and eighteen items out of 3,000 in the merchandise list were advanced in class. Taking the scale of rates from New York to Chicago as a basis, these advances represented an average increase in the freight rate of 35.5 per cent. The Western Classification Committee on January 25, 1900, advanced the rates on 240 of the items in their list. Using the Chicago-Missouri river rates as a basis, the advance was 47.4 per cent. The Southern Classification Committee on February 1, 1900, advanced 1,977 articles out of a possible 2,600. It has 9 different classes of rates. Thirty-two articles were advanced from second to first class; 38 from third to second class; 69 from fourth to third class; 36 from fifth to fourth class; 10 from sixth to fourth class, and 46 from sixth to fifth class. There are instances in which advances were made from fourth to first class, and from third to first class. The classes which were among the lowest are beginning to disappear from the classification list. There were 109 of the lower classes and commodity rates in the classification which governed prior to February 1, 1900, but in the new classification only 58 were left. In addition to these advances there were 75 instances of discrimination made by widening the difference between the carload rate and less than carload rate. The advance in rates resulting therefrom ranged from 30 per cent to 50 per cent. The railroads did not seem to take into consideration the fact that merchants had made contracts ahead based on existing rates, and the result of the advance in classification which was only an indirect method of advancing rates entailed a great loss upon the merchants.

The attention of the Interstate Commerce Commission was called to the matter in December, 1900, but there did not seem to be any certainty as to whether that commission had jurisdiction over classification matters, and the question was referred to the Attorney-General, who concluded that there was no ground for interference by him. The shippers then appealed directly to the classification committees for a change of the classification back to the old basis, and in some instances their appeals were granted. The Official Classification Committee modified some of the advances, but did not go back to the original basis. The witness is of the opinion that under the law the Interstate Commerce Commission is powerless to remedy the evil complained of. He thinks the matter was referred to the Attorney-General as being a violation of the antitrust law, but that officer did not seem to take that view of the case.

The reasons advanced by the railroad companies and the classification committees for advancing the rates were that the prices of commodities of all kinds were going up throughout the country and the railroad rates should also go up. The witness says that he examined into the earnings of railways to a considerable extent and found that for the year immediately preceding the advance in the freight classification the earnings of the Southern roads were 20 per cent higher than they had ever been in the history of the country, and he thinks that a 20 per cent increase in net earnings ought to have satisfied the roads. The witness does not think that there would have been any more complaint made if the rates had been advanced directly instead of indirectly by an advance in classification. (860-861, 862, 869, 877.)

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Changes in freight classification.—Mr. LANGLEY testifies that there is great discrimination in the "manipulation," as he terms it, of the freight classification. He thinks this discrimination is to the detriment of the South, and believes that the less interference and the fewer obstacles that are thrown in the way of development the better it will be for the country. There would have been very little complaint if the railroads had advanced the scale of rates themselves. There was a time, he says, when the merchants were inclined to complain of freight rates, but in later years they have reached a conclusion that the rates of freight are not so material as their universal application. The changes in classification have induced great confusion and inequality. People sometimes think that the railroads, while desiring to increase their revenues, do not care to assume the responsibility of advancing the rates directly, and resort to the roundabout method of having them advanced by the action of the classification committees in changing the classification. The method of making the changes by the classification committee has this further advantage, that few merchants, comparatively speaking, are familiar with transportation methods or with the effect that the classification has upon the freight rate. Out of the changes in classification of 2,600 items in the Southern territory at least one-third would remain advanced, because the merchants would abandon all hope of ever securing a return to the original basis. (865.)

Mr. GRISWOLD, general freight and passenger agent of the Western Maryland Railroad, says that there was a considerable change in the Official classification a little time ago, but afterwards a large proportion of the articles whose classification was changed were embodied in a supplement allowing a 15 or 20 per cent reduction from the advanced classification. Mr. Griswold is not aware that the changes in the classification were such as to be relatively injurious to small shippers and favorable to large concerns. (618, 619.)

Mr. MARKHAM, of the Illinois Central, states that in the recent changes in the Official classification the advance in freight rates was chiefly because of an advance in price of a great many of the commodities which had been carried at special commodity rates before because they could not bear higher rates, but at the same time reductions were made on other goods. The Illinois Central uses the Southern classification, also the Western classification, the two being different. (435.)

3. *Freight rates in the South—Recent increase.*—Mr. BACON complains also of the fact that freight rates to Southern seaboard cities on alkali products are higher than ocean freight rates from England, so that the domestic product is practically excluded from a region within a considerable distance from these seaports. The rate from Wyandotte to Atlanta is 36 cents per hundred on soda ash, 64 cents on caustic soda, and 65 cents on bicarbonate of soda, while English products can be delivered there by way of Savannah at a much lower rate. The rate from Wyandotte to New Orleans on all these articles is 33 cents, while the ocean freight rate from Liverpool to New Orleans is 10.7 cents. At one time there was a rate of 89 cents per ton on soda ash from Liverpool to Newport News. (74, 80.)

Mr. BACON complains especially of the excessive freight rates on the products of that company in the Southern territory, and of the fact that there is a difference in classification of these products under the Southern classification from that under the Official classification in the North. He presents the following table showing the relative charges per carload and train load on bicarbonate of soda (baking soda) and caustic soda from Wyandotte, Mich., to leading Eastern and Southern points, together with the distances:

To—	Miles.	Product.	Railroad charges, carload.	Railroad charges, train of 30 cars.	Rate per 100 pounds.
					<i>Cents.</i>
Boston	760	Ash, bicarbonate and caustic	\$57.00	\$1,710	19
New York	700	.....do	48.00	1,440	16
Philadelphia	656	.....do	42.00	1,260	14
Baltimore	698	.....do	39.00	1,170	13
Richmond	774	.....do	49.50	1,485	16½
Chattanooga	678	Bicarbonate	147.00	4,410	49
Atlanta	716	.....do	195.00	5,850	65
New Orleans	1,000	Ash, bicarbonate and caustic	99.00	2,970	33
Memphis	700	.....do	69.00	2,070	23

Commenting on these figures, the witness declares that there is something wrong with the system of classification by which the charge for hauling a carload to Atlanta, 716 miles, is \$195, as compared with \$48 to New York, 700 miles; and by which a

train load of 30 cars is hauled to Philadelphia, 656 miles, for \$1,280, while to Chattanooga, 578 miles, the charge would be \$4,410.

The freight rates generally through the South, Mr. Bacon declares, are excessive, and this results in material injury to the prosperity of that section. Under reasonable freight rates the South would be the home of the biggest manufacturing plants in the world. There is no manufacture of glass or of soap in the South of any importance, and no market for alkali products. The result is that nothing is done to establish a demand for those products and to favor manufacturing by the establishment of reasonable freight rates. Under low rates factories for the manufacture of these and other articles would start up, and in the long run the railroads would profit by the increase in their business. (73, 75, 79, 80.)

Mr. McGovern says that prior to the organization of the Southern Classification Association the classification feature of rate making was handled by the several traffic associations in that territory. There was a single classification for the southern territory, but it was made piecemeal instead of by one general association as at present. The new committee made a thorough and systematic revision of the entire classification. Under the old plan additions and changes were made from time to time without proper regard for the effect upon other analogous articles, with the result that the classification abounded in conflicting ratings and inconsistencies. The new committee began with the iron and steel list and the changes which it adopted were published in Southern Classification No. 26, which went into effect February 1, 1900. This revision of the iron and steel list contained advances in a good many ratings. One reason why the iron and steel rates were raised was because the railroads in their equipment and otherwise had to use iron and steel, and a higher price made a higher rate. The roads can not afford to reduce all their rates to the basis of the commodity rates; it would make them bankrupt. A revised classification which embraced everything excepting iron and steel, and which made substantial modifications, was promulgated in Classification No. 27, which went into effect June 1, 1900. Classification matters have been given the fullest consideration and the advances made in the classification have not been the result of any attempt on the part of the principal lines to put up the rates to the shipping public. These revisions came at a time of extraordinary trade conditions, which justified substantial advances in many of the ratings. There had been marked increases in the prices of many important commodities, especially those entering most largely into the cost of operation of transportation lines. Some of the lines in the southern territory actually showed a reduced net revenue during certain periods as against an increased gross revenue during the same periods, which is attributable to the increased cost of materials used in operation. The revision of the classification, however, was not for the purpose of increasing rates, but was chiefly to simplify and harmonize matters. Many of the existing ratings had been unreasonably low in themselves, and by comparison with the ratings on the same articles in the other two classifications of the United States. (655, 656.)

Carriers' risk and owner's risk rates.—Mr. McGovern says that the first important change that was made by the committee in classification 26 was the abandonment of what was known as the double-column rating, and substituting therefor the single-column plan. In the old classification up to No. 25 two ratings were shown opposite many of the articles, one in the "carriers'-risk" column, for cases where the carrier assumed the common-law liability, and the other in the "released" column, for cases where goods were carried at the owner's risk or limited liability, the first column rating being higher than the second. There was nothing approaching uniformity in the differences between the two columns. It was found that in some instances the carriers'-risk rate was only 14 per cent higher, and in some instances 280 per cent higher than the owner's-risk rate. Some 1,700 articles had been shown by the previous classification in the carriers'-risk column only—that is, only a single rate was published. As a matter of fact, according to Mr. McGovern, the goods of this character which were actually shipped were in 99 cases out of 100 shipped on the ordinary bill of lading of the railroads, which is a limited-liability bill, so that the shipper did not actually avail himself of the carriers'-risk privilege. By the new classification the rates remained the same, but it was provided that they should be on the limited-liability basis, and that if the shipper insisted on the common-law liability, he should pay a 30 per cent higher rate. This system of uniform bills of lading and single-column classification is in line with the practice of the trunk-line roads and others in the Official territory. Technically it may be said that there was an advance of rates because the shipper would have to pay 30 per cent more if he got the unlimited liability of the carrier which he might have insisted on before, but in practice he did not insist on it before in most cases; and for 99 per cent of the goods the rates and the bills of lading were precisely the same after the change as before.

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Mr. McGovern says that this change was misunderstood by many people and was made the basis of a general complaint that the rates on 1,700 articles has been advanced.

The first change in Classification No. 27, as compared with Classification No. 26, was as to Rule 1, which was a little more favorable to the shipper, in that there was a reduction from 30 to 20 per cent additional in the carrier's-risk rate as compared with the owner's-risk rate. For 13 years the lines in the Official classification territory have used a uniform bill of lading, which has been published as a part of the Official classification. This matter of uniformity in the bill of lading was early taken up by the Southern Classification Committee, which after much consideration evolved a bill of lading which was finally adopted and approved by the various individual lines, and went into effect June 1, 1900. (A copy of this bill of lading was furnished the commission.) Practically the only difference between the carrier's risk and the limited liability is that under the carrier's risk, if the goods are lost or destroyed, the owner can recover the loss occurring except from one of the four exemptions established by the common law, viz, an act of God, fraud on the part of the shipper, inherent defect in the article, or inherent vices in an animal. The bill of lading in addition to these limitations releases the carrier from further risk by reason of fire, chafing, leakage, and all those damages incident to ordinary transportation which are not the fault of the carrier and are due to its negligence.

The only consideration that was given the Official and Western classifications in the revisions of the Southern classification was simply to compare them, article for article, as the work of revision proceeded. As to the liability question, however, the revision resulted in making the Southern classification the same as the Official classification.

There have been no cases in court to test the validity of the two forms of contract. Not more than 1 per cent of the freight carried consists of hazardous risks. (650-661.)

Changes and advances by last classification revision.—Mr. McGovern says further that the advances in the descriptions and ratings as shown in Southern Classification No. 27 do not exceed 400 or 500 as compared with Classification No. 26, and there were about 100 reductions. Many of the advances were made on unimportant articles of shipment. Consistency and universality were aimed at in the revisions. All druggists' articles in boxes were made first class; small grocery articles in boxes were as a rule made second class, as were also ordinary hardware, iron, and steel articles in boxes. One reason for this was to prevent the underbilling of drugs, groceries, and hardware, which practice has grown up, and is on the increase in the Southern territory. The principal articles used on the farm and many other very important products were not advanced in ratings. It is a general experience that when reductions are made it is believed that it increases the business of the roads. The occasion of the advance in the classification of cotton goods was brought about by the fact that in the early days the classification was arranged so as to be in the nature of a protection to the early cotton manufacturers in the South, and even to-day it is so arranged. When the classification is advanced the rates are always advanced.

Mr. McGovern concludes by saying that the making of a freight tariff or a freight classification is not an exact science. The change of commercial conditions in the increase of local industries, new discoveries in science, competition between carriers and markets, will necessarily effect changes in freight classification and freight rates from time to time. Ever since Classification No. 27 went into effect some modifications have been made, and other modifications will be made from time to time as circumstances may dictate. It is not to the interest of the carriers to make their rates exorbitant or so high as to unduly limit or restrict the free movement of traffic over their various lines. (661-662, 668-672.)

Mr. DUNLAP, an officer of two small Georgia railroads, testified in 1900 that there had recently been a general increase in freight rates on the through Southern lines. He was inclined to justify this increase, despite the fact that the railroads have all the business they can carry and are even short of cars, because of the general prosperity of the country and of the fact that the Southern railroads have only recently been able to make any profits at all. Most of them have just got out of bankruptcy, and until recently their stocks have been of no value. While the Georgia Railroad Commission limits the freight rates, the rates actually existing hitherto were much lower within the limits.

Another reason why an increase of freight rates seems to the witness justifiable is that the railroads have hitherto helped the establishment of cotton factories in the South by making low rates on machinery and materials and in other ways. The result is that now, the factories being established, railroads have no cotton to haul to the seaports, and the amount of freight which they get in the shape of cotton goods is much less than what they formerly hauled. As an illustration of the unduly low rates which had prevailed on cotton goods, Mr. Dunlap instances a shipment of

1,200 bales of cotton cloth from Monroe, on the Gainesville, Jefferson and Southern Railroad, to Shanghai, China. The rate was only \$1 per hundred, 93 cents of which was for rail freight to San Francisco. The rate from Monroe to Atlanta was only 6 cents, and that for the 10 miles over which the goods were hauled on the witness's road only 3 cents. While this local rate of 3 cents was apparently higher for the distance than the other railroads received for their longer hauls, it was yet unduly low, in view of terminal charges, etc. On shipments to New York the witness's road gets 6 cents per hundred for the same distance, while it formerly received 12 cents per hundred for hauling raw cotton the same distance. (2-4.)

Mr. DAVANT, commissioner of the Memphis Freight Bureau and Shippers' Organization, thinks that the increase in freight rates over the Southern roads in 1900 was at least partly justifiable. The Southern railroads have seldom earned any dividends on their stocks, and the witness supposes it to be reasonable to allow them to do so. (6.)

4. *Local rates on cotton—Memphis.*—Mr. DAVANT says there has been a considerable reduction in the local rates on cotton from neighboring points to Memphis during the past five years. The Tennessee Railroad Commission has had nothing to do with the fixing of rates, but the Memphis Freight Bureau is constantly making efforts to secure more satisfactory local and through rates. Some of the local rates it considers fair, but others are still too high. (7.)

5. *Reduction of freight charges—Minnesota.*—Mr. TEISBERG, secretary of the State Railroad and Warehouse Commission of Minnesota, gives several instances of the reduction of freight charges on grain within that State. From Alexandria to Minneapolis, 133 miles, the rate was 21 cents per hundred pounds in 1880, 19 cents in 1885, and 12 cents in 1887. Since that date it has not changed. From St. Vincent, 380 miles, the rate was 35 cents in 1880, and 21 cents in 1887, and is now 16 cents. Mr. Teisberg thinks that these reductions have been partly caused by the operation of the railroad law, the rulings of the commission, and the moral effect of those rulings, but that the more economical methods of transportation, such as the increase of the size of cars and engines, are the chief cause. He considers that competition has had very little to do with it. (364.)

6. *Western freight rates.*—Mr. BACON, of the Michigan Alkali Company, says that Western freight rates on the products of this company are so high that practically none are shipped into that territory. There is a rate of 58 cents per hundred pounds to San Francisco, this low rate being due to the competition of the foreign product with ocean transportation. The witness has no complaint to make regarding discrimination between long and short hauls ordinarily, excepting the low rates where there is water competition. But he believes that it would be to the advantage of the railroads and the West generally to reduce freight rates in that section so as to allow the establishment of industries. (80, 85.)

Mr. STUNNS, of the Southern Pacific Company, asserts that the rates for transportation from the Pacific coast have very considerably decreased since 1891, and he knows of no single instance in which they have increased. (765.)

7. *Freight rates on alkali products.*—Mr. BACON, freight manager of the Michigan Alkali Company, complains of the excessive freight rates charged upon its products as compared with other articles. The various articles are all shipped in compact form, in large bags or barrels; they are all heavy and they are clean and convenient to handle. There is not so much leakage from the packages as there would be from flour barrels. A barrel of flour weighs 212 pounds, and a 15-ton car would contain 143 barrels. A barrel of dense soda ash weighs 570 pounds; of light ash, 300 pounds; of bicarbonate of soda, 420 pounds; of cement, 400 pounds; that is, a 15-ton car would contain from 52 to 100 barrels of these respective products. Notwithstanding the favorable character of the alkali products for shipment, the railroads charge a rate very much in excess of that on flour and similar barrel products. The following table shows the relative rates from Wyandotte, Mich., to various Eastern and Southern points (1900):

To—	Barrel dense ash.	Barrel light ash.	Barrel bi- carbonate.	Drum caustic.	Barrel flour.
	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Boston.....	109.3	57	79.8	142.5	37.1
New York.....	91.2	48	67.2	120	32.8
Philadelphia.....	79.8	42	58.8	105	28.6
Baltimore.....	74.1	39	54.6	97.5	27.5
Richmond.....	94	49.5	69.3	123.7	26.5
Chattanooga.....	159.6	84	205.8	285	.....
Atlanta.....	205.2	108	260	406	.....
New Orleans.....	188.1	98	138.6	247.5	.....
Memphis.....	102.6	54	75.6	136	.....

Mr. Bacon recognizes that the fact that flour is a staple article, shipped in large quantities, justifies a lower rate than on alkali products, but he considers the difference shown in this table excessive. The railroads charge \$1.09 for taking a barrel of heavy ash from Wyandotte to Boston in car lots, while a barrel of flour is hauled the same distance for 37 cents. (72, 73, 81.)

8. *Transportation of California fruit.*—Mr. STUBBS, of the Southern Pacific Company, does not think that there is any complaint or any basis for complaint on the part of freight shippers in California against excessive charges by the railroad companies for transportation. The fact that the shipments of citrus fruits to the East have grown from nothing to 20,000 carloads a year shows that there can be no basis for complaint. Shippers do complain of the practice of the railroads in determining the routes and in not operating refrigerator cars themselves. They also contend against the demand of the railroads that they should load 13 tons to the car instead of 10 tons, on the ground that this does not leave sufficient room for the circulation of air. The railroads are satisfied that this is not true, because for the most part 40-foot cars are used for 13-ton shipments as against 38-foot cars for the 12-ton shipments. The railroads found that the size and weight of boxes had been increased so that practically 13 tons were being carried for the rate on 12 tons. (767.)

9. *Coal rates—Philadelphia and Baltimore.*—Mr. GRISWOLD, general freight and passenger agent of the Western Maryland Railroad, says that the rate from the Cumberland and West Virginia coal fields to Baltimore by the Baltimore and Ohio is \$1.45, without distinction as to distance. There is a territory beyond that section from which the rates are higher. They are also higher from the gas-coal field. The rates to Philadelphia are the same as to Baltimore. This is doubtless because the rate from the Pennsylvania fields to Philadelphia is the same as the Baltimore and Ohio rate to Baltimore, and if the Baltimore and Ohio charged a higher rate to Philadelphia the Pennsylvania road would haul all the coal there. (619, 620.)

10. *Freight rates on paper.*—Mr. GRISWOLD, general freight and passenger agent of the Western Maryland Railroad, thinks that the Southern lines make such low rates to Western points on paper in carloads that the New York, Pennsylvania, and Maryland lines have to make low rates to put their shippers on an equal footing with those in New England. (619.)

11. *Freight rates to Denver.*—Mr. GRIFFITH, representing the Denver Chamber of Commerce, says that there has been no change in the freight rates on first-class commodities from the East to Denver during the past two years, so far as he is aware. (855.)

B. Policy regarding rates—Competition and other influences.

(See also *Water transportation*, p. CLXXIV.)—1. *General effect of competitive forces.*—(See also under *Consolidation*, p. LXVIII.)—Mr. THOMAS, president of the Erie Railroad, declares that the greatest danger to the public is not from high railroad rates but from unrestricted competition resulting in discriminating rates, or in rates which are too low to give a profit to the railroad. At present rates are more stable and uniform than they have been before, and there is a feeling of confidence on the part of the railroads as well as a disposition to maintain fair rates. This country has shown itself able to transport freight more cheaply than any other. The new opportunities and wealth of the country have been stimulated in every possible manner. While competition may have some effect in developing transportation lines and lowering rates, and while some competition is undesirable, the paralleling of railroads results in economic waste. It may be a question whether, if there were no direct competition between railroads, freight rates would be reduced, but, in the opinion of the witness, the competition of different sections of the country and of different countries of the world would keep rates down. America is competing with the world. The price at which grain shall be shipped from Chicago to New York is fixed by the markets of England, and the Continent, where there is competition of the grain from Argentina, India, Russia, and many other countries. The railroad manager who undertakes to keep up rates because he has an apparent monopoly would soon ruin his business, drying up the entire sources of supply, and putting his territory at such a disadvantage, as compared with the rest of the country, that manufacturers and producers could not exist. It does not even pay to put up rates for the purpose of speculation in Wall street; there are easier methods by which to make profits there. In the experience of the witness he has never known an appeal by a majority of manufacturers or of communities, regarding their inability to meet competition of other sections, to be brought to railroad managers without meeting a prompt response.

Mr. Thomas also alludes to the competition of Canadian railroads as a factor in checking the charges of American railroads, even as far south as the Gulf. (551, 552, 554.)

Mr. SCHIFF, banker, declares that transportation rates in general will adapt themselves by a natural law to the prevailing rate of interest. If other investments aver-

age a return of 4 per cent, railroad capital actually spent can not be made to return more than 4 per cent, no matter what is done. (774.)

2. *Competition between railroads—Rate wars.*—Professor RIPLEY says that where there is not competition there is not that incentive, which becomes a matter of self-preservation, to add the very latest and very best improvements, which must prevail where competitive conditions exist. Roads which are subject to competition know perfectly well that if they do not give quick trains and good service traffic will go by the other lines.

At competitive points on roads there is frequently a secret rate in force which is much lower than the published rate. (294, 295, 296.)

Mr. TEISBERG, secretary of the State Railroad and Warehouse Commission of Minnesota, thinks that so far as community of interest in ownership may prevent rate wars it is a good thing. His observation is that rate wars help only large shippers who do not need the help of the railroads. The small shipper is generally not prepared to take advantage of the reduced rates. (365.)

Mr. TALCOTT, assistant to the president of the Seaboard Air Line, says that rate wars have been less frequent in the southern territory than in the northern. (627.)

3. *Distance as an element in freight rates.*—Mr. TALCOTT, assistant to the president of the Seaboard Air Line, says that there is a consensus of opinion among railroads that charges per ton per mile should be higher for short hauls than for long. He has had occasion to endeavor to establish a definite rule, as an engineer and a mathematician, by which charges may be proportioned to distance. He has found that the scale which seems to fit best the actual conditions of tariffs makes rates increase as the square root of the distance; that is, the charge is double for four times the haul. Mr. Talcott has made use of this rule, not only for the fixing of rates, but for the division of charges, and the rule has been approved for both purposes, both by practical railroad men, by courts, and by State authorities. (630, 631.)

4. *Competition of Canadian railways.*—Mr. THOMAS, president of the Erie Railroad, says that the Canadian railroads are important factors in making rates on all American roads even as far south as New Orleans. The exporter of grain or other commodities does not care whether his shipments go by way of Montreal, New York, Newport News, or Galveston. If the rate made by Montreal is lowered, it must be met by the roads to all these other points or they must forego the business. The shipment of goods by water is also a great factor in keeping down rates. (552.)

Professor RIPLEY says that the suspension of the privilege to ship goods in bond over Canadian roads would be of great damage to New England shippers. (299.)

Professor RIPLEY says that Canadian roads are allowed by the American roads a differential, in order, so far as he can see, not to bring to an issue the question whether those roads are subject to the interstate-commerce law, i. e., rather than fight the matter out, the American roads have allowed and do allow the Canadian roads to charge less for the same haul than the roads allow themselves in United States territory. (298.)

5. *Advantages of Boston by reason of Canadian railway connections.*—Mr. HOWES testifies that Boston's railroad connection with the West by the Canadian Pacific road and its branches has been quite an advantage. The financial and commercial interests of the American trunk lines terminated at the Hudson River, and their influences were detrimental to Boston shipping. The Canadian roads were interested in having shipments sent to Boston, and by reason of this competition the American trunk lines gave Boston a consideration which they otherwise would not have had.

In the summer time grain that arrives at Montreal can be shipped thence to Liverpool by steamer just as cheaply as from Boston. The freezing of the St. Lawrence in the winter causes a great deal of the Canadian shipments to be sent through Boston. The tendency for the last year or two has been somewhat against this Canadian trade. A spirit of antagonism has grown up in Canada to a certain extent, due partly to the belief that trade relations between the two countries are not what they ought to be, and out of this belief has grown a political feeling which has necessarily had considerable influence on the Canadian Pacific road. The effect has been to lead Canadian shippers to use the Canadian Pacific to St. Johns, New Brunswick. The Grand Trunk Railway has also developed its terminal facilities at Portland, Me., and this has injured Boston trade to a certain extent. In going to Portland, the Grand Trunk carries its freight entirely over its own line. (701-702.)

6. *Canadian Pacific differentials.*—Mr. STUBBS, of the Southern Pacific Company, says that the American transcontinental roads have fought the demand of the Canadian Pacific that it be allowed differential rates on account of the longer time of transportation and other disabilities of the road, and that this differential, which was

a very disturbing element in the past, no longer exists. The matter was finally submitted to arbitration, and the American roads won. The witness asserts that the transcontinental lines west of the Missouri River did not cut rates secretly to meet this Canadian differential, but the Canadian Pacific road complained continually that the rates east of the Missouri River, and particularly east of Chicago, were cut so that while the Canadian road nominally had a differential it really was not given any advantage. The witness supposes it is true that there were sporadic instances of rate cutting, though he is not in a position to know regarding eastern lines. (763.)

Professor RIPLEY says that the through export rate from this country to China is to-day as low on American roads as on the Canadian Pacific, though this is contrary to agreement. The Canadian Pacific is allowed, by agreement of the American roads, to charge a lower rate than is charged by the other transcontinental roads, but in practice to-day, by reason of the rate war which has been on for some months, shipments are going to Seattle and San Francisco, within the territory of the United States, at less than the rate that was to be allowed the Canadian Pacific. The rates from one point to another are determined primarily by competition with water carriage, and the rate to the Pacific coast from any point east of the Mississippi is uniform. North of the Ohio and east of the Mississippi shipments to any place east of the Pacific can be made for the same rate. Eastern manufacturing towns, therefore, have an equal advantage with manufacturing towns farther west.

Mr. MARKHAM, of the Illinois Central, says that the Canadian Pacific road is not subject to the same regulations for making rates as are the transcontinental lines of the United States, because the Interstate Commerce Commission has no control over the Canadian Pacific road, except where its lines run into the United States, and there is nothing to prevent that road from giving a portion of the revenue which accrues on the Canadian lines to shippers. The Canadian Pacific does not have any line into Chicago, and traffic from the Illinois Central to the Canadian Pacific would be taken over the Wabash or the Michigan Central. (442.)

7. *Basing-point system* (see also as to *Southern States*, p. CVII).—Professor RIPLEY presents a diagram which is published by the chief inspector of the joint rate and inspection bureau of the Trunk Line Association at Chicago. The diagram presented is published by the railroads for the use of their agents, and shows the distribution of the percentage rates on the Chicago and New York basis. The distance from Chicago to New York is always represented by 100. In parts of the territory represented by this diagram, shipments from any point pay 96 per cent of the Chicago-New York rate, whatever that may be. Within other parts of the territory it is 95 per cent of the Chicago-New York rate, or 65, 80, or 110 per cent, etc. (301.)

Mr. GRIMWOLD, general freight and passenger agent of the Western Maryland Railroad, says that rates between Chicago and New York are the basis of all rates in trunk-line territory. All other rates are fixed percentages of them. For instance, the rate to Cincinnati is 87 per cent and that to St. Louis 116 per cent. The class rates have not been changed in many years. (625.)

C. Classification of freight.—1. *Description and general effects of system.*—Professor RIPLEY says that there are at present some 5 classifications of freight, the principal one of which, known as the Official Classification, covers all territory east of the Mississippi—that of the Eastern Trunk Line Association; another covers the far Western States and is known as the Western Classification; another covers the territory south of the Ohio and is known as the Southern Classification; and then several of the States, Illinois and Iowa, prescribe by law what the classification of the freight on their roads shall be.

By classification is meant the separation of goods into groups according to the rates which are to be paid. A reduction of the general schedule of rates may be entirely offset by changes made in classification of goods; that is, goods which formerly went second class may be moved up into the first class, etc. The absence of uniform classification throughout the country gives rise to great difficulty in the assessment of charges and in the comparison of the movement of rates. Goods which may be reported second class at the point of shipment may be first class at the point of delivery. Uniformity of classification would have great advantages, but the difficulty of securing it would be considerable. A commodity which in one part of the country is an ordinary product of the soil, and which must therefore be given a low classification, becomes a luxury at a point distant from the place of production, and would consequently be given a high classification. Oranges are worth comparatively little by the box in California, but transported to the northeastern corner of the United States, they are of much greater value. This increase in value makes it possible to move them up in the scale of classification and to charge considerably more for transporting them. The question of uniform classification involves an agreement between

all the railroads and the introduction of a sort of system of reciprocity through the recognition of the fact that what a road would lose on certain kinds of traffic through uniform classification it would gain on others. Some progress has been made toward uniformity in classification. A great number of arbitrary classifications which formerly existed have been removed, and highly complex conditions, which grew out of them and put the shipper at the mercy of the railroad by making it impossible to figure out in advance what rates would be, have been replaced by the comparatively simple situation to-day of five or six principal classifications. (302, 303.)

Mr. P. J. MCGOVERN, chairman of the Southern Classification Committee, defines the three classification districts or territories in respect of freight movement, viz:

1. The territory lying north of the Ohio and Potomac rivers and east of the Mississippi River and Chicago, which is covered by the Official Classification.

2. The territory lying west of Chicago and the Mississippi River, which is covered by the Western Classification.

3. The territory lying south of the Ohio and Potomac rivers and east of the Mississippi River, and is covered by the Southern Classification.

In all three territories, various exceptions to the classification are in force, in the shape of commodity tariffs or what are termed classification exception sheets.

The classification is usually divided into three parts: (1) The general rules which govern in the application of the rates; (2) the descriptions of the articles, setting forth the names of the article, manner in which it is to be packed, etc., and (3) the ratings themselves, showing what class each particular article is to take. (352.)

Mr. McGovern says further: "The making of freight classifications is the making of rates. * * * Two factors enter into the final determination of a rate: First, the rate itself, and, secondly, the classification of freight to which that rate applies."

The cost of transacting the business has very little to do in forming the classification. An article is considered with reference to its weight, its specific gravity, and that sort of thing, and its value, no doubt with respect to its relation to the trade of the country where it is produced. Several letters accompany Mr. McGovern's testimony, showing the method by which the classification committee takes up and considers the change of classification. This method shows that a change of classification is always considered by the committee, and cases are taken up in the order in which they are presented for consideration. Referring to an application by the Armour Company, of Kansas City, for a change in the classification of butterine, he said that the proposition advanced by the company to have this listed in a lower class should not be entertained, merely because it would be less expensive to the company to furnish their own ice in the transportation of it in small lots. (668-672.)

Mr. LANGLEY says that prior to the enactment of the interstate-commerce law each individual railway line made its own freight classification. He thinks there were 138 classifications. After that law went into effect it was found that in applying these classifications to the scale of rates then in force the long and short haul clause was violated. The roads then held a convention and attempted to adopt a uniform classification. That was found to be inexpedient, and the United States was then arbitrarily divided into three classification divisions. The territory from New York to Chicago and north of the Ohio River is known as the Official or Trunk Line territory; east of the Mississippi and south of the Ohio is the Southern territory; west of Chicago is the Western territory. Three classification committees, one for each territory, arranged a classification of freight for their respective territories, and there was little complaint from 1887 up to January 1, 1900. (860.)

Mr. Langley testifies that the railroads have two systems of making rates. One of them is styled the "Commodity rates," which covers traffic that moves in bulk—such as grain, flour, and various other products. In the effort to systematize traffic in miscellaneous merchandise the railways (under the Official Classification) have arranged 6 classes of freight rates. Under these 6 classes they arrange the separate items, some 3,000 in number. (861.)

Mr. GRISWOLD, general freight and passenger agent of the Western Maryland Railroad, says that there is no absolute rule for the division of territory for the purposes of classification, but the Southern territory generally takes the Southern Classification; the territory embracing New England and the Middle States takes the Official Classification; and there is another classification in the trans-Mississippi territory. There are considerable differences between the Southern and the Official classifications. Mr. Griswold thinks the Southern is on the whole the higher and the more complicated. In making a rate from Official territory into Southern the Official Classification governs as to certain Southern territory and the Southern Classification as to other. (617, 618, 623.)

Mr. Griswold says that many of the roads—as, for instance, his own—are not represented upon any classification committee. He, however, always receives notice

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when a revision is proposed, and he supposes that other traffic managers do. Shippers also are free to make suggestions, and do make them, either directly or through railroad officers. (618.)

2. *Southern Classification.*—Mr. MCGOVERN states that the Southern Classification Committee was organized April 15, 1899, its object being the establishment of uniform freight classification and to aid in executing the laws affecting commerce. Its membership is composed of 42 transportation companies operating in the territory south of the Ohio and Potomac rivers and east of the Mississippi River, together with the steamship companies engaged in coastwise transportation to and from the ports of that section. Some of the steamship companies are more or less affiliated with some of the railway companies in the association, and unless their officers are the same as of the railway companies they are given a vote in the association.

The articles of the association provide for a subcommittee of 15 members, two-thirds of whom are necessary for a quorum, whose duty it is to consider the classification of freight, whether submitted by the chairman or by shippers, or in the shape of complaints from shippers, and to recommend to the full committee. If the recommendation is concurred in by the general committee, the chairman publishes it and it becomes the official issue of all the members of the association. They have a general notice on file with the Interstate Commerce Commission to that effect. If any line does not care to accept, it will give notice to the committee and file that notice with the Interstate Commerce Commission. The committee does not even undertake to enforce the application of the classification after it is once published. A five-sixth vote is necessary to establish or to change a classification. The representatives composing the general committee are the traffic managers, traffic officials, general freight agents, etc., of the various transportation companies of the association.

The Southern Classification Committee, continues the witness, has no financial functions. Its expenses are divided on the mileage basis. The need of such a committee had been recognized for many years prior to its organization. Similar committees had been in existence in the territory and in the Western Classification territory for many years, and their value had been demonstrated. (652, 653, 654, 655.)

For discussion of recent changes made by the Southern Classification Committee, and of their effect on rates, see p. LXXIV.

Mr. TALCOTT, assistant to the president of the Seaboard Air Line, says that the Southern Classification was, in its origin, a compromise measure between all the roads in that territory, and replaced their individual classifications. When it was adopted some were exceedingly anxious to base it on the Official Classification, which contained only 4 classes. It was found that these would not fit the Southern conditions. It would put some things in the fourth class that would not stand fourth-class rates. Lower classes had to be established. An increasing number of commodity rates have also been introduced. Moreover, there were State classifications within the limits of the particular States, and the witness thinks many of these are still in existence. (632, 633.)

Mr. GUILLAUDEU, president of the Old Dominion Steamship Company, states that that company does not get the same amount for transporting through freight from New York to Norfolk and Richmond, destined for the West, as on goods destined for the South. The distinction is brought about largely by the different classifications. The Southern Classification runs lower than the Trunk Line Classification. The Southern rate scale is higher because of the vast difference in the tonnage moved as between the East and the West and the East and the South, and because of the greater number of competitors of all kinds in the Western business. (446.)

3. *State classification in the Southern States.*—Mr. LANGLEY says that a peculiar condition in respect to Southern territory is that the Southern Classification governs on interstate traffic all through that territory, but the various States, through the State railroad commissions, do not recognize that classification in intrastate traffic. The result of this is that a merchant, for instance, in Mississippi can buy his supplies on the basis of what is known as the Southern Classification and distribute in his State on a much lower basis of classification, whereas an outside merchant shipping to the point in that State is governed solely by the Southern Classification, which is about 30 per cent higher than the Mississippi Classification. (863-864.)

4. *Commodity rates.*—Mr. GRISWOLD says that a commodity rate is generally a special rate made on such articles as lumber, coal, and pig iron, which could not be moved in large quantities at class rates. It is true, however, that commodity rates are sometimes named on other kinds of goods as a means of making cuts. There are a great many commodity rates in existence, but far less than some years ago. (617.)

Mr. MCGOVERN testifies that commodity rates are not in the nature of discriminations, but are supposed to be to the advantage both of the shipper and of the carrier.

In making such rates the classification is not reduced all over the classification territory. Usually each railroad makes its own commodity rates. They are established where the particular commodity is actually shipped most. Any person engaged in shipping a particular article or line of goods subject to such a rate would be given the reduced rate. There is no discrimination. The practice seems fair and sensible and is a pure business proposition. Commodity rates stimulate the particular business and are very beneficial to a community starting a new manufacturing business, for instance, as they are somewhat in the nature of protection to those interests. Commodity rates would apply to all alike who are engaged in the same particular line of trade in the territory. One idea in the making of commodity rates was to build up the iron business of the South. Lower rates were made on northbound pig iron than on manufactured iron articles coming into the Southern territory. The practice is precisely like that of a man with a stock of goods selling some of them at 5 per cent profit, some at 10 per cent, and others at, say, from 40 to 50 per cent profit. Commodity rates are remunerative to the railroads as additional business for increasing the traffic. The making of a competitive freight rate is subject to precisely the same conditions as the price of the thing unshipped. The maker and the carrier join in the partnership and both are helped and nobody is hurt except some one outside of the classification territory who is engaged in the same kind of business. Such rates are usually applied to new articles of manufacture. The cotton rates from the South are in some cases higher than the rates on the factory products. These are arranged so as to stimulate the cotton manufactures of the South. There may be an element of injustice in this to the cotton grower, but it is a simple business proposition. (674-676.)

Mr. TALCOTT, assistant to the president of the Seaboard Air Line, says that when the Southern Classification was established it was necessary to give commodity rates to certain Western products which could not bear the class rates. From time to time commodity rates were claimed for many other things, until the number, which had been a half dozen at first, was too large to be covered by the alphabet. New ones have continued to be introduced since Mr. Talcott was actively connected with the matter 10 years ago. (632, 633.)

Western commodity rates.—Mr. STUBBS, of the Southern Pacific Company, believes that the Western Classification of freight is as satisfactory as a compromise between the views of many different railroads and shipping interests makes possible. If each road could make its own classification there would be many changes. There never can be any classification which will preclude the necessity of special commodity rates. As the scope of a general classification increases the number of such special rates must also increase. The Western Classification may not provide a satisfactory rate for some commodity which is of great importance to some particular road, though of minor importance to the other roads, and it must accordingly make a commodity rate.

Mr. Stubbs asserts further that practically all of the transcontinental freight is carried on commodity tariffs under the controlling influence of sea competition. Sea carriers actually classify freight much more than the railroads. They take freight on the basis of both weight and measurement, and especially where the rate is based on measurement its proportion to the value of the commodity varies greatly. Moreover, the requirement of insurance on sea cargoes acts virtually as a means of classifying rates. The rates therefore are different for almost every article, and the rail carriers must make commodity rates to correspond. These commodity rates are made by the transcontinental carriers in conference and are practically the same on all of the railroads as regards transcontinental business. (763.)

5. *Changes of classification.*—Mr. MCGOVERN says that when changes of classification are made, 10 days' public notice in case of an advance and 3 days' notice in case of reduction is always given. Classifications must change very many times to meet commercial conditions, and while they may interfere with contracts theretofore made between merchants, it is found impossible, even with the greatest effort, to accommodate all the changes to all the trade conditions. Sometimes a notice of 20 days is given of any contemplated change. (668.)

6. *Discrimination by means of classification.*—Mr. LANGLEY testifies that by the advance in the classifications made by the several classification committees in 1900 the merchandise traffic, which moves in smaller volume than what are known as commodities, such as flour, coal, grain, and articles of a similar nature that move in carloads, is forced to pay a higher scale of rates, and thus is taxed more heavily than the commodity traffic. He thinks this is not equitable, because if the railroads desired to increase their revenue, or if there was any necessity for the increase of revenue, the increased tariff should be levied on all traffic alike. (870.)

The protest of the Merchants' Association is not primarily that freight rates have

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been advanced, but that they have been unequally advanced in a way that adds burdens to the small man and the small shipper. Under this indirect method of raising freight rates the small man always gets the worst of it. He believes that the classification for the country at large or for the different sections of the country ought to be drawn up by a representative body, including representation of the shippers and of the railroads, and with publicity in the conferences. (867.)

Mr. McGOVERN refers especially to the item of coffee, which was advanced in classification by the Southern Classification Committee, and says that, protests having been made, the roasted coffee was reduced, while the green remained in the advanced classification. The result of this was to benefit the roasted-coffee interests. The witness says that in checking over the official classification he noticed that a good many of the items that were under the control of the industrial combinations or trusts were not advanced at all. These changes in the classification whereby the trust articles were not advanced were discriminations in favor of the trust interests. (865-866.)

7. *Classification inspectors* (see also *Underclassification*, p. ciii).—Mr. LANGLEY says that the inspectors employed by the classification committees have arbitrary power and have the right to open a shipment and look through it and classify it in accordance with their classification rules. He thinks that many times they are bribed by the large shippers, but says, of course, there is no way to prove this, and believes also that sometimes the shippers in New York are instructed to misclassify freight and thereby get a lower rate. He does not know definitely of any case of venality on the part of any inspector, but says "it is one of these things that everybody knows." The inspectors are employed by the railroad associations in each respective classification territory. It is generally understood among merchants that their packages of goods are subject to be opened by the inspectors, although there is no contract in the bill of lading authorizing the railroad companies to do so.

There is a practice, but it is not general, among merchants to ship in a lower classification than the goods should honestly go into. The railroads keep records of cases in misclassification, and the inspectors know just where to put their hands on parties who are given to that sort of thing. Section 10 of the interstate-commerce act, however, provides a penalty for misclassification, but says nothing about inspection. There is great difficulty in correctly grouping various kinds of merchandise or articles in a way that will correspond with the classification as promulgated, especially in the case of hardware. It requires a man quite expert and the packer must have a high degree of intelligence to analyze the classification and comply with it in a good many instances. The inspectors are supposed to be expert in classes of goods and familiar with the classification and the grouping of various articles into one shipment. Their actions are at times complained of, however. (867-868.)

8. *Packing of goods—Minimum weight, etc.*—Mr. LANGLEY says that it is a matter of convenience among merchants to put a considerable variety of goods into a single packing case sometimes, and they do so in order to comply with the rule that the classification committees have established that no single package or small lot of freight of one class will be taken at less than 100 pounds at first-class rate, and in no case will the charge for a single consignment be less than 25 cents. He thinks it would be a protection to the merchants and some aid to the inspectors if an invoice accompanied the bill of lading. In some of the Southern centers there are jobbers who job in a number of different commodities at the same time, but they do not have any special advantage over Northern jobbers in that respect, because the railroads have a rule as follows, viz:

"Shipments of property combined into packages by forwarding agents claiming to act as shippers will only be taken when the names of individuals and final consignees, as well as the character and contents of each package are declared to the receiving agents, and such property will be waybilled as separate consignments and freight charged accordingly."

The local jobber, however, may have a slight advantage over the New York jobber in combining into packages several small shipments, not violating the rule that no package shall contain more than 100 pounds, because the New York shipper dealing in only one line of commodities could not afford to ship directly to the small country store. (869.)

Mr. McGOVERN says further that there is a complaint about the regulations as to the style of package, and as to the make-up of freight in different classifications. The Southern classification has a clause to this effect, viz:

"Property presented to carriers packed in so-called boxes or cases made from strawboard, leather board, wood-pulp fiber, wire-split wood, and other analogous materials included in wooden frames, will be charged 10 per cent higher than the classification provided for such property in boxes or cases."

The reason given by the roads for this rule is that the railroad loses the freight on the extra weight of a wooden box, and to equalize matters they make a discrimination of 10 per cent on all freight shipped in the lighter boxes. In hardware there are instances in which they charge a higher rate for goods packed in boxes than in barrels. Their explanation of this is that the shippers will put hardware in boxes, and if it is a high-class hardware they will call it low-class hardware and thereby get a lower rate of freight. (876-877.)

9. *The cotton piece-goods schedule.*—Mr. LANGLEY testifies that dry goods are in the first class in all three of the classification territories. What are known as cotton piece goods, which are supposed to be goods made exclusively of cotton, are in a lower class. The Merchants' Association of New York endeavored to have the classification of cotton piece goods simplified, and presented an argument in favor of it. The official classification committee simplified it by advancing it from the third to an intermediate class, 15 per cent less than the second class. The Southern schedule of cotton piece goods includes about 35 different articles made wholly of cotton. As a matter of fact, most of these terms are technical trade names. Into these 35 terms between 2,000 and 3,000 different styles of goods made of cotton are endeavored to be condensed. There is some new name attached to some product of cotton every year to make it attractive, and it is difficult to tell how to classify such article. When a shipment is made, although it may be cotton piece goods really, the inspectors who are maintained by the Southern classification committee will use their own judgment as to whether the goods in that shipment should be included under these 35 terms. If it should seem to the inspector that these goods do not come under any of those 35 terms, the shipment, instead of going forward to the fifth class, would be advanced to the first class. The witness says that if there is a shipment of chevots and there is room in the box in which they are packed for a quantity of dry goods made partly of wool, which is first class, the inspector will raise the entire shipment up to first class, even though 75 per cent of it was cotton piece goods. The advance in the freight rate by this process would be contingent upon the distance transported, being less for a short distance than for a longer. The witness does not think that after a classification has been made by experts in the business it should be disturbed. (866, 867.)

10. *Uniformity in classification advocated.*—Mr. BACON, of the Michigan Alkali Company, complains of the lack of uniformity under the Official Classification in the Northern States and the Western and Southern classifications. The various products of his company—caustic soda, soda ash, and bicarbonate of soda—all take the same classification in the Northern States, but as soon as the Ohio or Mississippi River is crossed these products each come under a different class, and there is great confusion. There is no justice, Mr. Bacon declares, in charging a rate of 54 cents on caustic soda from Wyandotte, Mich., to Atlanta, when the rate on soda ash is only 36 cents. In the Northern States these products all fall in the sixth class, while in the Southern States they go in either the fourth or fifth usually. The result of this lack of uniformity is an inability on the part of the producers to calculate as to what the freight rate will be and to make their contracts accordingly. Goods are started out under one classification and may pass through one or two others. The manufacturer who has a rush order may not be able to learn for a week what the rates will be. He does not know how to make contracts, being unable to calculate the freight rates; and the more so because the rates under each classification are subject to change without reasonable notice. (73, 74, 81, 82.)

Mr. Bacon, in view of his experience as to the disadvantages of lack of uniformity in freight rates, declares that there should be a uniform classification throughout the country. This should be prepared by a single traffic association, and should be subject to the control of the Interstate Commerce Commission. As a more definite method of adopting such a classification, the witness suggests that there should be an organization consisting of six railroad men and six business men. The railroad men should be selected by the railroad companies, and should represent the different sections of the country. The business men should be appointed by the Interstate Commerce Commission, and should represent the six leading classifications of freight. The witness thinks that lawyers would not be required on the board. He recognizes that the making of classifications is a very intricate matter. The argument made by the railroad companies in favor of the maintenance of several traffic associations and several classifications is that railroad officials in one section are not familiar with the conditions in other sections. But a body organized as suggested would be representative of all sections.

This body should fix rates to take effect January 1, and to remain in effect without change for at least one year. The witness believes that it would be practicable to retain rates thus unchanged. The work of this traffic association should be subject

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to the supervision of the Interstate Commerce Commission, although that body by itself would doubtless find it a physical impossibility to make classifications and establish rates for the entire country.

Mr. Bacon is inclined to think also that freight rates upon a uniform classification should be uniform for the different sections of the country. The same commission or association which determines classification should fix rates and keep them unchanged throughout the year. It might possibly be necessary to make some differences in rates on particular commodities in different sections of the country, but the witness believes that if rail rates were made alike in all sections, every section would build up rapidly, manufactures would be established where now excluded by high freight rates, and the railroads would soon find business profitable everywhere.

Mr. Bacon thinks there might be some advantage in having the classifications and rates proposed in the first instance by the leading railroad companies, and equalized and adjusted by such an association as he suggests.

The witness declares further that he has seen no evidence of an increasing tendency on the part of the railroads themselves to establish uniform rates. They need to be made to do it; moreover, the parties in interest will adjust rates for their own advantage, while the Government would be impartial if it took up the matter. (74, 76, 82-84.)

Mr. WILSON, of the Cincinnati Board of Trade, declares that the freight classifications made by our railroads should be made uniform as far as possible. This can not be done absolutely at once, but a uniform base classification ought to be put into effect, with such flexibility as commercial circumstances require. The power which establishes classification should have the right to make modifications upon proper representations. Cincinnati lies on the boundary of the three great classifications, very much to the inconvenience of the shippers, who must take into consideration all the time into what classification the goods are to be shipped. No possible benefit could be obtained in intrusting the Interstate Commerce Commission with any greater power over classification matters. (698.)

Mr. MCGOVERN, of the Southern Classification Committee, thinks that a uniform classification is not altogether impossible, but that it would be impracticable and that its value has been overestimated. The attempt to bring about an agreement as between the existing three classification systems would result in a modification of the number of classes. Cotton-factory products, for example, are first class in Western territory, third class in Official territory, and fifth class in Southern territory. Existing freight rates should not be violently disturbed. Neither classification territory would be willing to change entirely to the classification in any other territory, and a new class would probably have to be established as a compromise. It is proper that cotton-factory products should be placed in different classes in different sections of the country. In Western territory cotton products are consumed only, not manufactured. There is no question of encouraging the development of factories. In the Official territory cotton goods are produced, but the business is firmly established. In Southern territory cotton mills are just starting, and the goods were put in a low class to get the business on its feet. When the conditions as to the density of traffic become similar in each great territory the system of classification will gradually level itself up and tend to harmony.

Mr. McGovern does not think that the establishment of a uniform classification would materially simplify the transportation of goods from one section of the country to another. It is true that in crossing the boundaries of the classification territories the basis of rates is changed and combination rates have to be made. In many instances there are definite through rates based on one of the classifications only, even where goods pass from the territory of one classification to that of another. (677, 678.)

Mr. WHEELER, representing the San Francisco Board of Trade, says that no freight classification or tariff was ever constructed which was wholly consistent. Shippers have constantly to call the attention of the railroads to inconsistencies and to try to secure their correction.

This witness believes that a national classification of freight should be established, with, however, permission to the railroads in particular localities to make suggestions and to establish commodity rates. It is justifiable that there should be special rates in view of the varying conditions in different sections. The tariffs in the South must take into account the transportation of cotton, and of coal, iron, and steel from the Alabama district. The eastern Official Classification must take into view the special classes of traffic which are most important in those sections. As it is under the three existing classifications, each railroad makes many special commodity rates according to conditions, and this could be done just as well under the national classification. As particular evidence of the importance of commodity tariffs, the witness speaks of

the rates on transcontinental traffic which are practically all, he asserts, commodity rates differing from those of the Western classification. "The exceptions are the whole thing." The railroads are forced to make these commodity rates in order to meet sea competition. (749.)

11. *Impracticability of uniform classification.*—Mr. SRUBBS, of the Southern Pacific Company, thinks that the present system of three classifications—the Official, the Southern, and the Western—goes as far toward uniformity as is practicable. Commodity rates must be made in many cases even under the present classifications, and the railroads have had to make considerable concessions in order to agree as far as they have. If a national classification were attempted the number of concessions would be multiplied, and often the result would be an injury to the public quite as much as to the carriers. An increase in the scope of classification would also force an increase in the number of commodity rates which would practically make the uniformity of no significance. By multiplying the differences in conditions through an attempt to secure a single classification, the need for commodity rates would evidently be increased. The witness thinks, moreover, that a uniform classification would be of no importance, because classification does not make rates. The rates could be made to differ, according to conditions, whatever the classification. The whole idea of uniform classification is a snare with which to fool the public. (766, 767.)

Mr. TALCOTT, assistant to the president of the Seaboard Air Line, does not consider that the conditions admit of a uniform classification for the whole country. The interests of the roads in a region where a particular commodity is produced will often lead them to give it a much lower rate than roads in other regions could afford to give it. For instance, the Florida railroads would put oranges in a lower classification than they would be given in Virginia, where they are not raised. Again, in the South, where they are endeavoring to encourage manufacturing, commodity rates are made for manufactures which would put them in a very low class, though the Official Classification puts them in the first class. (633.)

Mr. GRISWOLD, general freight and passenger agent of the Western Maryland Railroad, says that there would be very great advantage in a uniform classification of freight. There have been many attempts to bring it about, but so far the difficulty has seemed insurmountable. The Official Classification was the result of an attempt to secure uniformity. Conditions are better now with 3 classifications than they were some years ago with 10 or 15. There is no marked tendency toward uniformity between the classifications that now exist. The difficulty seems to be that different sections require different classifications on account of the volume of traffic in different commodities. A railroad which has a large business in a certain article can afford to handle it cheaper than a road in another section which handles only a little of it. (617, 619.)

Mr. GREENE, of the Audit Company of New York, thinks that the tendency toward consolidation of railroads will favor increasing uniformity of classification, but that the difficulty of absolute uniformity is great on account of the difference in conditions in different sections. Classification is only another method of fixing rates. Cotton goods, under stress of circumstances, may properly be carried at one rate from New York and another rate from Atlanta. (485, 486.)

Mr. LANGLEY says that uniform classification is a good thing, but he does not believe it practicable. The official classification is made to correspond with the scale of rates based on the rate from New York to Chicago as follows, viz: First class, 75 cents; second class, 65 cents; third class, 50 cents; fourth class, 35 cents; fifth class, 30 cents, and sixth class, 25 cents.

From New York to Atlanta, which is practically the same distance as from New York to Chicago, the first-class rate is \$1.14; second class, 98 cents; third class, 86 cents; fourth class, 73 cents; fifth class, 60 cents, and sixth class, 49 cents.

There are 3 classes of rates in the Southern territory higher than the highest class for similar service in the official territory. The Southern territory has always had an exceedingly high scale of freight rates. The railway facilities in the South are far inferior to those in the North. Recently there has been a great improvement generally throughout the South in railways, but that section is not up to the standard yet. One cause, perhaps, of the higher freight rates in the South is that the return traffic from the South moving North is quite light, except in the case of cotton, but still a great part of the cotton crop is shipped abroad and never comes North. (864.)

12. *Freight classifications and through billing.*—Mr. NICHOLSON, of the Central Railway Clearing House, testifies that the difference in freight classifications in force in different parts of the country involve a great deal of labor in billing the goods. The great bulk of the clearing-house traffic is on the Official Classification. The question of obviating the difficulties of the different classifications has been argued by the traffic officials between the East and the West for many years, but nothing has been

accomplished. In some sections of the country where a large class of particular freight is moved it would be to their advantage to have a lower classification than that prevailing elsewhere.

Mr. Nicholson says that there are many commodity classes, but that this does not embarrass the clearing house in the making of decisions. (726, 727.)

13. *Classification of freight by Interstate Commerce Commission.*—Mr. GRISWOLD, general freight and passenger agent of the Western Maryland Railroad, thinks that to give the Interstate Commerce Commission supervision over freight classification would be to give supervision over the work of experts to inexperienced persons. While it would be possible for the railroads to arrange a classification so as to favor certain interests, he does not think it likely to be done in practice, because those who prepare the classification represent so many different interests. (618.)

D. Export and import rates.—1. *Generally.*—Professor RIPLEY says that the Interstate Commerce Commission has held that it is not in accord with public policy that the freight rate from Chicago to Liverpool should be less for the entire haul than the rate from Chicago to the local consumer at Boston or some intermediate point. The Supreme Court of the United States, however, has supported the practice of the railroads in making low export and import rates, and in the case of the Texas and Pacific railroad decided that the railroad was justified in making a lower rate from New Orleans to San Francisco on goods which had come to New Orleans from Liverpool by water than it made upon goods shipped from New Orleans as the starting point. The grounds of the decision were that the rate from New Orleans to San Francisco by land must meet the competitive rate by water, and that the rate from Liverpool to San Francisco via New Orleans must meet the straight water rate from Liverpool to San Francisco. The minimum figure in either case was to be determined by the conditions of competition. In one particular case the discrimination against New Orleans was from 50 to 200 per cent. In another case the domestic rate from New Orleans to San Francisco was \$2.88 per hundredweight, while the total rate on imported goods from Liverpool to San Francisco via New Orleans was \$1.07 per hundred, the Texas and Pacific road getting only its proportional amount of that \$1.07. Tin plate was also carried from Swansea to Liverpool, thence to New York and to Chicago, via Pittsburg, at a total charge less than the published rate from Pittsburg to Chicago. The existence of low export rates to the Pacific on cotton goods from New England manufacturers to the Orient is essential to the manufacturers in order to keep them on a par with manufacturers who can send the entire way by water. Low export rates concern the consumer in this country and low import rates concern the producer. In some cases the low import rates might nullify protective duties.

Export and import rates have a bearing upon the matter of personal discrimination. A shipper from some western point may send goods on an export through bill, and consequently at a lower rate, but include in that shipment goods destined for local delivery in New York. Goods meant for New York would be removed at that point. The shipper would be getting the advantage of the low export rates on goods intended for local traffic and would avoid the rule adopted by the Eastern Trunk Line Association freight committee, which provides that when any local goods are shipped in the car with export freight, less than carload rates must be charged. (299, 301.)

Mr. LANGLEY, of the Merchants' Association of New York, testifies that on flour, from Minneapolis to Liverpool, the inland rate is 2 cents per hundred pounds less from Minneapolis to New York than it would be on a shipment of flour to be delivered at New York and consumed there. With the exception of two of the Western mills, all the mills at Minneapolis, Duluth, and West Superior are consolidated. His own opinion, however, is that a trust as applied to the manufacture of flour is impracticable. The witness says that the effect of making excessively low rates on wheat shipped abroad works in favor of the foreign miller as against the home miller.

There are also import rates from foreign ports to interior American points lower than from our own trade and manufacturing centers to those points. This is unjust, although it is proper to favor long hauls relatively. It would seem proper that the rate from Liverpool to Chicago shall be almost as cheap as the rate from Liverpool to New York. The inland rate has a greater influence over the through rate than the sea rate. It is possible that jobbing merchants in Chicago can, on a low through import rate, reship their commodities and compete in territory which otherwise would be tributary to New York. Marshall Field & Co., of New York, can sell, in territory within 50 miles of New York, the same kind of goods bought in the same market in which the New York jobber buys. The only way that this can be accounted for is that that firm must receive some advantage in the matter of the through rate. (870-871.)

Mr. THOMAS, of the Erie Railroad, thinks that the practice of making rates on exported products lower than those on products used at home is justifiable on account of the necessity of meeting the competition of the world in foreign markets. The practice does not constitute a discrimination against domestic producers. Indeed, it increases the volume of business of the railroads, so that they are enabled to make lower rates for domestic shipments. In the case of the low rates on export wheat, the millers get lower rates on flour than they would if the export rates were not low. It certainly is to the interest of this country and of the railroads to have the grain ground here if possible. Another reason for making the rates on grain lower than those on flour is that grain is much more cheaply handled. It loads and unloads itself. The witness thinks, however, that even if the loading and unloading were done by the shipper, grain products would and should bear a higher rate than grain. (557.)

Mr. GREENE, of the Audit Company of New York, says that the practice of the railroads in making lower rates on goods for export than for goods used in this country is part of the same policy which frequently leads manufacturers to sell goods abroad at lower prices than in this country. Both practices are justifiable. The enormous energy of the American people sometimes leads them beyond the line of prudence in the production of wealth. Only an exportation of the surplus production can avert hard times. Otherwise, men must be discharged and business cut down. Few people realize the importance of export trade in its relation to the prosperity of the country. In order to facilitate such exports low freight rates and low prices on goods going abroad are entirely justifiable, and tend to benefit the entire business of the country. The cheap export rates on the railroads are a powerful instrumentality in keeping the balance of trade in favor of the United States. (484, 485, 487.)

2. *Exports and freight rates.*—Mr. MARKHAM, of the Illinois Central, says that the exports per annum from the United States amount to over 2,000,000,000 pounds of provisions, 500,000,000 bushels of breadstuffs, and 7,000,000 bales of cotton; that notwithstanding the greater part of these products is raised much nearer the Gulf ports than the Atlantic ports, only a small percentage of them find an outlet via the Gulf ports. With a reduction of the river rate, the rates on the Southern railroads would be correspondingly reduced, and that reduction would necessarily reduce the rates on the Atlantic seaboard lines. (431.)

3. *Pittsburg export rates.*—Mr. ANDERSON, secretary of the Chamber of Commerce of Pittsburg, says that the freight rate on steel rails from Pittsburg to New York at the time of his testimony was \$2.80 a gross ton, and that rails could at that time be shipped from Pittsburg to Liverpool at about \$4.25 a gross ton. (843.)

4. *Import freight rates.*—Mr. GREENE, of the Audit Company of New York, thinks that goods are sometimes shipped from foreign countries to interior points in the United States at even less than the prevailing rate from New York City to those interior points. The railroads consider such a policy justifiable on account of competition and in order that they may get the traffic at all. Thus railroads will receive goods from Liverpool and carry them from Chicago to New York for low rates in order that they may get the business. The ethical question as to the justice of such special rates is a difficult one, but the witness thinks on the whole that they tend ultimately to bring down domestic rates as well. (485.)

5. *Import rates on transcontinental business.*—(See also *Canadian Pacific differentials*, p. LXXXI.)—Mr. STUBBS, of the Southern Pacific Company, says that there is no regular system of making import rates from San Francisco and Pacific coast points to the East on goods coming from the Orient. "It is a go as you please." The steamships take freight at whatever rates they can from Asiatic ports to American cities, and the railroads accept their agreed proportion of the total rate whatever it may be. There are no published tariffs and no agreements between railroads which are enforceable. The witness further asserts that San Francisco has no reason to complain that it is robbed of business by means of these low, through import rates. It is true that rates from oriental ports to Chicago and New York through San Francisco have sometimes been lower than rates to San Francisco itself. But the import business of the country, except for the Pacific coast States themselves, was originally centered in the hands of houses at the Atlantic seaboard, and it is hard to change the practice. When the immediate-transportation act was passed, which allows imported goods to go to interior points under bond and to pay duties there, many interior cities began to do their own import business, but San Francisco of course gained no advantage from this change.

As a matter of fact, continues Mr. Stubbs, the controlling factor in the import rates on Asiatic commodities is water transportation by the Suez Canal, the Isthmus of Panama, and Cape Horn. The business went originally entirely by these routes, and the railroads were forced, if they were to take any traffic at all, to meet their rates.

Naturally the import rates which were made were lower than the rates on domestic duties, while the steamers from the Orient to San Francisco also made lower rates for goods going to the Eastern cities than for those going to San Francisco.

The witness doubts whether there is much profit to the railroad companies in the import traffic which they carry at these low rates. He adds, however, that all railroads are forced to take some business which is subject to strong competition at rates which are not compensatory and which give little regard to the total cost of transportation. Under these circumstances the carrier does not consider the numerous fixed charges, which do not vary whatever the volume of business. Moreover, about 75 per cent of ordinary operating expenses will be found to vary but little as the volume of business fluctuates. Accordingly the goods carried at very low rates may more than cover the additional cost which carrying them necessitates. The witness therefore does not think that railroads have actually carried Asiatic business at a loss. He says, further, that he does not suppose that the Eastern business of the Southern Pacific coming from Asiatic ports would exceed 12,000 tons, which is a very small proportion of the total business. (761.)

Mr. MARKHAM, of the Illinois Central, states that the transcontinental rates on silks, teas, etc., is controlled considerably by rates of the Suez Canal and the Indian Ocean. (442.)

E. Differential rates from the West to the Eastern cities.—Mr. HOWES, of the Boston Chamber of Commerce, says that the export rates from Chicago and other Western points to Liverpool via Boston are the same as those via New York, but that the local eastbound rates on sixth-class traffic are 2 cents higher to Boston than to New York, the effect of which has been to deter the building up of a local grain business at Boston. While New York, Philadelphia, and Baltimore often have large quantities of spot wheat which can be shipped to any foreign port, as the exigencies of the trade may require, Boston does not have it. The contracts for grain passing through Boston to Liverpool are made at Chicago or beyond, and the shipments are made as through shipments, thus benefiting Boston very little. It has also prevented the building up of a tramp-steamship business and has confined the exports from Boston largely to England. Apart from this differential, the witness is not prepared to say that Boston suffers any from the freight rates from the West. Theoretically, there is no reason why the local rates from Chicago to Boston should be any higher than the through export rates. On a carload of 40,000 pounds the differential would be \$8. The witness believes the rates are not always observed. The statement is made that a dealer who has a large shipment coming from Chicago can get a rate made temporarily for that particular shipment. The railroad agent at Chicago will write a letter notifying the Interstate Commerce Commission that the railroad has changed its rate, and then, 5 minutes afterwards, write another letter stating that it has been changed back to the old rate. Baltimore has a differential in its favor on shipments from the West, but its extensive exports are believed by Boston people to grow out of an additional cut in rates to that city. (701.)

Mr. LANGLEY says that New York has suffered much from the competition of other trade centers, many of which have railway lines that are interested in building up those centers. New York has been discriminated against for 20 years in the scale of rates in force between the East and the West. Boston is in the same position. Beginning at Boston and running down to Newport News, there is in existence a differential scale of rates from Chicago of about 2 cents per hundred pounds. Baltimore gets flour from Minneapolis for about 5 cents a barrel less than New York. In the opposite direction it costs New York more per hundred pounds for the shipment of merchandise than it costs Philadelphia and other cities south. This whole subject was agreed upon between the railroads about 20 years ago. The question was submitted to arbitration at the instigation of the New York Central and the Pennsylvania roads, and a commission, consisting of Allen G. Thurman, ex-Senator Washburn, and Judge Cooley, was appointed to investigate the matter. The merchants of New York were at first opposed to the rates, but they afterwards concluded that the condition of things was forced upon the New York Central in order to protect its earnings, and they ceased to make any strenuous complaint about it. It was practically a blackmailing scheme forced upon the New York Central by the trunk lines farther south.

In the export business, however, Boston takes the same rate as New York, in order to be put upon the same basis. The only reason that can be assigned for the special advantage which Baltimore and Newport News have enjoyed under this arrangement is that it "represents the price of peace as among the lines to the seaboard."³ The only remedy the witness suggests would be for the New York Central to break away from the agreement and insist that rates to and from the seaboard points to Chicago should be the same for all. He does not think there is any competition between the

trunk lines that would benefit New York. The roads that are parties to this agreement in reference to the differentials are all members of the Eastern Trunk Line Association, which also embraces the Norfolk and Western and the Chesapeake and Ohio roads. The decision of the arbitration committee may have been just at the time, but it was never intended to operate perpetually, and since the establishment in the Southern ports of regular lines between the United States and Europe, the New York trade has been greatly lessened on direct shipments. It is claimed that the terminal charges in New York have a great deal to do with the differential, but the witness does not know much about that. Likewise the transfer charges in New York and Buffalo have some effect in diverting business to the Canadian lines. The general rule is as expressed in the maxim, that "commerce follows the line of least resistance." (872-874.)

Mr. GRISWOLD, general freight and passenger agent of the Western Maryland Railroad, states that the system of differentials between cities grew out of the competition between railroads, and was first arranged by compromise and agreement on the basis of lower rates to the shorter lines; as, for instance, a lower rate from Chicago to Baltimore, for export traffic, than from Chicago to New York, because the distance is less. Of course a longer route from Chicago to Baltimore must necessarily make the same rate as the shorter. The facilities of a port in handling export traffic are also considered in arranging differentials. The port which has the worst facilities claims the lower rate. (612, 615, 616.)

Mr. Griswold says that the present difference on export grain from Chicago between New York on the one hand and Baltimore on the other is $1\frac{1}{2}$ cents a hundred. All differentials between seaboard points are absolute differences per hundred, and not percentage differences. (614, 615.)

On westbound traffic Baltimore has a differential as compared with New York which on merchandise ranges from 8 cents (first class) to 3 cents (sixth class.) Mr. Griswold does not know that this gives Baltimore a distinct advantage in the importation of foreign products. New York has an advantage in the number of regular steamship lines, and also in the number of tramp steamers. The ocean rates might be so much lower than those to Baltimore as to offset the differential on the railroads; sometimes they are; generally, however, they are about the same. (620.)

Mr. Griswold thinks that the giving of a greater differential to Newport News than to Baltimore has had some effect upon Baltimore traffic; but it is hard to say, because traffic is influenced by so many conditions. When the grain trade drops at a port everybody thinks that something has happened to draw business away; but the next year, under the same condition of rates, etc., the business may come back. Mr. Griswold thinks, however, that if the rates between New York and Chicago were brought down to a level with those between Baltimore and Chicago Baltimore business would be considerably injured. (615, 623.)

F. Carload rates (see also as to Pacific coast, p. cxvi).—1. *Generally*.—Mr. LANGLEY, of the Merchants' Association of New York, says that in making the classification the roads have adopted what are known as the carload and less than carload rates. For instance, the roads will make a rate for a carload from New York to Chicago so low that the Chicago merchants will be able to distribute those goods from Chicago to a point many miles east toward New York, the carload rate and the local rate from Chicago east being less than the carload rate from New York to the intermediate point. The difference between the carload rate and the less than carload rate would not be a discrimination if there was any fixed rule for the difference, but the classification committees observed no fixed rule. (861, 863.)

2. *Southern Classification*.—Mr. LANGLEY says that the Southern group of railways are interested in building up Southern territory to the exclusion of merchants elsewhere, and make a wide difference between the carload and less than carload rates, so that it is practically impossible for any outside merchant to make any sales whatever in Southern territory. The effect is to exclude the foreign jobber. This witness complains especially of the numerous increase in the difference between carload and part carload rates in the South. He declares that the railroads exercise a power frequently equivalent to taxation. Their actions are purely arbitrary and are governed by their own consciences. Arguments may be presented before the classification committees, but there is no power which can be invoked to compel any change in the classification. (862.)

Mr. MCGOVERN testifies that the Southern Classification Committee has no fixed rule with reference to whether an article ought to take a carload rating or whether it ought to be any per cent less than the carload rating. No effort has been made to increase the number of carload ratings or to widen the distance between the carload and less than carload rating. The practice has been to limit the number of carload ratings to those articles which are ordinarily moved in carload lots. The

Southern Classification has comparatively a smaller number of carload ratings than the Official and Western Classifications. The Southern Classification Committee has not attempted to prevent New York or Chicago or any long-haul market from doing business in the South by increasing the number of carload ratings so as to build up the interior Southern jobber, or for any other purpose whatsoever. The Atlanta jobber wants as low a carload rating as he can get. He desires that the carload rate from New York to Atlanta, plus the less than carload rate from Atlanta to any small town in the Atlanta territory, should approximate the through less-than-carload rate from New York to that town, while the far-off jobber as a rule wants no carload ratings at all. This is the issue in the case of the New York Merchants' Association v. The Southern Hardware Jobbers' Association. All rates for short distances are higher per mile than for the longer distances. It is possible in some instances (but there is no deliberate intention on the part of the Southern Classification Committee to that end), for goods to be shipped from New York to Atlanta and reshipped back 150 to 200 miles toward New York at a cheaper rate than they could be sent direct from New York to that destination. This fact shows a wide difference between the carload and the less than carload rate. The witness does not recall any instances of this kind of rate, but says that agricultural implements in carload lots are rated as sixth class, subject to a minimum of 20,000 pounds, while in small lots some of them are first class and some second class; so that a car could be shipped to Atlanta sixth class and then distributed on the first or second-class rate out and the distribution could go a good distance before the through first or second-class rate on the part carload to the final destination from New York would be equalled. Questions of this kind are not considered by the Classification Committee. Each case is taken up on its own merits, but it is not the policy on the part of the committee to keep the through shipper from doing business in the South or to build up the interior jobber, or vice versa. If such policy were pursued by the committee it would stamp out the coastwise trade of the Old Dominion Steamship Company and the other coastwise steamers, all of whom have representatives in the Southern Classification Committee. The Southern Classification Committee is making no effort to get into line with the policy of the Official and Western classifications on this point. If they are getting closer together, it is merely a coincidence. The witness believes that the question of minimum carload rates might be brought closer together in all three classifications, and thinks 12,000 is a proper minimum carload for all parts of the country. (662, 663, 665.)

Mr. MARKHAM states that the rates on the Illinois Central are not determined by the Southern classification committee, and it has rates for carload lots less than for part carloads. He thinks the lines within 100 miles of the Mississippi River have carload and less than carload rates. Possibly the discrimination is greater now between carload and less than carload rates than it was 20 years ago, and the effect is to increase the carload business. (441.)

2. *Carload rates to Denver.*—Mr. GRIFFITH, representing the Denver Chamber of Commerce, says that he knows of no carload rates which are granted on shoes or other high-class commodities in shipments to Denver. There are carload rates from Chicago and other points to Montana which operate to the disadvantage of Denver. The witness presumes that there may be carload rates to Denver on some classes of articles. (855.)

G. Paralleling of railroads and its effect on rates.—Mr. THOMAS, of the Erie Railroad, does not think that direct competition between parallel railroads is an advantage to the public. It increases the expense of transacting a given amount of business. Thus the Nickel Plate and West Shore railroads were built parallel to the Lake Shore and the New York Central, which were abundantly able to transport all the traffic at the least possible cost. It would have been much more to the interests of the country to have the money invested in improvements on existing lines. The same is true of the Lehigh Valley and the Central Railroad of New Jersey. Either of these roads could do all of the business of the other in some of the territory. Operation could be conducted more cheaply if all the business were carried by one line. The witness has never known of an instance where the cost of transportation has been reduced without benefit ultimately going to the public. Legislation directed to preventing the building of parallel lines would be more desirable than that restricting freight rates. Overcompetition is more dangerous than combination. At the same time Mr. Thomas thinks that there is an advantage in a certain degree of competition, especially between the trunk lines which can carry the same through traffic, but which do not parallel one another locally. There will always be competition between New York and Chicago. If one road fails to supply equally satisfactory passenger facilities, another road will take away its business. (551, 550.)

Construction of new railroads to Pacific coast.—Mr. STUBBS, of the Southern Pacific Company, asserts that the extension of the Chicago, Burlington and Quincy Railroad

to the Pacific coast is not demanded by the volume of traffic. It would merely create a new capital for the community to support. He believes that in the long run the public has to pay the charges of the construction of unnecessary railroads, and that there is already as much competition among transcontinental roads as they can possibly stand, none of them except the Northern Pacific now paying dividends. The proposition to extend the Union Pacific from Ogden to southern California may be viewed in the same way, and the witness does not know whether it will be even of benefit to the Union Pacific. (764, 765.)

Mr. WHEELER, of the San Francisco Board of Trade, says that he does not know authoritatively whether it is the intention of the Burlington Railroad to extend its system to the Pacific coast. In a general way it may be well for a section of the country to have as many railroads as possible, but the witness is inclined to think that the building of new roads does not tend to lower freight rates, but merely makes one more to divide the receipts, so that there is even a disposition to increase the rates somewhat. (747.)

Western Maryland Railroad.—Mr. GRISWOLD, general freight and passenger agent of the Western Maryland Railroad, says that his road has a line 87 miles long between Baltimore and Hagerstown; the Baltimore and Ohio has one of 104 miles, and the Pennsylvania one of 158 miles. The rates on all three lines are the same, and the times of delivery are also about the same. Preference in shipment depends upon the location of the shipper and the receiver, terminal facilities, etc. The whole business of the section could be handled by one road. Each road reaches other points, however, which the others do not reach, so that it is not a useless paralleling. (616, 622.)

II. Subsidiary traffic organizations—Private cars, etc.—1. Fast-freight lines.—Mr. NICHOLSON, of the Central Railway Clearing House, testifies that the fast-freight line system was started in the days when one road was afraid to let its cars go on the track of another, and freight was transferred and the settlements made on the revenue thereof at junction points. To obviate the delay of this method of procedure, various fast-freight lines were organized, such as the Blue Line, the Red Line, the White Line, and others, for the purpose of allowing the cars to go through from New York to the Western cities. A special waybill was gotten up to meet the accounting requirements, the division of revenue among the railroads being shown on each shipment, at the bottom of the bill, and when the first junction point was met the agent of the other road paid in cash to the agent of the initial road the revenue due him, and billed the car out, and so on to its destination. The fast-freight lines were usually only branch departments of these combined railroads. The Merchants' Dispatch Line is a corporation, its stock being owned chiefly by the New York Central interests. There are 15 or more fast-freight lines running over the New York Central. Their accounts, with one or two exceptions, are not audited by the Central Railway Clearing House. The rates charged the fast-freight lines are the same as the rates charged to others. When they own cars they are paid the same mileage as other persons. The system of division of earnings between the different railroads connected with the line is on the basis of relative mileage, except in the case of short lines, where constructive mileage is allowed, or there is the addition of an arbitrary charge for physical disabilities of switching and delivering.

The fast-freight lines, continues Mr. Nicholson, are gradually passing out of use. Those remaining are being consolidated. They are more numerous on the New York Central than on the Pennsylvania system. The Union Freight Line, operating over the Pennsylvania Railroad, is not a corporation. It has its own soliciting agents, however, to solicit freight in the name of the line, as do all the other fast-freight lines. The fast-freight lines are looked upon by the traffic officials as a sort of trademark. Shippers often send freight over a particular line because they have had good service by it before. In the country west of Chicago the fast-freight line is unknown. The costs of operating a fast-freight line are from 2½ to 6 per cent of the freight receipts. These expenses are paid by the roads on a cooperative basis, each line paying its pro rata amount according to earnings. From a traffic standpoint, the railways desire the fast-freight lines maintained; from an accounting standpoint, they wish them abolished. There is not the same justification for them as formerly. They are regarded as merely a branch of their companies. (724, 725, 728, 731.)

Mr. GRISWOLD, general freight and passenger agent of the Western Maryland Railroad, says that fast-freight lines used formerly to be organizations entirely distinct from the railroads, owned largely by officers of the lines over which they operated, and to some extent by outsiders. Mr. Griswold does not know of such a case now. The fast-freight lines that now exist are nothing more than names, by which the conduct of through traffic over 3 or 4 or more railroads is placed for convenience under the control of one manager. Their purpose is to secure through schedules and give better service, thus enabling the lines to compete more efficiently for traffic.

The power to make rates is sometimes given to the manager of the line, but as a rule the manager can not make a rate on any business without the consent of the road on which it originates. It is possible for a manager to make a cut rate with the concurrence of some one line, that line protecting the cut, without the other roads being parties to it. (613, 614.)

Mr. GUILLAUME states that the business of the Old Dominion Line in connection with the Southern Railway from New York to Atlanta is done under the Piedmont Air Line, an organization with a trade-mark and with agents in New York, Boston, and elsewhere to look out after business. The organization has traveling men and is kept up by contributions from the various transportation companies for which it does business. (446.)

Mr. TALCOTT, assistant to the president of the Seaboard Air Line, says that there never have been in the South any independent fast-freight lines like those that exist in the North. The lines have simply been made up by combinations among the railroad companies, each putting in its quota of cars and establishing a line organization. (635.)

2. *Refrigerator cars.*—Mr. STUBBS, of the Southern Pacific Company, alludes to complaints of California fruit shippers against charges of the refrigerator companies. The charges are apparently rather high, but the refrigerator companies have claimed before the Interstate Commerce Commission that they afforded no more than a reasonable profit. Mr. Stubbs thinks, however, that some reduction will soon be made. He says that shippers desire that railroad companies should themselves own these cars, but that this is doubtful, since the movement of fruit is confined to a comparatively short season, and a company which owns these cars can put them into service in other sections of the country and other lines of transportation, as a railroad company owning them could not do. The experience of the witness leads him to believe that it is more economical for the transcontinental railroads to lease these cars from companies than to operate them directly. He declines to state the rate paid by the railroads for the use of the cars, but says that it is less than the prevailing rates on the Eastern roads, which are three-fourths of a cent or 1 cent per mile.

Mr. Stubbs states that the freight rates on green fruit are the same to all Eastern markets, while the refrigerator companies necessarily grade their charges according to distances, especially because it requires more ice for longer distances. The railroad freight rate on fruit from California is \$1.25 per 100 pounds, while the witness supposes that the refrigerator charges vary from \$50 to \$135 per car (of 10 to 13 tons.) (769.)

Mr. WHEELER, of the San Francisco Board of Trade, says that formerly the E. T. Earl Company operated refrigerator cars in the California fruit business, but that it recently sold out to Armour & Co., who now operate practically all of the refrigerator cars, although the witness thinks that the Santa Fé owns a few cars also. Complaint has been made that the charges for the use of these cars are excessive, but the witness does not know much about the subject. He thinks, from conversation with railroad men, that the time is not far distant when the railroads will own and control their own refrigerator cars, but the proposition seems to cause a good deal of friction with the private lines. (754.)

3. *Private cars and car trusts.*—Mr. ADAMS, statistician of the Interstate Commerce Commission, says that there are immense numbers of private cars, and that the rental paid for them by the railroads runs into the millions. If any rolling stock is lying idle and not used, it is not usually the property of the private car companies. On the other hand, the equipment trust obligation, under which a company took over a car and used it as its property and at the end of the year paid 6 per cent on its value and 2 per cent for annuity, is gradually disappearing. The plan is like buying goods on the instalment plan. The better roads are either owning their own cars or renting from outside parties on a mileage basis. (386.)

Mr. TALCOTT, assistant to the president of the Seaboard Air Line, says that car trusts are very general, he thinks, in the Southern States at the present time. (635.)

4. *Express companies.*—Mr. TALCOTT says that when he had to do with express-company contracts, the contracts provided that railroads should give the express companies the available space for transportation, without interfering with the transportation of mails, or passengers and their baggage. The railroad determined how much space should be made available for express and how little. But the rates were made by the express company, and the earnings were divided between the railroad and the express company on a percentage basis. The express company received a larger proportion on the through competitive business than on the local business. (635.)

Mr. ADAMS, statistician of the Interstate Commerce Commission, thinks that express companies ought to be subjected to the same scheme of reporting as the railways, and also that the private companies that furnish cars to railroads and receive a rental for them ought to be brought under the supervision of the Interstate Commerce Commission, at least so far as reports are concerned. (386.)

I. Central Railway Clearing House.—1. *Buffalo Railway Clearing House.*—Mr. WILLIAM NICHOLSON, manager of the Central Railway Clearing House of Buffalo, New York, testifies that the clearing-house principle was made applicable to the through-freight traffic accounting of the New York Central and Hudson River Railroad Company, its leased and operated lines, at the instance of Mr. John Carstensen, the comptroller of those lines. A more general clearing house was established at Buffalo on April 1, 1899, for the purpose of handling certain details of through-freight accounts for the allied roads terminating at the Niagara frontier. The membership consisted of the New York and Hudson River Railroad Company, the West Shore Railroad, the Lake Shore and Michigan Southern Railway Company, the New York, Chicago and St. Louis Railway Company, and the Pittsburg and Lake Erie Railroad Company. The duties of this clearing house were: The clearance of freight-revenue balances accruing between the clearing-house roads, on all interline, joint and fast-freight line traffic passing through Buffalo or crossing the Niagara River at Black Rock and Suspension Bridge; the complete and proper revision of all billing; the compiling and furnishing to the accounting departments of the roads all statistics, statements of earnings, etc.; the checking and recording of all joint or fast-freight line claims, and the keeping of complete records of clearing-house and fast-freight line business. All freight agents of companies members of the clearing house were to be considered as agents of the clearing house, and to respect orders of the manager. Clearing-house traffic, other than fast-freight line, to be waybilled exclusively without divisions of earnings on a special clearing-house waybill. The clearing house to use, whenever practicable, the standard blanks of the Association of American Railway Accounting Officers. (719-720.)

2. *Scope of Central Railway Clearing House.*—Mr. NICHOLSON testifies that the Michigan Central Railroad withdrew from the Buffalo Clearing House on December 1, 1899. The reason for withdrawal was that it had a weekly system of accounts. Another reason was that it was afraid that its competitors would know the amount of business it was doing. It also found fault with the methods of the clearing house and of the executive committee. No further change in membership occurred until May 1, 1900, when the Cleveland, Cincinnati, Chicago and St. Louis Railway and the Lake Erie and Western Railroad were admitted to membership. In view of the fact that the two last-named companies and the Pittsburg and Lake Erie Railroad Company did not have termini in Buffalo, the executive committee changed the name of the association to the Central Railway Clearing House. The association has an executive committee composed of one representative of each road.

The duties of the clearing house have been largely increased from time to time, and at present it accounts for revenue on the following traffic, viz: Interchanged between the New York Central and Hudson River Railroad, West Shore Railroad, Rome, Watertown and Ogdensburg Railroad, Pennsylvania Division of the New York Central and Hudson River Railroad, Mohawk and Malone Railway, Wallkill Valley Railroad, Beech Creek Railroad, Lake Shore and Michigan Southern Railway, New York, Chicago and St. Louis Railroad, Cleveland, Cincinnati, Chicago and St. Louis Railway, Lake Erie and Western Railroad, and Pittsburg and Lake Erie Railroad, passing the Niagara frontier. Between the Lake Shore and Michigan Southern Railway on the one hand and, on the other, the Cleveland, Cincinnati, Chicago and St. Louis, the Pittsburg and Lake Erie, and the Lake Erie and Western Railroad. Between the New York, Chicago and St. Louis Railroad and Cleveland, Cincinnati, Chicago and St. Louis Railway and the Lake Erie and Western Railroad on the other hand. Between the Buffalo and Allegheny Railroad, Buffalo and Mississippi Railroad, New York Central and Hudson River Railroad, West Shore Railroad, Rome, Watertown and Ogdensburg Railroad, Pennsylvania Division of the New York Central and Hudson River Railroad, Mohawk and Malone Railway, Wallkill Valley Railroad, Beech Creek Railroad, Lake Shore and Michigan Southern Railway, and all Pacific coast roads where transcontinental tariffs apply.

In respect of transcontinental traffic between the Atlantic and Pacific coast points, the clearing house also acts for the Boston and Albany Railroad and the Boston and Maine Railroad Company in the matter of accounts. The revenue on traffic between transcontinental tariff points to the Pacific coast and those within clearing-house territory east of the Niagara River via the Michigan Central Railroad is also taken care of in the clearing house, but the local traffic of the Michigan Central Railroad Company is accounted for to that company direct. (720, 721.)

Mr. Nicholson testifies that the Trunk Line Association of New York has jurisdiction over the east-bound traffic, while the Central Traffic Association of Chicago has similar functions with respect to west-bound traffic. The railway clearing house has nothing to do with these associations, except to get tariffs and instructions to check revenues of the roads. (725, 726.)

3. *Organization of clearing house.*—Mr. NICHOLSON says that there are 220 employees of the association, 198 of whom are clerks. The number of clerks employed on the

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actual clearing-house work is 158. The average clerical salary is \$44.94. An itemized statement of the business of the association accompanies Mr. Nicholson's testimony.

The general supervision of the affairs of the clearing house is handled by the manager and his chief clerk. The work is divided into 11 departments, each in charge of a head clerk, as follows, viz: (1) Accounting department, (2) apportionment department, (3) statistical department, (4) abstract department, (5) revision department, (6) claim department, (7) daily earnings department, (8) mailing department, (9) bindery, (10) stationery, (11) telegraph. (721-723)

A partial idea of the extent of the business, from the date of its organization to the present, can be gained from the following statistics to May 1, 1901:

Revenue of, cleared between membership roads	\$33, 997, 541. 91
Total number of tons forwarded and received from stations on all roads, divided into 60 commodity classes	9, 626, 994
Total number of waybills abstracted for trunk-line commissioners on traffic moving east bound from the Niagara frontier, showing number, date, station from and to, weight in pounds, extended and footed	1, 532, 986
(721-723.)	

4. *Method and advantages of railway accounting by the clearing house.*—Mr. NICHOLSON testifies that prior to the organization of the clearing house practically all business interchanged between the roads was settled for by the agents at junction points. The old system provided that each individual waybill should be divided and settled between the roads. Take, for example, a shipment from Boston to East St. Louis. The old junction-settlement plan would require the stopping of the waybill at Albany, East Buffalo, and Cleveland for junction settlement between the roads handling the shipment. With the clearing-house plan, the waybill would be reported as forwarded by the agent at Boston and as received by the agent at East St. Louis, direct to the clearing house, where the same would be accounted for to roads in interest on the basis of the known tariffs and division sheets. At the end of each month the proper officer would be notified by it of the condition of accounts affecting the other roads for all waybills handled in that month. (721.)

Mr. Nicholson declares that the clearing house has done more than any other agency to provide for the delivery of shipments to consignees on proper net charges. It does away with the multiplied settlements of the railroads, expedites the movements, minimizes the collection of overcharges, simplifies the accounting, and concentrates the preparation of statistics and other information for railroads in interest.

Its methods represent the most pronounced concentration of through freight accounting. The clearing house is a move in the direction of economy, and if made universal would be a very great benefit.

The Central Railway Clearing House has long since passed through the crucial period of its existence and has been made a success from the date of its inception.

The system of the clearing house is used as one railroad, whether there be 4 or 5 of them in the same territory. So far as the expense of the clerical force is concerned, the clearing house is an economy to the several companies. The incorporation of the passenger accounting into the clearing house has been talked of, but the witness does not see that anything would be gained by it, because the passenger business is all prepaid, while 94 per cent of the freight is collected at the point of destination. The clearing house merely has charge of accounts, and not of cars, except as they may affect distinct freight-line accounts. (721-724, 729-731.)

The earnings are furnished to the various departments every day and some statistics every day of certain classes of freight; anything, in fact, that the traffic manager may require. The earning ability of every single part of the road is thus made known. He does not know that the question has ever come up as to whether the books of the clearing house are open to the inspection of the Interstate Commerce Commission. The clearing house publishes no reports of any kind. Its figures are incorporated in the auditors' books of the various companies, and are published by them.

Mr. Nicholson says, further, that the clearing house has no financial function, all moneys collected by the agents being remitted to the treasurers of the respective roads direct. It is merely a branch of the auditing department. The establishment of the clearing house has had the effect of simplifying the work of auditing at the several headquarters of the road.

The witness states that the clearing-house system might enable each road in interest to arrive at the total amount of business done by its competitors, but that information is never allowed to be given to the competitive roads. The accounts of each road are kept to themselves. He does not think that there would be any difference in principle even if the railway systems in the clearing house were not controlled by the same interests. (730.)

Mr. Nicholson says, further, that Commissioner Knapp, chairman of the Interstate Commerce Commission; the late George R. Blanchard, trunk line commissioner, and other noted railway men have gone on record as favoring the railway clearing house. He quotes from a prominent railway traffic official:

"It is our experience that no arrangement of accounting between connecting roads is so satisfactory and produces such good results as that of through billing with audit settlement. The work of the clearing house in that connection has been marvelous." It is "one of the great modern improvements for the settlement of interchange traffic." (724.)

5. *European clearing houses.*—Mr. Nicholson testified that he is not aware of any clearing houses in Europe, excepting one in England and one in Ireland. The clearing house of England is very large, and requires a clerical force of thousands. He does not believe a universal clearing house for the American railways could be established, because of the immensity of the business. (728.)

J. Miscellaneous.—1. *Baltimore freight committee.*—Mr. GRISWOLD, general passenger agent of the Western Maryland Railroad, states that the Baltimore Freight Committee is composed of representatives of transportation lines which either terminate at Baltimore, or pass through there, or have representation there. He thinks each important railroad and steamboat line is represented. It has existed since January 1, 1898. The purpose is to discuss any questions that may be brought up and to secure uniformity of practice. It meets at the call of the chairman. It can not make a decision except by a unanimous vote. If any representative has no power to act on a given question without referring it to his traffic department, he must state the fact. Sometimes matters are held over until a vote is received by letter from a member so situated, or until a subsequent meeting. The committee has only a limited authority over rates, and none over differentials. Several of the representatives must obtain authority from their traffic officials before consenting to any action on rates. There are local freight committees at various other cities, one in Boston and, the witness thinks, one in New York. (611, 612.)

2. *Changes in freight rates.*—Mr. BACON, of the Michigan Alkali Company, complains of the fact that freight rates are changed at the pleasure of the railroads at any time, thus putting the manufacturers at sea in making their contracts. As an illustration, the freight rates on alkali products from Wyandotte, Mich., to Richmond, Va., were, during 1899, raised from 13 cents per hundred to 24 cents, then reduced to 16½ cents, and on January 1, 1900, reduced to 13 cents, while on January 23 the rate was again increased to 16½ cents. The witness believes that rates should be fixed by a central authority and retained for a year unchanged. (76.)

3. *Routing of shipments of freight.*—Mr. STREUMS says that the Southern Pacific and Santa Fe railroads have recently exercised the power of directing the route over which shipments of oranges shall go after leaving their roads. This was necessary to break up the practice of the shippers in demanding rebates from the various railroads connecting with transcontinental lines as a consideration for sending shipments over them. (764.)

4. *Uniform waybills.*—Mr. NICHOLSON testified that a movement has been started for uniform waybills and uniform freight and expense bills all over the United States. The Association of Accounting Officers has adopted a waybill, which is used by 160 railroads. (728-729.)

5. *Floating cotton.*—Mr. MARKHAM states that "floating cotton" is cotton shipped from a town where there is no compress and stopped in transit at a town where there is a compress, where it can be compressed, classified, and afterwards reloaded for its destination. By this practice cotton purchasers are enabled to ship full carloads, which is an advantage to the producer of from \$1 to \$3 per bale, and does away with the middleman at great cotton centers, such as Memphis and New Orleans. Formerly the cotton factor at New Orleans or Memphis advanced money to the producer for supplies and other material entering into the production of the crop. Interest, commissions, brokerage, insurance, and handling the cotton generally resulted in the producer's getting very little, if any, profit. The practice of floating cotton has done away with this. Very little cotton is bought on the Illinois Central for Southern mills, but where it is it is bought in the same way as for the New England mills. The effect of this system will gradually take cotton away from the larger centers, as the planters can get as good prices now at the small stations. (440.)

6. *Freight rates and cotton factories.*—Mr. DUNLAP, an officer of two small railroads in Georgia, says that special rates on cotton-factory machinery and materials have been made by the railroads in the South with a view to establishing them. On the witness's road two cotton factories have been built, and the manufacturers received a two-thirds rate on their materials. The rate on machinery from New York has been about 55 cents per 100 pounds. The witness thinks it was desirable to thus favor these factories, but he says that the railroads make less profit in hauling the manu-

factured cotton from the factories than they formerly did in hauling raw cotton to the seaports. (3, 4.)

7. *Northern and Southern tonnage on the Illinois Central compared.*—Mr. MARKHAM states that the tonnage on the Northern and Southern portions of the Illinois Central is very nearly equal, but even with that it necessitates a large number of empty cars because of the different freight movements at different seasons of the year. The Southern roads operate, as a rule, under a disadvantage as compared with the Northern roads, because they do not have an equal tonnage per mile, and therefore do not have the same earnings per mile of road. (440-441.)

Mr. Markham states that on the lines of the Illinois Central from Cairo north the ton miles to the miles of line are four times what they are south. (437.)

IV. DISCRIMINATIONS BETWEEN PERSONS.

A. Discussion as to existence and extent of practice.—1. *Existence and evils of practice affirmed.*—Professor RIPLEY says that personal discriminations in rates are common; that certain shippers are obtaining rates which are, perhaps, 35 to 40 per cent less than the published rates, while those who are shipping without the large volume which always lends inducement to cut rates are paying nearer the established rate. Whenever there is open rate cutting, it follows almost invariably that that leads to personal discrimination. The competition which rate cutting presupposes leads to a deeper cut for the large shipper or for the person who is shipping from a competitive point, whereas the rate remains more nearly at the established figure where the shipment is made from a local station or is made by a person who is shipping small amounts. Personal discrimination is sometimes made through the subterfuges of "hold overs," rebates, underclassification, and underbilling.

The maintenance of rates at an established figure is a very important matter for business men. It does not make so much difference to the manufacturer what freight rate he has to pay as it does to have freights uniform for him and for his competitors. He would rather pay a high rate and have it uniform than get a low rate when a competitor possibly gets a still lower one. (287, 289.)

Mr. GINSWOLD, general freight and passenger agent of the Western Maryland Railroad, says that theoretically there would be a temptation to cut west-bound rates in the fall, when much grain is moved East and many empty cars are going West. He does not think that this is important in practice. Rate cutting is more due to the anxiety of the solicitors to secure business; they do not consider much the fact that cars are going West empty. (622.)

Professor PARSONS states that from his investigations he believes the tendency of private monopolies is to make comparatively high rates and an unjust, partial, complex tariff instead of a simple, symmetrical, harmonious, well-adjusted system to develop the country, as would a system of rates under public management. Private monopoly would develop the country only so far as that development would be profitable to the monopoly itself. The rates at present are so adjusted as to benefit the large shipper as against the small one, whereas if any favor should be shown it should be shown to the small shipper. The true policy is to equalize opportunities, making rates alike to all under the same circumstances and conditions. (134, 135.)

Mr. TEISBERG, secretary of the State Railroad and Warehouse Commission of Minnesota, says that in the opinion of his commission the absolute amount of freight charges, within reasonable bounds, is of less importance than uniformity of charges to all patrons of the road. So far as business within the State is concerned, he believes that there is not much discrimination, because there seems to be no temptation to it. On business between Chicago and the Twin Cities there is a great deal of competition, and it is likely that rebates and various other schemes are often resorted to. (366.)

Mr. WILSON testified that large shippers generally have an advantage over smaller ones. Railway discriminations have destroyed fortunes and have driven people out of business. The public has no idea of the extent to which they still prevail. They now generally take the form of combinations of heavy shippers who have cars and equipment of their own, and the rental that they are able to command for the use of those cars is very great. This has the effect of driving out of business the firms who do not own cars. Railway discriminations are beyond legislation. Possibly consolidation may remove them. The apathy of the public is the great obstacle to the enforcement of the present laws, which are ample for the purpose. (695-697.)

Professor PARSONS states that the existence of personal discrimination is a powerful argument for Government ownership of railroads. He refers to the report of the Senate committee of 1885, which treated specifically of many of the evils of the railway systems at that time. He quotes from that report extensively and also from the testimony of witnesses who appeared before that committee, as well as from the reports of the Interstate Commerce Commission and from other sources, to show that dis-

criminations in railway rates in this country have existed for many years and are in existence to-day. The effect of these discriminations is to build up the strong at the expense of the weak. Another effect is to build up the cities at the expense of the rural communities. In many instances individual business has been built up at certain points which have been favored, while many other people less favored have been driven out. These reports have stated that the published freight rates were paid by scarcely any shippers, and that no one shipper knew of the rate another was receiving. Professor Parsons declares further that while the interstate-commerce law of 1887 has been passed for the amelioration of the evils growing out of these discriminations it has been found ineffective; that criminal prosecutions have been found ineffective to secure the enforcement of the law. (126-128.)

Mr. GRIFFITH, representing the Denver Chamber of Commerce, says that the practice of granting rebates and personal discriminations was formerly very prevalent in the West, but that he has known of none recently. He presumes that there has been an agreement among railroads to maintain rates. (855.)

Mr. MARKHAM, assistant traffic manager of the Illinois Central, thinks that consolidation of railroads will be advantageous in doing away with discriminations. Thirty years ago it was a very common thing to bill freight openly at one rate to one individual and at another rate to another individual at the same point. The shippers did not make any objections, because the party who received the lower rate shipped a much larger volume. Since that time there has been a radical change of thought, and a correspondingly radical change of action. The traffic managers want to be fair, but are not always able to resist propositions which appear to be fair from a business standpoint. (432, 433.)

2. *General denial of existence of practice.*—Mr. GRISWOLD, general freight and passenger agent of the Western Maryland Railroad, says that rate cutting seems to be decidedly less prevalent than several years ago. The latest instances that he has known of were near the close of the year 1900, and in these cases it was not possible to fix it in connection with all-rail lines. The reason of the diminution of cutting, he thinks, is the cooperation of the larger lines in maintaining rates and in carrying out the requirements of the interstate-commerce act. (614.)

Mr. Griswold thinks that the influence of rate cutting on traffic is less than is sometimes supposed. He thinks that variations of traffic are more likely to be due to other conditions. For instance, a steamship line at one port may make a specially attractive rate in order to fill a steamer. The railroad agents are notified of it, and they go around among the shippers and get a cargo. There is not necessarily any cutting of the railroad rates. (615.)

Mr. TALCOTT, assistant to the president of the Seaboard Air Line, says that so far as he knows freight rates are well maintained at the present time. There is business enough for all, and there is very little temptation to disturb rates. (627.)

Mr. MARKHAM, of the Illinois Central Railroad, says there is but little of what are known as special-commodity rates (designed to favor particular shippers), rebates, etc., in existence at this time. The practice was in vogue before the interstate-commerce law went into effect of giving special rates from large jobbing centers, but it has practically ceased. (437-439.)

Mr. GUILLAUD, of the Old Dominion Steamship Company, says that if the Interstate Commerce Commission had power to insure the maintenance of published tariff rates it would not benefit the steamship lines. Rates in the Southern territory are particularly well maintained. Secret rates and so on are almost unknown. (448.)

Mr. NICHOLSON testifies that the railways have made an organized attempt to get rid of secret rate cutting, and seem able to cope with the difficulty. The community of interest of railroads is the greatest factor in respect to maintaining rates. (728.)

Mr. GREENE, of the Audit Company of New York, thinks that combinations among railroads will reduce the evil of personal discriminations so that the question will no longer be a burning one. He believes also that the penalty for discriminations should be placed upon the railroad corporation rather than its officers individually. (487.)

Mr. WOODLOCK, railroad editor of the Wall Street Journal, declares that the payment of rebates and the making of discriminations is nearly a dead practice. Rates are uniform to shippers to a degree greater than ever before. (464.)

Mr. ANDERSON, secretary of the Chamber of Commerce of Pittsburg, says that some 3 years ago the chamber, believing that the railroads were discriminating against the city, organized a transportation board and employed one of the most competent men they could get to take charge of it. That bureau was maintained 2 years, and was discontinued as a department of the chamber of commerce simply because nobody could be found who had any complaints to make against the transportation interests. Mr. Anderson knew in past years of the existence of discriminations, and he had supposed that they still existed; but they seem to have disappeared. (639, 640.)

Mr. DUNLAP, manager of two small railroads in Georgia, does not think that there

are any discriminations of consequence as between different shippers in the Southern States. He says in particular that his lines do not cut rates. (2, 4.)

Mr. BACON, of the Michigan Alkali Company, does not believe that there are any discriminations between persons in the shipment of alkali products. His own company gets the open rate. The railroads solicit business, but never offer to reduce the rate, and the witness believes that his three or four competitors get no advantage in rates. (85.)

3. *New England.*—WILLIAM Z. RIPLEY, professor of economics in the Massachusetts Institute of Technology, says that rates are being cut in New England anywhere from 30 to 40 per cent on west-bound traffic. He refers to a case where a large shipper is sending first-class freight from Boston to Seattle for 95 cents per hundred pounds, while the published rate is \$1.25. The reason for the extended cutting now going on is that the large amount of exports and the large amount of traffic going east have turned a great many empty cars upon the seaboard and there is great competition among the roads for filling those cars to the west. Ordinarily Canadian roads are allowed by the American roads a differential and given an advantage in freight rates to Chicago ranging anywhere from 10 cents up upon a hundred pounds. American trunk lines have now begun to cut under the differential, and traffic which for a great many years has been going over the Canadian lines is now being diverted over some of the main trunk lines. This rate cutting is not due to the desire of the eastern trunk lines to cut rates. It is forced upon them by the situation. The far western connections of these lines apparently are desirous of securing business which shall be diverted to their lines by the eastern trunk lines, and they notify their eastern connections that any business diverted to them will be taken at a considerable cut. The eastern trunk lines, therefore, must either take business and transfer it to their western connections at a reduction or allow it to go over some other competing trunk line. Some roads would be glad to do away with the rate cutting and would welcome any amendment to the interstate-commerce law which would enable them to maintain rates. (286-290.)

Professor PARSONS refers to the discriminations prevailing on the Boston and Albany road previous to its lease by the New York Central, and also subsequent to that time, and from a report of the Massachusetts railroad commission, which was admittedly made by some officer of the Boston and Albany Railway Company (the railroad commission not having any knowledge of the facts or any power to ascertain them), it appeared that the reductions made in recent years from the published freight rates were in many instances as high as 73 per cent, and in nearly all instances as much as 10 per cent; that shippers did not dare to complain, even when invited to do so by the Massachusetts railway commission, because of the fear that they would receive worse treatment at the hands of the company. The report of the railroad commission on this subject is quoted in full.

Professor PARSONS declares that in his opinion the discriminations made by the Boston and Maine Railroad, as well as by the New York, New Haven and Hartford road, were sufficient to create a monopoly in favor of individual shippers; that a monopoly is any advantage which tends to shut out competition. He gives many instances of particular discriminations in freight rates, and argues that in every one of those instances the party in whose favor the discrimination was made had been given a sufficient benefit to enable him to build up a business, while the less favored competitor was compelled to go out of business. (126-132.)

Professor PARSONS refers to discriminations by the Fitchburg Railroad, the Boston and Albany, and the New York, New Haven and Hartford, as shown by recent investigations. The discriminations practiced by these several roads related to local traffic only. Those by the New York, New Haven and Hartford were shown by Mr. Cowles to be even worse than those of the Boston and Albany. The discriminations were not always a matter of personal favoritism, but were very often forced upon the roads by the large shippers, who threatened to take the trade to another road. Sometimes, however, the purpose of discrimination is to let the favored persons realize a large profit, while at other times the managers of the roads themselves share in the profit, as was originally the case in the building up of the Standard Oil monopoly.

Professor PARSONS states that in the investigation of the Boston and Albany case it had been found that discriminations had been resorted to by the road to build up manufactories on the line of the road by giving special rates. The Massachusetts railroad commission in 1894 disclosed the fact that the average freight rate on New England roads was about double the average freight rate in the Middle States or in the Middle West and nearly double the average freight rate for the whole United States, and the commission argued, therefore, that the result of these personal discriminations had been unfavorable to New England generally, and especially to Boston. The leasing of the Boston and Albany by the New York Central has even

a greater tendency in that direction, because the New York Central is interested in the building up of New York City. (132, 133.)

4. *Pacific coast.*—Mr. WHEELER, of the San Francisco Board of Trade, says that there is no occasion for making rebates during a rate war, but that when the war ceases there is a tendency to grant such rebates and secret discriminations. The witness does not believe there is a single shipper on the Pacific coast who has not, at one time or another, received these discriminating rates. At the same time the thinking shippers have made every effort to prevent them. The only reason why a good merchant seeks a rebate is in order to put himself on a level with his competitor whom he knows gets one.

The Pacific coast railroads defended their practice of making secret rebates formerly on the ground that the Canadian Pacific insisted upon being allowed to make rates 10 per cent lower than those on the direct routes, in view of the disadvantages of the roundabout line and of the necessity of transferring goods from rail to water in order to reach San Francisco. The American railroads held that the Canadian Pacific was not entitled to the business and that they would not allow it to get the business, so that the rates were cut secretly in order to overcome this 10 per cent differential. The hardware merchants of San Francisco got together and agreed, solely for the purpose of doing away with secret rebates, that they would sacrifice the advantage of this 10 per cent differential and not ship over the Canadian Pacific line at all. The result is that that road is now out of business in San Francisco territory, which no more belongs to it than Victoria and Vancouver belong to the Southern Pacific. (748.)

Mr. STUBBS, of the Southern Pacific Company, says that the secret discriminations which it is claimed were formerly made in order to meet the Canadian Pacific differential no longer have any motive since that differential has been abolished. He supposes that there may have been some rate cutting by the lines east of the Missouri River, though he was not in a position to know. He states definitely that there is now no rate cutting by the Southern Pacific Company. (762.)

5. *Standard Oil Company.*—Professor PARSONS declares that advantages in rates are given the Standard Oil Company by railways in comparison with the rates given to other oil-refining companies. He states that from Cleveland, Ohio, to Boston the rate on oil was 24 cents; but from Cleveland—the headquarters of what was known as the Western refining interests, which was opposed to the Standard Oil monopoly—to any other point in New England the rate was the Boston rate plus the local rate from Boston to the point of shipment. The Standard Oil Company had enormous oil tanks near Boston and shipped its oil there by boat, and thus was able to drive the Western refining interests practically out of the New England field by reason of the railway discriminations.

He further states that the oil tanks of the Standard Oil Company, which ordinarily weigh from 35,000 to 50,000 pounds, were billed through by the New England roads at 24,000 pounds and were paid for on that basis. The railways attributed these discrepancies to error; but it was very significant that all the errors were in favor of the trust and none against it. This witness says, further, that the Standard Oil Company had a large refinery near Chicago, and that the rate on oil from Chicago to New Orleans was made 25 per cent lower than from Cleveland to New Orleans, thus driving the Cleveland refiners out of the New Orleans field. (126, 129.)

B. Methods of discrimination.—1. *Generally.*—Professor RIPLEY says that rate cutting is sometimes done by means of the subterfuge of a "hold over." Rates are cut and the explanation made that the road has a long-time contract with the shipper to whom the cut rates are given. Rate cutting is sometimes accomplished through the giving of rebates. A Western road, for instance, may deposit an amount of money in a Boston bank to the credit of a certain New England freight agent. The agent is authorized to draw upon that for cash, which he pays out in rebates, the shipper of course paying by check for the full amount of the established rate, that being a matter of record. Again, rate cutting may be done through the underclassification of freight, i. e., freight is classified at a rate lower than that at which it should be classified. The process of underbilling is another means by which rates are cut. The shipment is made at a rate for a long through haul. The freight is then taken off at an intermediate point to which the local rate would be considerably higher than its proportion of a through rate.

The existence of rate cutting is very widespread. The only way to stop it is to do away with competition. (286-290.)

2. *Misclassification of goods—Underbilling* (see, also, *Classification Inspectors*, p. LXXXVI).—Mr. GRISWOLD, general freight and passenger agent of the Western Maryland Railroad, says that the agents and receiving clerks of his road are directed to watch closely and see that articles shipped conform to the invoice furnished by the

shippers. In practice, however, the road is largely dependent on the good faith of the shippers. It is not possible to know without examination what the hidden contents of the cases are. The Baltimore and Ohio and the Pennsylvania have an inspection bureau at Baltimore, but it has not been extended to the other lines there. Mr. Griewold does not think that a Government inspection would be superior to one established by the railroads. (623.)

Professor RIPLEY says that in many respects the roads are at the mercy of the shippers. A shipper may underclassify his goods and get second or third class rates on goods which ought to come under a higher classification. The shipping agent can never be sure from his personal knowledge that goods are properly classified. (288.)

Mr. McGOVERN, of the Southern classification committee, testifies that by underbilling is meant the under reporting of weight or false description of goods for the purpose of getting a reduced rate, and he says it is one of the most troublesome things with which the transportation companies have to deal. It is not only because companies lose revenue by underbilling, but it prevents the honest shipper from doing business or drives him into the same unfair practices himself. Several examples were given of the unjust practice of underbilling. In one of the Southern States a large jobbing house was found to be underbilling to the extent of from \$11 to \$50 a day. The worst feature of this particular case was that in the same city another house in the same line of business did not underbill, and lost a considerable amount of trade because of its honesty. Whisky and vinegar are sometimes billed as molasses, because the rates on molasses are lower than they are on whisky and vinegar. There seems to be systematic underbilling going on all the time. Sometimes a large piece of machinery is taken apart and its component parts shipped as rough castings merely to get a lower freight classification.

Only a very small per cent of the total amount of underbilling is connived at by the railroads. In many cases it is started by the soliciting agent of the road, perhaps, who is greedy for the business and tells the shipper how he can avoid the classifications by the process of underbilling; but this is in a very small percentage of the cases. The practice seems to be increasing rather than diminishing.

The classification committee has no machinery by which it can protect the roads from the evils of underbilling, but the traffic associations have taken measures to prevent it whenever they can, and have agents whose business it is to ferret out cases of this sort. Any single road would find it difficult to enforce the classification. It should be from a general or joint agency of all the roads in the classification territory. The witness does not think the Interstate Commerce Commission could be of any efficient service in preventing underbilling. The railroads are perfectly competent to take care of themselves on this question if they want to do so, and if they do not the commission would find great difficulty in doing it. (672-674.)

3. *Private cars*.—Mr. McGOVERN testifies that one of the principal ways in which discrimination is now practiced is by private companies owning their own cars and carrying goods at lower rates than the railroad companies do. This is often done by the railroads allowing the private company a greater rate per mile for wheelage than is paid others, sometimes as much as 1 cent per mile per car being paid to the owner of the car. (674.)

4. *Cartage*.—Mr. NICHOLSON, of the Central Railway Clearing House, testifies that what is known as cartage in railway parlance is brought about by a line, in order to secure business, agreeing to cart goods without any charge—in other words, to include cartage in the rate. The Central Railway Clearing House would not know anything about the existence of this practice. He thinks there is not as much of this sort of business as formerly, because the bills now ordinarily specify a certain amount for cartage. (726.)

5. *Shrinkage of through rates*.—Mr. NICHOLSON testifies that it would be possible where two lines are interchanging traffic for the Eastern trunk line to accept the regular published tariff rate and at the same time enter into an agreement that the Western line would shrink its percentage of rate. That would not go into the clearing house. The waybills would be made to read correctly, and any shrinkage would be taken care of in some other way. He does not know of any of that at the present time. (726.)

C. Discriminations as affected by legislation.—Professor PARSONS does not believe it possible to remove discriminations by legislation of a regulative character, because the railway managers could give preference by through car service, car mileage allowances, elevator commissions, and subsidies of various kinds, or by a private arrangement in the shape of direct bribery where no record of the transaction is kept. Discriminations can not possibly be wiped out so long as the roads are in private hands, and the only way to do away with them is to remove the cause—antagonism of interest between the managers of the road and the public by governmental ownership. In Germany, New Zealand, and Australia personal discrimina-

tions were entirely abolished after the roads were taken over by the government, and in not one of the 30 countries of the world owning and operating their own railroads have any complaints ever been made with reference to personal discrimination. (133, 134.)

Mr. McGOVERN believes there is adequate legislation on this subject at present, and possibly it would be better if the penalty were made less severe. The penalty now is fine and imprisonment. If the imprisonment feature were eliminated it might be better, as it is difficult to get a railroad agent or a shipper to testify against another when the penalty for the infraction of the law is imprisonment. The fine should be made cumulative if it could be shown that the violation of the law is deliberate and intentional and has been followed for any length of time. (674.)

V. DISCRIMINATION BETWEEN PLACES.

A. General principles—Discussion (see also *Differential rates*, p. xcii).—

1. *Practice as to long and short hauls.*—Professor RIPLEY presents a diagram for the purpose of illustrating the practical working of the long and short haul clause in the interstate commerce act, which permits rates for a longer haul to be lower than those for a shorter haul over the same road where conditions are dissimilar. Often over a long stretch of noncompetitive territory situated between two competitive points rates will not vary at all. This is sometimes true of a stretch of 200 or 300 miles. When a competitive point is reached rates take a sudden drop. Beyond the competitive point, in a noncompetitive field, the rates rise suddenly, and all that the traffic will bear in the way of rates is put on until the next competitive point is reached. Frequently at these competitive points a secret rate, less than the published rate, is given. The result is that these competitive points have a great advantage over places where there is no competition. (296, 297.)

Mr. GRISWOLD, general freight and passenger agent of the Western Maryland Railroad, is aware of the existence of higher charges for the shorter than for the longer haul in some parts of the South, on account of water competition. He does not know of any such practices in any territory north of Virginia. His own road does not charge more for an intermediate than for a terminal point in any case, either on interstate or intrastate business. He would not consider it good policy. It is a disadvantage to the people on the line of the road and an inconvenience to the railroad company to have different methods of making rates for interstate business and for intrastate business in the same territory. Moreover, it would injure the road in injuring the communities served by it. Whatever harms any community or any set of shippers tends to injure the road; and this is a universal principle. (616.)

Mr. Griswold, however, suspects that higher charges for shorter hauls than for longer do exist in some cases in the North, New York and Chicago, but he does not think it is intentional. In meeting certain conditions other cases are sometimes overlooked which ought to have been met at the same time. (626.)

2. *Rights of localities.*—Mr. WHEELER, especially in connection with his discussion of the Pacific coast rate situation, points out that the railroads have enormous power to promote one section of the country at the expense of another. While it is claimed that the interests of the railroads and of the shippers are the same, it is nevertheless true that the interests of shippers in different sections are often opposed to one another and the railroads may side with one or the other. This witness thinks each section or city should be allowed the benefit of its own advantage of situation. (745.)

Mr. WILSON, of the Cincinnati chamber of commerce, declares that there has been too much paternalism practiced by the railroads. The railroads have no right to assume paternal functions over any city, locality, or individual. This policy has benefited the Eastern cities at the expense of the West. Nevertheless the Northwest and immediate North are gaining in that business all the time in spite of the discriminations in favor of the Northeast. (695.)

3. *Power of railroads.*—Professor RIPLEY says that the railroad has the life and death of manufacturers in its hands. He remembers hearing of an attempt which was made to establish a paper pulp factory at Denver. The men back of the scheme were notified by one of the roads that if they established a pulp mill at Denver which would prevent large shipments of freight which had formerly come from Wisconsin, the road would kill the business at any cost. Whether this mill was subsequently established or not Mr. Ripley does not know. He believes that the power of the roads is equally great over the miner of coal and ore and the producers of other commodities. (287, 288.)

Mr. McGOVERN, of the Southern Classification Committee, declares that railway rates have less to do with the building up of communities than people generally imagine. Of course, if the railroads should set out with the deliberate intention to kill one town with freight rates and to build up another by a sort of hothouse process, they might be able to do it as against local wealth and energy; but as a general

proposition the growth of towns does not depend very largely upon rates, but more upon the enterprise and push of the citizens of the town. Many instances were given and comparisons made where cities having better railway facilities and lower rates had not grown so rapidly as cities less favorably situated. (686.)

4. *Discussion as to justification of discrimination between small and large towns.*—Professor RIPLEY says that the question involved in discrimination as to localities is whether a given tonnage shall come from 20 sources or whether it shall come from 1,000 sources; whether there shall be a few large industries or a great number of small ones. The effect of local discrimination is to concentrate business and population in a few centers. Business enterprises are abandoned in a place discriminated against, not because it has become more expensive to manufacture at that particular place than formerly, but because it is much cheaper to carry on business in some other place on account of the better railroad facilities offered. It is at places in favor of which railroad discriminations are made that the plants of the great industrial combinations are located. The doing away with local discriminations would lead to a much more widespread distribution of industries in the small towns of the country with less of the aggregation of industries in particular centers which get the benefit of competitive rates. (295-299.)

Mr. MARKHAM, of the Illinois Central, states that the statistics given (above, p. LXXIV) in respect to the reduction of railway rates refer almost wholly to through rates, but that there has been also a reduction in local rates, though not correspondingly so great. The rates on cotton have been revised two or three times in the last 20 years, and there were reductions in merchandise in the Southern States as well as in the Northern States traversed by the Illinois Central. The excessive reduction on through rates does not entail a burden on the railroads, because if the roads did not take this competitive business at the low rates they would lose so much revenue, which would have to be made up on the traffic from noncompetitive points. If we divide the whole expense of the railroad up into three parts, the roads could not control; the question to be determined is whether it will pay "movement expense." The other two-thirds expense goes on whether that business is taken or not, and any amount in excess of this "movement expense" that can be obtained is just so much more that can be applied toward meeting the fixed two-thirds expense, and thereby enables the road to make the burden that much lighter for the local or noncompetitive traffic. The movement of this competitive freight will not always incur even the entire expense embraced in the several items comprising the "movement expense;" one-third of it is interest on stock and bonds; another one-third the fixed expense of the maintenance of stations and station grounds, salaries of the general officers and operatives, which it is necessary to retain whether the competitive business is taken or not, these two items being denominated "fixed expense." "Movement expense," making up the other third, consists of the wages of engineers, firemen, conductors, brakemen, repairs, fuel, oil, waste, water, and wear and tear of rails and track. As competitive traffic is offered at certain specified rates made by influences which the railway can not control, the "movement expense" of such traffic might be decreased considerably, so that the entire additional expense of the movement of the competitive freight would in many cases be inappreciable. This low expense may be covered by very low rates without injury to any community or locality, and yet the rates which the railroad must charge upon other traffic would necessarily be higher in order that the entire cost might be covered and the property safely and successfully operated.

This apparent local discrimination helps the local point as well as the competitive point, that the railroad by taking the goods at the competitive point at low rates makes a little profit, which is just that much added to its receipts, and is just that much advantage to the local points. The railroad can add to its receipts more than to its expenses by taking such competitive traffic.

A community of interest in some way might prove beneficial in preventing the gradual decrease in rates at competitive points, but the things that have operated largely to reduce those rates have been the rivalry of towns situated on different roads and the necessities of commercial communities. Railroads that serve particular communities or trade centers can not resist the demand for putting those people on a plane where they will be enabled to do business and build up the railroads as well as the towns. The witness does not think there is any community of interest strong enough to prevent the recognition of trade centers. (436-438.)

Mr. TALCOTT, assistant to the president of the Seaboard Air Line, says that to charge more for a shorter than for a longer haul is a discrimination, though he will not say that it is necessarily an unjust discrimination. When he was in charge of the making of rates he did away with it on the ground that the additional revenue which might be got by such discriminations was not enough to justify his company in subjecting itself to constant attacks for discrimination, and to the constant necessity of defending such rates as just and reasonable. He regards as reasonable the clause

of the interstate-commerce act which prohibits (ordinarily) a higher charge for a shorter haul, provided it does not exclude competition by forcing a reduction of rates to intermediate points that the railroad can not submit to. He would not approve an absolutely ironclad rule. He would not think it always just to forbid the meeting of competition, even if it does make a discrimination against intermediate points. But an elastic prohibition, with allowances for special cases, he considers justifiable. (630-632.)

Mr. ANDERSON, secretary of the chamber of commerce of Pittsburg, does not think that unjust discriminations between places can long be maintained. If one city or district is especially favored, the railroads that serve other districts will soon be compelled to grant them the same concessions. (638.)

It is true that complaints existed up to about the time of Mr. Anderson's testimony of discriminations against Pittsburg and in favor of Buffalo, in that both Pittsburg and Buffalo, as terminal points, had the same rate from the West, though the distance to Buffalo is greater. This gave Buffalo an advantage over Pittsburg in the large distributing territory of which it was the center, and also in shipments to New York, since, according to Mr. Anderson, goods can be sent to New York cheaper from Buffalo than from Pittsburg. (639, 640, 647.)

Mr. GRISWOLD, general freight and passenger agent of the Western Maryland Railroad, can conceive of its being the interest of a road to build up a town, but not at the expense of other towns on its line. His road might put in a siding to encourage a new factory, or might make a special rate on the building material for it. It would not give such an establishment any rates on its product which similar establishments on the line at other points did not get; that would be direct discrimination, and Mr. Griswold does not know of any such practice.

5. *Long and short haul clause in State laws.*—Mr. TALCOTT, assistant to the president of the Seaboard Air Line, thinks that the principle of the long and short haul clause has been generally enforced by the State commissions within the Southern States; not, however, in Virginia. (631.)

Mr. TRENBURG, secretary of the State railroad and warehouse commission of Minnesota, says that the railroad law of his State contains a long and short haul clause similar to that of the interstate-commerce law. The State railroad and warehouse commission has an authority to suspend this clause, similar to that of the Interstate Commerce Commission. Two applications for suspension have been made, and both have been refused. (365.)

B. Long and short haul discriminations in the South—Basing-point system.—1. *Existence and criticism of practice.*—Mr. WILSON, of the Cincinnati Board of Trade, declares that the prosperity of the Southern States has been largely depressed by ignoring the "long and short haul" principle. The great trunk systems of the country rarely have any trouble over this clause. The southern territory is where this difficulty obtains, and it all centers around the idea that there must be low rates to meet water competition at certain points, and that to these must be added local rates back to the interior. The interior is thus checked by high rates. Advantage is given to certain towns, whether they have commercial merit or not, that merely happen to be situated on a river, creek, or canal. This policy has been very injurious to the South. When the Louisville and Nashville Railway opened business after the war, water competition was effective from Cincinnati and Louisville to Nashville, but now it is a very rare thing that a boat loads with freight from Cincinnati to Nashville, and yet the rates made from Cincinnati to Nashville are based on old river competition. (696-697.)

Mr. Wilson testified that the "basing-point system" is the successor of the "long and short haul" system of making rates. Beginning with the theory that rates must be reduced where there is competition between water and rail, the railways extend that principle to railway crossings. The effects are evil to the roads and to the people, often preventing the establishment of industries at more eligible points upon a railroad than at the crossings. The Pennsylvania Railroad has done away with this system, with the result that industries are scattered from one end of its line to the other. Southern roads, especially the Louisville and Nashville, have operated on the discriminating principle very largely. The Cincinnati Southern never operated on it, and has never had any conflict with the "long and short haul" clause. (697.)

Mr. DAVANT, commissioner of the Memphis Freight Bureau, an organization of merchants and manufacturers, says that the bureau has accomplished a good deal in securing more just freight rates for Memphis and its vicinity. The bureau does not believe, however, that discriminations between long and short hauls should be altogether abolished. It favors the doing away, in whole or in part, of discriminations against North and South Carolina mill points in shipments from the West as compared with New England and coast points, but in shipments from New York and

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the East to St. Louis and Memphis it finds Memphis at a disadvantage because the railroads claim that they can not reduce the through rates to Memphis without reducing and disorganizing all of their local rates. The conditions of transportation at different points are so different that it is hard to establish any just rule in regard to long and short hauls. The witness admits that discriminations against intermediate towns and in favor of competitive points tend to prevent the establishment of factories and industries at intermediate points. He says it is uncertain whether the gain in business to the railroads by fostering the establishment of industries at intermediate points would equal the loss of business at the competitive points by maintaining higher rates there. (5, 8.)

Mr. TALCOTT, assistant to the president of the Seaboard Air Line, says that the long and short haul clause of the interstate-commerce act has never been fully observed in the Southern States. For instance, rates from Chicago to Atlanta are higher than the rates from Chicago to Savannah or Charleston, though the freight goes through Atlanta to reach those points. These conditions are caused by actual competition. Mr. Talcott believes, however, that all the roads have tried to carry out the law. They have claimed that they can not carry it out in every respect. (630, 632.)

Mr. DUNLAP, an officer of the Gainesville, Jefferson and Southern Railroad and of the Tallulah Falls Railway, both short lines, says that the business of those lines is mostly local, and that discriminations between long and short hauls are of little importance upon them. There are three or four common points where these roads have competition, and the rate to them is a little lower than to the intermediate points. (2.)

2. *General defense.*—Mr. MCGOVERN, of the Southern Classification Committee, testifies that the principal difference between the rate system in the South and in the other two sections of the country is that in the South there are lower rates to what are called basing or competitive points than to the small local stations. These rates were first established in competition with water transportation, and the basing-point system grew out of this principle. Afterwards new rail lines were built and there was competition between all-rail carriers and between markets that forced the rates down to large towns where there was no water competition at all. The roads have not believed that they ought to be called on to put down rates equally to every intermediate point where competition does not exist. The only difference in conditions as between Georgia and Ohio is that in Ohio there had been a flat fourth-section basis before the interstate-commerce law was passed. In the South competition exists not only with the sensible traffic officials, but with others who are not so sensible, but who are still doing what they believe to be for the best interests of their roads. Competition is anything that compels the carrier to reduce a rate, and one competing road would be as much affected by it as another. There is not so much of a tendency to establish basing points arbitrarily in the South as there formerly was. They were established and are maintained by reason of competition and competitive rates. (678-680.)

Mr. TALCOTT, assistant to the president of the Seaboard Air Line, says that when he was directly connected with rate making in the Southern States the basing-point system, in the sense in which the phrase is now used, had not been developed. The system on Western business then was that the roads north of the Ohio River made the same rate from any given point, as Chicago, to all points on the river, and the roads south of the river made the same rate from all points on the river to each interior point. The combination of these two rates to and from the river made the through rate. As far as practicable the most important distributing points were given the same rate, to enable them to develop equally. The rates to other points were generally made by adding to the rates to these distributing points the local tariff of the road over which the freight went. This was a recognition of the general principle which is used in the present basing-point system. (629, 630.)

Mr. MARKHAM states that what is known as the "basing point system" of the Southern States is simply that when a town has grown to any importance, so as to have a wholesale business, then it gets rates which are related to rates that are made to other jobbing centers. The system would start from a point like Atlanta or New Orleans and gradually extend to other towns that were of sufficient commercial importance to justify the receipt of as good rates as the larger cities. The rates are not always the same to the different points, but their relations to each other are such as to enable each place to trade in the outlying territory that might be claimed as tributary to it. The determination of what should be a basing point is somewhat arbitrary and involves an infraction of, or an exemption from, the long and short haul clause of the Interstate Commerce law. The rates from New York and Chicago to the same territory are related. A rate from one place could not be changed without a demand being made for a reduction in the other rate. The rates were very early fixed from Baltimore, Cincinnati, Louisville, and St. Louis to the southern ter-

ritory near the Mississippi, and changes have been made from time to time in the rates so as to equalize them from the various points. (439.)

Mr. Markham states further that the competition of the rivers made the rail rates in the first instance. The differentials established at that time obtain to a large extent now. Many commercial conditions prevailing may necessitate changes of rate. In a meeting of the traffic managers of the various competing railway lines various influences arise, and it often requires a long time to establish certain fixed differentials between the various shipping places and a common trade center, each manager being particularly anxious to secure the trade for his own line and threatening to make other special rates if not given equal treatment. The defense set up by the Southern railways before the Interstate Commerce Commission and the United States courts, that the low rates granted to the important Southern cities was because of the water competition, is a true one. It may have been true in the first instance, even though no boats were plying on the rivers reaching those cities, because if the railroads were to put up the rates a river traffic would soon be created. The railroads would protect themselves from the river competition as they would from a rival railroad. Even when water competition is killed by such low rates the railroads seldom advance rates afterwards. They could not easily be advanced, because the merchants and manufacturers have adjusted their prices and their business operations to them, and the change would cause a general disturbance of the fixed conditions. Moreover, a traffic officer, from long association and working traffic under those rates, can not readily disassociate his mind of the idea that the business is properly conducted, and that any other rates would be improper. (434-435.)

Mr. Markham denies the charge that the railroads lose money by hauling freight at very low rates on through traffic from competitive points and made up those losses by increasing their local rates. He said the railroads at the interior points have reasonable rates which will enable those towns and communities to do business; that the railroads find the situation at the river points such that they can get traffic only by making a certain very low rate; that while that rate may necessarily be very low, only a fractional part of what it is at interior points, it does not necessarily follow that the road is losing money on that traffic, because the rate will enable the road to add to its receipts more than to its expenses. (436-438.)

Mr. Markham states that if his railroad hauled all freight at an average rate they would get just as much money as they do now; that the railroads would be very glad to get the average rate for a car of merchandise. The rates to Southern points remote from the rivers are higher than the rates to points on the rivers, because the roads could not be successfully operated, particularly the Southern roads, if all rates were reduced to the basis of the river rates. (435.)

3. *Effect of competition of Mississippi River* (see also p. CLXXXVII).—Mr. Wilson testifies that water transportation down the Ohio and Mississippi rivers to New Orleans and other river points is recognized very much to the disturbance of trade relations at all river points—the rates are lower than to the interior points. The rates to Atlanta, for instance, are much higher than the rates to New Orleans and Mobile. Selma, where the Cincinnati rates are 104 per cent of the New York rate as against 55 per cent of the distance, is excluded, because there is no water competition by way of Mobile from New York. (689.)

Mr. MARKHAM refers particularly to the rates on the Mississippi River from Memphis down, and compares them with the railroad rates in the same territory, saying that the rates from competitive points to New Orleans are much lower than from noncompetitive points, both by rail and by water. A railroad rate from a point near the river would be the river rate plus the rate from the river to the interior point. If it were not so near the river the railroads would be justified in charging a higher rate. The last report of the Interstate Commerce Commission showed that 17 per cent of the railway mileage of the United States was south of the Ohio and Potomac rivers, but that the earnings of those roads were only 12.5 per cent and their dividends only 6 per cent of those of all the railroads of the United States. Replying to a question as to whether at competitive points on the river the railroad and not the steamboat fixed the rate, he said that he had no doubt that eventually it must be so. While the steamboat rate on cotton from Memphis to New Orleans is 17 cents a hundred, farther down, where there was no competition, the rate might be as much as 20 cents. (436-437.)

4. *Steamboats on the small rivers of the South*.—Mr. MARKHAM states that he does not know of any lines of steamboats regularly plying on the smaller rivers on the Atlantic and Gulf coasts. The Tennessee and Cumberland have boats running, and the Arkansas and Red rivers also, and the witness thinks there are lines running from Mobile up the Alabama River as far as Montgomery. He has also seen a statement that boats are running up the Tennessee River as far as Chattanooga, but he thinks

this is an innovation. The statement made in the public press that by shipping by water from Chattanooga to Paducah there was a saving of 30 to 40 per cent on through shipments to New York and Philadelphia is hardly correct. The saving would not be that much, because there are boats up to Nashville, and the rate to Chattanooga would be the Nashville boat rate, plus the rate from Nashville to Chattanooga, which would not be as great as if there was only rail competition to Chattanooga all the way. Probably only in some special commodities, such as grain, flour, and other articles, would any saving be effected. (435, 439, 440.)

Mr. TALCOTT, assistant to the president of the Seaboard Air Line, says that some years ago, when he had direct knowledge of conditions, there were regular lines of steamboats on some of the smaller Southern rivers, whose competition the railroads had to recognize. The boats on the Savannah River were at one time subsidized by the railroads in the Southern Railway and Steamship Association to secure the maintenance of rates. (628, 629.)

5. *Montgomery and Mobile rates.*—Mr. MCGOVERN says that the rate from the North to Mobile was made the same as the rate to New Orleans, which was first fixed by the competition of the river. This witness scarcely thinks it justifiable to make these rates the same. Now, when goods come down from the North the direct rate to Montgomery would be, in some instances, less than the Mobile rate plus the local rate from Mobile to Montgomery. Goods under such circumstances are shipped through to Mobile and back. The reason the goods are not stopped at Montgomery in the first instance is that it was found that the agents were gradually hunting for freight combinations, and consequently the policy was adopted to put the Montgomery goods into the Mobile shipment and let the Montgomery man make his arrangements to have them reshipped. (681.)

C. Alleged discriminations between rates from East and West to Southern States.—1. *Cincinnati: Its interest in Southern trade.*—Mr. EDWARD P. WILSON, secretary of various Ohio commercial organizations, testifies that in early days Cincinnati was one of the principal points of supply and distribution to the South, the goods being carried on steamers and distributed by river and bayon throughout the South. She thus gained a prestige in Southern business, and for three-quarters of a century has been developing that business, though not to the extent she formerly did. The construction of railway lines into the South and the improved service in rail transportation have given better facilities to rival cities than Cincinnati now possesses. The Louisville and Nashville Railroad was the first important line built from the Ohio River into the South, and as it made its connections through Louisville, that city was brought into prominence as a rival distributing center to Cincinnati. (687.)

2. *Alleged exclusion of Western manufacturers from Southern trade.*—Mr. WILSON testifies that about 1879 competition of the railroads for Southern business was very brisk, both from the Eastern seaboard cities and from Western centers, like Chicago, Cincinnati, St. Louis, and Louisville. The result was that the roads made an agreement to divide the business and maintain rates, and to give to the Eastern cities practical control of the trade in manufactured articles, which had their origin at that time on the Eastern seaboard, and to give to the roads leading south from the Ohio River the trade in what were then known as the peculiar products of the West—packing-house products, grain and its products—both direct and indirect. The result of this was to make rates of freight from the Ohio River points what the roads pleased on the heavy products and to maintain high rates on the miscellaneous manufactured products, so that competition could not be had with the Eastern cities on those products. Since 1879 conditions have changed, manufactures have moved westward and the West demands entrance to the South on equal terms with the East for manufactured products. This has been denied by the railroads, but certain spasmodic instances of relief have been afforded. Another advantage which the Eastern cities secured as against the Western cities resulted from the rates made by the coastwise steamers from the North to the Southern seaports. Owing to the favor shown the Eastern cities in respect of manufactured articles for Southern trade, the Western manufacturers in some instances have found it necessary to establish and maintain warehouses in New York and Boston, from which their manufactured products may be distributed to the South. (687–688.)

Mr. Wilson gave specific instances of railway discriminations against Western cities for Southern trade as compared with the Eastern cities. Cincinnati is 475 miles from Atlanta and New York is 876 miles from Atlanta by rail. While the distance from Cincinnati is 54 per cent of the distance from New York, the first, second, and third class rates from Cincinnati to Atlanta are 94 per cent of the New York rates. In one of the lower classes the Cincinnati rate is 69 per cent of the New York rate, but that is on one of the articles which was given to the West in the division of 1879. The distance from Cincinnati to Meridian, Miss., is 55 per cent of the distance from

New York to Meridian, and the Cincinnati rate is 107 per cent of the New York rate. A statement was presented to the Interstate Commerce Commission in 1892 wherein these and other discriminations were set forth. The commission, in May, 1894, found that the rates from the Western cities to the South were too high, as compared with the Eastern rates, and ordered them reduced about 40 per cent. The question, however, was carried to the Supreme Court of the United States, but the merits of it were not considered, the case being ruled out on the ground that the Interstate Commerce Commission did not have authority to establish railway rates.

Mr. Wilson declares that cheap water transportation from the Eastern cities to the Southern seaports is not as great a factor in the establishment of the Eastern rail rates as is ordinarily represented by the Eastern roads. It is used merely as an excuse for making the Eastern rates lower than the Western rates. The competition between the Eastern coastwise steamship lines and the railroads is much less than it is represented to be. (688-689.)

Mr. LANGLEY, of the Merchants' Association of New York, says that New York is not holding its own as a distributing center throughout the Middle West as against Chicago and St. Louis. There is competition as between New York and the Western cities for the Southern trade, but if there is any advantage in this particular New York has it as against St. Louis and Chicago. This is due to another agreement between railway lines, dating back perhaps 30 years, that merchandise should enter the South from the East. The idea was to exclude the Western lines from any participation in business that moved into the South. The agreement exists to-day. The witness does not think that the rates of the coastwise steamers had anything to do in regard to this agreement, and says that he does not think that any cheap water rates exist. There is, in fact, no competition between the coastwise lines and the railroads. The Southern classification applies to the steamship lines as well as to the railroads.

It is possible to deliver goods from New York in the Southern States east of the Mississippi cheaper than from Chicago or St. Louis, even though the Illinois Central has a direct line from Chicago to New Orleans and Mobile. The lines east of the Mississippi in the South refuse to cooperate or prorate with the lines west of the Mississippi. If the Illinois Central attempted to take independent action in respect of freight rates into the South it would precipitate a rate war. (874-875.)

Mr. Wilson says further that any road leading into the South has the power to reduce rates, but it does not consider it expedient to do so upon its own responsibility, because it fears the consequences of independent action. The controlling influence against the reduction of Western rates is that the lines from the Western centers dare not grant what they might consider to be their own interests, because of the opposition of the Eastern lines. The effect of this situation is to prevent substantial justice by any of the roads leading into the South. There are no more glaring instances of injustice by any system of railroads than the system of unjust tariff from the Ohio River to the interior South, and no case has ever been presented where the complaint has been more clearly defined and supported, and, at the same time, so conspicuously ignored. This condition is attributable to the fact that a few dominating interests govern the transportation of the South, and are close together in their determination to protect each other in order to protect themselves. A few prominent capitalists own the larger portion of the stock in all of the transportation organizations that do business in the South, and they have agreed practically among themselves that they will not hurt each other. The consolidation of these interests would perhaps be beneficial. Even if the specific difficulties are not removed, the conflict of interests will be minimized in the near future by combination. (691-692.)

Mr. GUILLAUME, of the Old Dominion Steamship Company, states that the Eastern men are looking with great alarm on the increased volume of trade from the Western cities, such as Cincinnati, St. Louis, and Chicago, and have come to the conclusion that those cities must enjoy better rates than the Eastern cities do. He says that it has been fully 20 years since there was any general movement of grain and other products from the West to New York for the South. In the meantime Baltimore and points in Virginia were having as low rates as New York from the West, if not lower. There is some business from Baltimore and Philadelphia from the West for coast points south of Hatteras, but the great volume of the business goes direct by through car movement across the Ohio River and is distributed all through the Southern States. The manufactured products from the Western cities destined for the South consist largely of iron articles, agricultural implements, furniture, etc. Perhaps the growth of manufactures in the Western country might have something to do with the increase of its volume of Southern trade, but it is to be attributed primarily to the decrease of rates. The witness is not in close enough touch with the rate situation to say whether the rates from the Western cities to the South are less than the published tariff. (447, 448.)

Mr. TALCOTT, assistant to the president of the Seaboard Air Line, says that when the Chesapeake and Ohio road was opened in 1874 it adopted for its rates to Richmond from the West the trunk line rates to Baltimore which it found in force. Western business had previously gone to Baltimore and thence to the South. The new competition necessitated a readjustment. Very recently, Mr. Talcott understands, the plan has been adopted of making Richmond, Norfolk, Portsmouth, Lynchburg, and perhaps Petersburg, gate cities from the West. The Western lines agree to make the rates the same to all these points, notwithstanding the different lengths of haul. The Southern lines make the rates to interior points by adding either agreed rates or locals. (634.)

3. *Territorial apportionment of traffic between Eastern and Western lines.*—Mr. WILSON testifies that a circular entitled "Division of Territory South of the Ohio River" contains the following clause relating to the territorial apportionment of traffic between the Eastern and Western lines, viz:

"(1) Western lines shall not make joint rates on traffic passing between points east of Buffalo-Pittsburg zone and points east of a line drawn from Chattanooga, Tenn., through Birmingham, Selma, and Montgomery, Ala., to Pensacola, Fla.

"(2) Eastern lines shall not make joint rates on traffic between points west of Buffalo-Pittsburg zone and points on or west of a line drawn from Chattanooga, Tenn., through Athens, Augusta, and Macon, Ga., to Liveoak, Fla.: *Provided, however,* That the Norfolk and Western Railway may participate in traffic via Kenova, at the rates established by the association between points in the territory on and east of its line from Columbus, Ohio, to Kenova, W. Va., and on and south of the line of the Pittsburg, Cincinnati, Chicago, and St. Louis Railway, Columbus, Ohio, to Steubenville, Ohio, and points on and east of the Chattanooga-Montgomery-Pensacola line as defined in paragraph (1)."

The witness does not know whether this division of territory is supported by any traffic agreement, but said it corresponds with the practice at the present time. It is a practice in restraint of trade. (690.)

4. *Conflict of Western interests.*—Mr. WILSON testifies that in the presentation of the Western case to the Interstate Commerce Commission, Chicago and Cincinnati acted together, but Louisville and St. Louis seemed to be so closely in the power of the local roads that they took no part in the transaction. The fact is constantly asserted by shippers that Louisville has the advantage of Cincinnati, by reason of the adjustment of the tariff on the Louisville and Nashville Railroad, but it has never been proven. It is known that Nashville is in receipt of a great many favors not accorded to any other inland city. Certain trades are so affected by it, that they have established their warehouses in Nashville, rather than fight the situation. The reason given for these favors to Nashville is that it should receive discriminations on account of having both rail and water connections, but the water transportation to Nashville is at present quite insignificant. Navigation is attended with so many difficulties and the river is so low nearly all the time, that it does not affect transportation at all. (692.)

5. *Rates from St. Louis and Cincinnati to the Southern States compared.*—Mr. WILSON testifies that there has been very serious complaint by the shippers of grain from Cincinnati against the policy adopted by the railroads whereby transportation by way of Memphis from the Western grain fields is made through St. Louis, and not through Cincinnati. For a time the rate applied from St. Louis to Southern territory on business coming from Kansas in competition with the Kansas City, Memphis and Birmingham road was only 1 cent higher than the rate from Cincinnati, and the roads from St. Louis to Cincinnati asked 7 cents for bringing the grain from St. Louis to Cincinnati. The roads South would have been compelled to cut their rates about 5 cents a hundred pounds in order to equalize conditions. This they refused to do, and a barrier was erected against the passage of any grain from points west or north of Cincinnati through Cincinnati. The only remedy for this is the consent of the roads to make the total rates between any two points the same, and to distribute among themselves, as they may deem equitable. Each community competing in a common market is entitled to just rates at the hands of the carriers and to the benefit of all its natural advantages. (694-695.)

6. *Cincinnati Southern Railroad.*—Mr. WILSON says that owing to the trade of Cincinnati being diverted by lines of railway from other Northern points to the South, Cincinnati found it necessary to construct a line of road from that city to Chattanooga, which was considered the most important strategic point south of Cincinnati, for distribution. This road was built by the city as a public enterprise. It cost something over \$18,600,000. Bonds were issued for this amount and the proceeds of the bonds put into the road. The city has been carrying those bonds, the road has been paying part of the interest and the city the rest, so that the road has cost the

city now about \$36,000,000 in cash. Its income is a rental of \$1,090,000 a year. The bonds are about to expire, and if they can be refunded at current rates of interest it will result in the city having an annual surplus. This road is leased by an organization known as the Cincinnati, New Orleans and Texas Pacific Railroad Company, a corporation organized under the laws of Ohio, which has been operating the road for about 20 years. The proposition now is to extend that lease 65 years, and it is being favorably considered by the majority of the people in interest. The impression prevails in Cincinnati and elsewhere that the outcome of this extension will be to give the control of the road to the Southern Railway, and this the people desire. Nearly 80 per cent of the stock of the Cincinnati, New Orleans and Texas Pacific Railway is held by the Southwestern Investment Security Company. The Southern Railway owns a majority of the stock of the Southwestern Investment Security Company, and through that instrumentality it has a dominant influence in the Cincinnati, New Orleans and Texas Pacific Railway Company. There is a clause in the proposed lease of the Cincinnati Southern road to the Cincinnati, New Orleans and Texas Pacific Company that "The right to sublet this property to any other than the Southern Railway is denied." The city of Cincinnati will never sell the road, at least not within the terms of the lease. The main thing to be accomplished is to lease the property upon a long rental and give the city an income. The terms of the lease will be based on the earnings of the road, and seem to be favorable to the future of the road as well as to the city. There is a clause in the present lease which provides that the lessee company shall not discriminate against the citizens of Cincinnati, Kentucky, or Tennessee, but this clause is indefinite, and as there is no penalty provided to secure its enforcement, it has not amounted to anything. In renewing or extending the lease the Cincinnati shippers are interested in having a declaration of policy that will protect the geographical situation and rights of the road. The Cincinnati Southern road having been leased to foreign control, its policy has hitherto practically ignored the territorial advantages that Cincinnati claims she should have through its construction. (687, 692, 694.)

D. Miscellaneous discriminations and rate adjustments in the South.—1. *Atlanta and Savannah rates.*—Mr. McGOVERN testified that there are 4 or 5 concerns in Atlanta that have warehouses located at Savannah in order to get the benefit of the lower rates to Savannah made by the ocean routes, and they then reship the goods inland from Savannah.

If it should come to pass that Atlanta would commence to do all its business at Savannah, the roads would have to decide what they would do about it, because there are some roads that haul Atlanta business that have nothing to do with the traffic at Savannah; and if the Savannah business should grow to a sufficient volume it would force a reduction to Atlanta and other interior points. Referring to the tin-plate industry, he says that Mr. Charles Conklin got his commodity rate on tin plate East and West by using as an argument that if the roads did not give him a commodity rate to Atlanta, he would move his works to Savannah and get the plate there by water. Mr. McGovern says he does not think the roads should have given him that rate, for the reason that it is not used for manufacturing purposes. He ships a great deal besides manufactures. (681, 682.)

2. *Birmingham and Atlanta rates.*—Mr. McGOVERN testified that Birmingham and Atlanta have the same rates from the East because they have always been in the same group. From the west the rates were formerly the same to the 2 points, but when the Kansas City, Memphis and Birmingham Road was built from Memphis to Birmingham the rates to Birmingham were made much lower than to Atlanta. The Louisville and Nashville Railroad attempted to keep up the same rates from Ohio River points to the 2 cities of Birmingham and Atlanta, but was not able to do so, and about 1886 the Birmingham differential was fixed, which still exists. It would not benefit Atlanta to build an additional railroad from the West, and would not lower her rates to the same plane as those of Birmingham. Atlanta has not suffered from freight rates and has all the railroads she needs. It is the business of the railroad to fix the rates to fit the conditions as they exist. (680.)

3. *The Charleston-Asheville-Norfolk case.*—Mr. McGOVERN says that what is known as the Charleston-Asheville-Norfolk case arose out of the desire of Charleston to have the same rates from Chicago through Asheville, as Norfolk has. The Southern Railway has a line through Asheville to Norfolk, and the rate was made the same on that line to Norfolk as on the direct line, although it was much more roundabout. Charleston is very much nearer Asheville than Norfolk is, but the Southern road would not grant the rate desired; consequently Charleston, about 2 years ago, brought the question before the Interstate Commerce Commission, but a decision has not yet been reached.

Mr. McGovern says the reason why Charleston did not get the same rates as Norfolk over the Asheville line was that the Asheville line had nothing whatever to do with fixing the rates from Chicago to Norfolk. The rate from Chicago to Norfolk was fixed by the trunk lines from Chicago to the seaboard, the shortest line being the governing element. It is the same as the Baltimore rate, which is a little below the Philadelphia and New York rates. The Charleston rate is likewise fixed by the trunk lines, and is practically the Norfolk rate plus the water rate from Norfolk to Charleston. Norfolk is considerably nearer Chicago than Charleston is. The Asheville line does not handle any Western business of any consequence bound for Norfolk. There may be a little money to the Southern road on Norfolk business from Chicago, but certainly not enough to make it a factor in rate making. (683-686.)

4. *Rates through Richmond.*—Mr. McGovern says that the rates from the West to Richmond, properly speaking, are subject to the official classification and are made the same as from Baltimore, but on through business going to the Carolinas the rates through Richmond are made on a proportional basis on the Southern Classification. The rate from Cincinnati to Richmond is 62 cents, but the proportional rate on business going through Richmond to the Carolinas is only 32 cents from Cincinnati to Richmond. The complaint is really as to rates rather than classification. (677.)

5. *Rates on cotton to Southern and to New England and European mills.*—Mr. DAVANT, commissioner of the Memphis Freight Bureau, testified in 1900 that the freight rates from Memphis to Eastern cotton mills were based on a rate of 55 cents per hundred to Boston and 57 cents to New York, while the rate on cotton to Carolina mill points was 59 cents. Thus cotton going from Memphis to Charlotte, N. C., or to Greenville, S. C., would pay 59 cents, while cotton for export or for shipment to New England, going through those points to Norfolk, 300 or 400 miles farther, would pay 42 cents. The rates to Liverpool from Memphis are sometimes lower than to Carolina points, although the rate to Liverpool at the time of Mr. Davant's testimony was about 72 cents.

The witness contends that the freight rates from Memphis should be the same to the Carolina mills as to Norfolk and to other ports. He does not believe that freight rates should be in proportion to the length of the haul. The objection of the railroads to reducing freight rates to the Carolina mills is that it would ultimately result in a reduction of local rates to those mills from near-by points. Cotton rates to Eastern points, under severe competition between the different railroads, have frequently been reduced below a paying basis. Under these conditions the witness does not think it just that the railroads should be forced to carry similar low rates into their local territory, from which they have to get the principal part of their earnings. The railroads are able to charge higher rates to the local mills in the Carolinas, because there is practically no competition there. The rates to New York and Boston are determined by the water competition by way of New Orleans or of Cincinnati. Notwithstanding these arguments in favor of discrimination, the witness insists that there should be an adjustment more to the advantage of Southern mills. (5-8.)

Mr. Davant says that the rail freights on cotton from Memphis to New York and Boston are determined by the cost of water transportation. As a matter of fact, there has of late been no transportation of cotton to those points by way of the Mississippi River and the Gulf, but there would be if the rail rates from Memphis were advanced. Some cotton is transported up the Mississippi to Cincinnati and thence by rail. The water rate by this route is 5 cents lower than the railroad rate, the difference being supposedly due to the high costs of insuring cotton during water transportation. The witness thinks that a certain amount of discrimination in favor of Eastern points as compared with Carolina mill towns is necessary because of water competition to the more distant points. (6-8.)

Mr. MARKHAM states that the rates from New Orleans or Memphis to Liverpool by way of Boston would be the same as through every other port all the way around to New Orleans. The rates from Memphis to all ocean and Gulf ports are fixed figures. Each port reports each day to the Memphis Cotton Committee what ocean rates they can obtain to Liverpool. Those ocean rates are added to those fixed rail rates, and the port which has the lowest rate to Liverpool fixes the through rate by all ports. The railroads have to shrink their rail proportion down to a figure that will enable them to make the same through rate, whereby all lines may get a share of the traffic. (442.)

6. *Galveston rates.*—Mr. MARKHAM states that the rates from Kansas City to Galveston and New Orleans are the rates from Kansas City to St. Louis, plus the barge line, and from Illinois territory to New Orleans by all rail. (441.)

E. Alleged discrimination against Denver.—1. *Complaint of Denver regarding through rates.*—Mr. GRIFFITH, representing the Denver Chamber of Commerce, says that there are 5 railroads coming directly to Denver from the East—the Union Pacific, Burlington, Missouri Pacific, Rock Island, and Santa Fe, of which

3 make part of transcontinental lines. Denver has also a rail-and-water route by way of the Gulf of Mexico and through Fort Worth.

The rates from Denver to San Francisco are now practically the same as those from Chicago and New York to San Francisco. They were formerly higher, the more eastern cities being given lower rates on the ground of sea competition by way of the Atlantic. A case was brought under the influence of the Denver Chamber of Commerce, known as *Kindel v. The Atchison, Topeka and Santa Fe Railroad*. Mr. Kindel, who brought suit, was a manufacturer of bed springs, who was especially anxious to obtain a satisfactory Western outlet. The Interstate Commerce Commission held that the rates from Denver to the Pacific coast should not exceed those from Chicago or more eastern cities. The witness believed at the time of his testimony in May, 1901, that the railroads were about to put the modified rates into effect.

Mr. STUBBS, of the Southern Pacific Company, says that the case brought several years ago by the chamber of commerce of Denver regarding freight rates was very similar to that which was being pushed regarding Pacific coast rates at the time of his testimony in the summer of 1901. The Denver case came directly within the long and short haul clause of the interstate-commerce law. The Denver jobbers claimed that they should have lower rates to and from points in California than prevail between the Missouri River points and California. The contention of the railroads was that the rates from the Missouri River to California were influenced by sea competition from New York, but that the influence of this sea competition did not extend farther west. They held accordingly that it would not be fair to give Denver a rate as much lower than that from Missouri River points as the proportionate distance would indicate. The railroads held that to give Denver the same rate as that from the Missouri River would be a fair compromise, and the Denver shippers accepted this offer.

The witness says further that the high rates which had previously prevailed from Denver had not been approved by the railroads themselves, but that they had maintained them because they did not wish to recognize that there was any effect of sea competition at Denver, or because the Interstate Commerce Commission would not recognize railroad competition as a factor in determining differences between the long and short haul rates. The railroads felt that if the rates from Denver were reduced then the rates from all other points would have to be similarly reduced, so that the rates were held up to protect the revenue of the railroads. In this case, however, the Interstate Commerce Commission held that Denver must be given the benefit of sea competitive rates. (760.)

Mr. GRIFFITH says further that Denver manufacturers also complain that the rates on raw materials from the East are high as compared with the rates on manufactured products, so that the development of manufactures in Colorado is greatly retarded. Some manufacturers have been able to get the railroads to make commodity rates on raw materials, which have relieved them, but this is not true in other cases. In the case of iron and steel, which are largely produced in Colorado by the Colorado Fuel and Iron Company, the manufacturers who use these products as raw materials claim that the high freight rates from the East act as a protective tariff to the local industry, so that the manufacturers get no advantage in low prices as the result of the production of iron and steel in the State. A large manufacturer of machinery told the witness recently that he bought a considerable amount of pig iron from Pittsburg in spite of the fact that the freight rate was so high. The witness is inclined to think that the Colorado Fuel and Iron Company ought to be able to produce iron and steel about as cheaply as it is produced in Pittsburg, although the cost of labor and general expenses are higher in Colorado. The supply of ore and coal is practically unlimited and quite convenient, although the Fuel and Iron Company gets most of its iron ore from the edge of Wyoming. The witness presumes that sooner or later there will be many more ironworks established. Colorado is a large State, with many resources and few people to develop them, so the available capital has largely gone into precious metal mining and other enterprises rather than into coal, iron, and steel production. (848-857.)

2. *Alleged discrimination against Denver jobbers in distribution of goods.*—Mr. GRIFFITH presents a paper prepared by the chairman of the traffic bureau of the Denver Chamber of Commerce regarding the freight rates at Denver, and the witness himself explains the subject further and presents additional arguments in favor of modifications of the existing basis. It is asserted by these gentlemen that Denver has never had any substantial assistance in her development from the transportation companies, but, on the other hand, has been constantly handicapped by restrictions.

The particular complaint presented by Mr. Griffith is in behalf of the jobbers of Denver, who hold that they have never enjoyed a basis of rates for the distribution of goods, particularly to common points in Montana and Idaho and other States adjoining Colorado, which enabled them to compete with Eastern cities and Missouri

River points or with the Pacific terminal points as regards the distribution of products from California. Denver has always been treated as a way station in the making of rates. From the East the Missouri River is substantially the basis line. Missouri River and other Eastern points receive through rates directly to common points in the Mountain States, while Denver must add to a high rate from the Eastern points other high local rates. The rates from Denver to Utah, Montana, and Idaho are based upon the Missouri River rates and are usually 70 or 80 per cent of those rates, which makes it practically impossible for any considerable amount of business to originate at Denver. By way of further illustration the witness states that the rate from the Atlantic coast by rail to Denver is \$2.72 per 100 pounds on first-class goods. The rate from Chicago to Denver on first-class goods is \$2.05, and the rate from Mississippi and Missouri River points is practically the same. From Denver to common points in Montana and Idaho the freight rate is \$2 on first-class commodities. The rates from the Missouri River to those common points direct is \$2.50 per 100 pounds, which is very much less than the combined rate from the river to Denver and from Denver to Idaho and Montana. Mississippi River points have a carload rate on first-class goods to Idaho and Montana of \$2.90 per 100 pounds, and Chicago has a carload rate of \$3.10. The rate from Chicago to Denver, added to the rate of these common points from Denver, is \$4.05, there being no carload rates allowed to Denver on most goods. The Chicago jobber thus has an advantage of 95 cents on the cost of shipment.

Mr. Griffith states that there is less occasion for complaint as regards the rates from Denver to New Mexico. An arbitrary blanket rate has been made by the railroads on the condition that the merchants should give them a certain amount of tonnage. These rates enable the Denver merchants to compete in New Mexico territory. The rates from Denver to Colorado points are also satisfactory, and, in fact, the jobbing business of Denver is largely confined to the State of Colorado alone. The rates in some instances are high, but the Eastern jobber has no advantage, since there are no through rates from the Eastern States lower proportionately than those by way of Denver.

This witness states also that practically all Eastern cities have the same advantage over Denver in the matter of jobbing business. The witness understands that goods coming from the East to Chicago takes a basis of 67 cents per 100 pounds first-class to Chicago; the Eastern rate to St. Louis is 87 cents, and to Missouri River points \$1.47. All the different Missouri River points get the same rate from the Atlantic seaboard and make the same rate to Western points.

The Denver merchants maintain, according to Mr. Griffith, that they are entitled to be placed on an equal competitive basis with regard to distributing goods to common points in the Mountain States. The present base line on which the Western distributive rates are founded is the Missouri River. A new base line should be established, running north and south through Cheyenne, Denver, Colorado Springs, and Pueblo. This would enable all the cities named and others along the same line to compete on equal terms with Eastern points. The establishment of this new base would also prevent rate wars and discriminations, since if cuts in rates were made to these points they would have to apply to farther Western points as well. The Denver merchants do not desire that the rates shall be lower proportionately to and from Denver than in case of the more eastern points, but they do desire to have proportionate rates. The witness recognizes that if the adoption of such a new basis would not furnish sufficient tonnage to the railroads to justify the change in the rate they could not be expected to adopt it, but he asserts that the only way in which the country can be developed is by ceasing to discriminate against it. It is to the interest of the railroads that the country which they enter should be developed in its manufacturing and distributing business. (848, 857)

F. Freight rates to the Pacific coast and sea competition.—1. *The case before the Interstate Commerce Commission.*—Mr. WHEELER, representing the Pacific Coast Jobbers' Association, describes the case being prosecuted in 1901 before the Interstate Commerce Commission with reference to the Pacific coast freight rates. This case was brought by the jobbers of the Middle West, through the St. Louis Traffic Bureau, to compel the railroads to put them in a more favorable position as regards traffic to the coast.

The witness states that the transcontinental railroads found themselves at the outset met with the competition of sea carriers from New York and the Atlantic coast to San Francisco and other Pacific coast ports. They were obliged to make rates to meet that competition, with allowance for the less favorable conditions of sea traffic. The railroads of the Middle West thereupon insisted that they should apply like sea-competitive rates between Chicago and other Middle West cities and the coast. They insisted on what was known as "postage-stamp rates," making the charges

from all Eastern points equal, as the Government does in carrying letters. They made tariffs accordingly, which practically confined sea competition to competition as it then existed. The merchants of San Francisco, in 1893, in order to break the monopoly then maintained, by virtue of practical combination between the railroads and the steamship companies, established a new steamship line to run in connection with the Panama Railroad and its steamship line on the Atlantic. They also subsidized a rival line of clipper ships around Cape Horn. The result was violent competition and a great cutting of rates. Rail rates were generally flattened out, and little or no difference remained between carload and less than carload rates, while value of goods and other proper elements which should be regarded in connection with sea competition were disregarded. This rate war continued during 1893 and 1894, after which the new steamship line was abandoned and the Panama Railroad Company renewed its relations with the Pacific Mail Steamship Company (which is affiliated with the Southern Pacific Company). Rates were advanced, but carload differentials formerly existing were not at first restored. The Middle West jobbers had been able, owing to the abandonment of these special carload rates, to secure an abnormally large share of the business of distributing goods into the Pacific coast territory.

For this reason the Pacific Coast Hardware and Metal Association, an organization of jobbers, made a protest and held a meeting with the railroads in May, 1898, at Milwaukee, as the result of which railroads in a measure restored the conditions existing before the rate war, which were more satisfactory to Pacific coast jobbers. The Middle West jobbers thereupon in turn protested and claimed as a right what had been granted by the railroads as a war expedient. Their efforts were successful in the case of the Great Northern and Northern Pacific railways, which, on May 1, 1899, reduced the carload differentials, and, despite the complaints of the Pacific coast jobbers, declined to recede from that position. The railroads running directly to California, however, paid no attention to their northern competitors, and continued the operation of the Milwaukee tariff.

Thereupon the Middle West jobbers began the suit before the Interstate Commerce Commission against the transcontinental railways. They demanded: (1) That rates should be graded according to distance, so that a lower rate should exist from St. Louis than from Chicago and a lower rate from Chicago than from New York; (2) that carload differentials should be materially reduced; (3) that "blanket" descriptions should be adopted, by which a variety of articles widely diverse in value, density, and liability to damage might be packed in a single case and transported at a single rate. (744, 745.)

Mr. LANGLEY, of the Merchants' Association of New York, says that it is possible for a New York merchant to do business in California territory in competition with San Francisco. On business destined for California and the Pacific coast there is a classification in effect which is peculiar to that traffic. It is made in a different way from the other classifications. It is made by grouping and naming rates to cover groups rather than items. There has been a contention by the commercial bodies of the central West, particularly Chicago and St. Louis, that the scale of rates and also the classification in effect from Chicago and St. Louis is detrimental to their interests. Those cities claim that the transcontinental lines are using the difference between the carload and the less than carload rates to exclude them from the Pacific coast territory. The Pacific coast jobbers maintain that Chicago and St. Louis have no right to do business in that territory, and there is now a case before the Interstate Commerce Commission that involves the whole question. The rate from New York to San Francisco and from Chicago to San Francisco is the same. Chicago and St. Louis both claim that because they are nearer San Francisco the rate to San Francisco should be relatively less than it is from New York. The rate from New York to San Francisco, however, on transcontinental business should be properly styled a "compelled" rate; that is, a rate not based on the cost of service or the distance hauled, but forced upon the roads by the ocean rate from New York around Cape Horn to San Francisco. Chicago and St. Louis seek to have that compelled rate used as a basis, and then oblige the railroads to grade the rates from the Eastern seaboard to the Pacific coast. Denver makes practically the same claim. If the principle involved in the compelled rate is not recognized and protected and this graded system of rates is introduced, the rate from New York to San Francisco of \$1, if graded westward, would soon reach a point beyond Denver where there would not be any rate at all. The Chicago merchant, while apparently able to compete with the New York merchant for the California trade, has against him the rate that he had to pay to get his stock from the East to Chicago. On import goods, however, he can compete with the New York jobber for the California trade. (875-876.)

Mr. STUBBS, third vice-president of the Southern Pacific Company, also discusses the case brought by the shippers of the Middle West before the Interstate Commerce Commission regarding freight rates to the Pacific coast. He says that the interstate-commerce law recognizes by implication that a substantial difference of circumstances and conditions will justify a higher rate for the shorter haul than that is contained within a longer haul than for a longer haul itself. Usually the Interstate Commerce Commission has defined such special conditions, justifying lower rates for longer hauls, to be competition by foreign carriers or sea carriers not under the control of the commission.

San Francisco has had the advantage of sea competition as from New York and from all points in the East within reasonable distance of New York. The sea carriers control the rates so that the railroads on such traffic can not get a fully compensatory rate, that is, a rate which contributes its full share toward all the expenses of transportation including fixed charges. The practice of the railways has been to meet this sea competition just so far as it extended and no farther. Thus the rail rate from New York to an interior town in California would be higher than the rate to San Francisco, even though the distance should be less, by the amount of the local rate from San Francisco back to this interior point. Thus the intermediate points in the West for a very considerable distance back from the coast have thus had higher rates than the rates from New York to San Francisco, and the Interstate Commerce Commission and merchants in the East generally have justified this practice. The same principle should apply as regards shipments from Eastern cities to the Pacific coast. Pittsburg, St. Louis, and other cities should have rates to San Francisco equal to the rate from New York plus the local rate from those cities to New York, whence sea carriers could be employed.

On account of the magnitude of the interests at these Eastern interior cities, they have been unwilling to accept this principle, and are bringing suit before the Interstate Commerce Commission to compel the railroads to make rates from Chicago, St. Louis, and other interior cities to San Francisco lower than the rates from New York to San Francisco, on the ground that the distance is shorter. All of the trans-continental railroads are involved, but the chief burden of the defense rests upon the Southern Pacific Company, because it is the most important and because it operates a through line from New York to San Francisco and has no line from Chicago, so that its interests are somewhat different from those of railroads originating at Chicago. The Southern Pacific Company holds that it would be ruinous to all of these roads if the principle contended for by the shippers in this suit should be accepted, because the rates from all intermediate points will be forced down to the level of the non-compensatory rates which are compelled by sea competition.

Mr. Stubbs declares that the influence of sea competition from the Atlantic coast to California affects the traffic as far west from the Atlantic as Kansas City, while goods have been shipped from San Francisco by way of New York, while goods have also been shipped from San Francisco to Dodge City, Kansas, by way of the Canadian Pacific. (760.)

2. *Carload differentials.*—Another question of difference in the suit referred to is regarding carload rates as compared with rates for less than carload quantities. Mr. Stubbs says that the Pacific railroads have made an adjustment precisely similar to that which exists in practically all railroad tariffs throughout the country, by which the rates on carloads are lower than those on smaller quantities. The difference is arbitrary, but will range from 50 cents to perhaps \$1.50 per 100 pounds, according to the basis rate. This arrangement enables the merchants of San Francisco, Portland, Seattle, and other jobbing centers on the Pacific coast to import goods by carloads and distribute them back to smaller towns in less quantities. The merchants of St. Louis, Chicago, and other large jobbing centers in the Middle West are trying to reach out into the Pacific coast territory, and are now seeking by this suit to compel the modification of the differentials in favor of carload lots, so that they can distribute their goods directly to the consumers on the Pacific coast at the expense of Pacific coast jobbers.

Mr. Stubbs says that the Northern Pacific and Great Northern railroads originally had the same carload differentials as the railroads terminating in California, and that on a petition of the jobbers in Chicago, St. Louis, and other cities they reduced the differential so as to give those jobbers an advantage in distributing goods to retailers on the Pacific coast. The object of the railroads in doing so was to favor the jobbers at their eastern terminals because of the relative unimportance of the jobbing business at their western terminals, especially as compared with the jobbing business of San Francisco. The attitude of these two northern roads as regards the case before the Interstate Commerce Commission is one of indifference. The witness does not know whether they would accept the existing carload differentials of the more south-

ern roads if the Interstate Commerce Commission should declare them justifiable, and it is questionable whether the Interstate Commerce Commission would have power to compel them to make these same differentials. (760, 761.)

3. *Blanket descriptions.*—A third feature of the case is the demand that various classes of articles which now take different rates may be given the same rates. This is particularly demanded as regards hardware. Indeed the real movers in the present suit are the Simmons Hardware Company, of St. Louis, and the Hibbard, Spencer & Bartlett Company, of Chicago, two of the largest hardware companies in the world. They wish, by way of illustration, that hammers, hatchets, shovels, and planes, which may now be assumed to have different rates of freight, may be put under the single rate. At present, if these different articles were packed in a single package, it would be charged for at the rate for the highest rated article. Under the change demanded the package would all go at one rate, lower than the former highest rate, the object of the change being to enable shippers to send assorted packages to retail dealers directly at low rates. (758, 759.)

4. *Argument of Pacific coast jobbers.*—In defense of the position of the Pacific jobbers in opposing the demand of the Middle West jobbers above outlined, Mr. WHEELER declares that it is not just to destroy the natural geographical advantages which any city possesses—advantages which were the very cause of its foundation. The people who pioneered San Francisco did not go there especially because of the beauty of its location or of its fine climate. They went because of the commercial possibilities owing to the fact that San Francisco had cheap water communication with the Eastern seaboard and is the natural gateway of the Pacific coast.

The San Francisco jobbers further believe that sea-competitive rates on the part of the railroads should be confined to points where sea competition actually exists. The witness believes that the long and short haul clause of the interstate-commerce law is clear in not permitting railroads to make a lower rate for a longer haul from Chicago and inland points to San Francisco. The law permits the waiver of the long and short haul clause where circumstances are dissimilar. The dissimilarity in this case probably consists in the fact that New York and other seaboard cities have water transportation to San Francisco which inland cities do not have. It costs comparatively little to build ships, and the sea is God's natural highway. New York has this sea connection with San Francisco. There is no such water competition directly from Chicago. Chicago and St. Louis, however, ignore the very basis of the low rates from New York to San Francisco, and maintain that they should have a lower rate than New York. The railroads claim that the rate should actually be higher than from New York, that the Middle West shipper should first pay the rail rate to New York, and then take advantage of the sea transportation. The railroads, however, are willing to compromise by making the rates the same from all these points.

Mr. Wheeler says further that the disadvantages attending water transportation are such that the rates by rail should be materially higher even in order to make equal competition, and he asserts that the shippers of the Middle West are trying to compel the railroads to ignore these disadvantages and make the rates by rail unduly low. In shipping by sea it requires at least four months longer to take goods by sailing vessels from New York to San Francisco than in shipping by rail. The capital invested in the goods during this voyage is idle, and the interest must be considered. Moreover, the uncertainty as to the time when the goods will arrive by sailing vessels is a great disadvantage to the purchaser of the goods. Again, to the sea rate the marine insurance must be added, as well as the liability to damage. All these disadvantages it is now sought to ignore. (745, 746.)

5. *Pacific coast rates and the Denver case.*—Mr. WHEELER holds that the Interstate Commerce Commission in its decision in the Denver case pointed out rightly the inconsistency of the principle of making sea competitive rates as regards Chicago, St. Louis, and other inland cities. Indeed, St. Louis, Minneapolis, Omaha, and other cities on the Missouri River are put by the railroads on an equality on the basis of the sea competitive rates from New York. The Interstate Commerce Commission in the Denver case held that the railroads might not justly draw the line at the Missouri River, but must give Denver and even Salt Lake City the advantage of lower rates. The rate has been higher from these places to San Francisco than from Chicago, St. Louis, or New York. The aim of the railroads in arranging the rates in this way has been to create the business as near as possible to their eastern termini, increasing the length of the haul. It is also the aim of the railroads starting from Chicago and Missouri River points to secure lower rates from those points than prevail from New York in order that manufacturing and other interests may be built up at their eastern termini and that their business may be increased at the expense of the business of seaboard cities which have natural and better geographical positions as regards Pacific coast traffic. For this reason the witness thinks that the Pacific

coast would benefit by the establishment of consolidated lines of railways operating all the way from the Atlantic coast. These through roads would have no motive to build up the middle cities, such as exists at present, but could haul the traffic all the way from the Atlantic seaboard. (746, 747.)

6. *Existing sea transportation routes to San Francisco.*—Mr. WHEELER says that there is not at present apparently any tendency for the sea-carrying trade of San Francisco to come under the domination of the railroads. There formerly was such a tendency, which caused great alarm to the Pacific coast shippers. Very recently a new line of vessels has been established known as the American-Hawaiian line. This is to operate very large steam vessels, of from 8,000 to 12,000 tons register. There will be a sailing each month from New York to San Francisco by way of the Straits of Magellan. From San Francisco the vessels go to Honolulu to take sugar cargoes, whence they return to New York. The great advantage of these vessels over the sailing vessels which have been so largely used is the certainty as to the time of arrival. They expect to make the voyage from New York to San Francisco in 60 days, and they are fully as regular as the rail lines in the delivery of freight. The merchant merely has to figure 40 days longer and he can make his orders accordingly. In the case of sailing vessels there was no certainty whether they would arrive in 4 months, in 6 or 8 months, or even longer. The merchant might find his goods arriving after the season for them had passed.

The rates established by this new line of steamers are scarcely higher than the sail rates previously prevailing. They run from 40 cents to 65 cents per hundred pounds. The all-rail rates on similar classes of goods range from 60 cents to \$3. The rail carriers make especially low rates on goods which are carried in the lower holds of vessels, such as iron and steel products of different sorts. (750.)

Mr. STUBBS says that the competition of sea carriers at San Francisco ports is greater than ever before. The Panama Railroad run three or four steamers each way monthly from New York to San Francisco. To be sure the Southern Pacific Company is interested in the Pacific Mail Steamship Line, constituting the western end of this Panama system, but this line does not now have power to fix rates. The American-Hawaiian Steamship Company is operating vessels of from 6,000 to 8,000 tons burden from New York to San Francisco by way of the Straits of Magellan. These steamships have a large capacity and relatively small coal consumption, and can take cargoes from New York to San Francisco very cheaply. They are taking all classes of freight. There is nothing but perishable freight that can not go around the Horn, and even perishable freight can be handled with proper appliances. (673.)

VI. TICKET BROKERAGE—PASSENGER BUSINESS.

A. Character of people engaged in brokerage business.—1. *Generally.*—Mr. LINDENBERGER says that there are two regularly organized associations of ticket brokers—the American Ticket Brokers' Association, with a membership of 335, and the Guarantee Ticket Brokers' Association, with a membership of 83. Mr. Lindenberger assumes that each member has 3 clerks, on an average, so that there are 1,800 or 2,000 persons making a living at the business in the United States. In the larger cities the business is conducted by those who devote their entire time to it; in smaller places it is done largely by persons in other lines of business, very frequently by those who conduct book and news stands in hotels. Many members of the American Ticket Brokers' Association have been engaged exclusively in this business for from 10 to 30 years. They have the respect and confidence of their communities and of the railway managers. Mr. Lindenberger does not know to whom he could more safely refer for a certificate of character than to the railway passenger men of his city, though many of them are bitter antagonists in a business way. (320.)

Not a broker now in the American Ticket Brokers' Association has ever been arrested for fraud or charged with it. Members have been expelled for doing an illegitimate business. (355, 357.)

Mr. Lindenberger states further that education in a ticket brokers' office is a common stepping-stone to employment in the passenger departments of railways. He knows several prominent railroad men in high positions who received their first education in the ticket business behind a broker's counter. A man there becomes familiar with every form of ticket that is issued, with the different lines of road in the United States, with connections, etc. (325, 350.)

2. *American Ticket Brokers' Association.*—Mr. LINDENBERGER submits a copy of the constitution and by-laws of the American Ticket Brokers' Association. Any person of good moral character who possesses the necessary ability and capital is eligible to membership upon payment of an initiation fee if, in the judgment of the executive

committee, the location will admit of his admission. A member may hold not more than two memberships in any one city and not more than five in the association. A membership under which the holder has conducted business for not less than 6 months may be sold or assigned to any person eligible to membership, with the approval of the executive committee. In every city where there are three or more members, the members must organize a local division having for its objects uniformity of selling rates and the destruction of hostile competition. New applicants in a city where one or more memberships are operated must pay an initiation fee of forty times the amount of the prescribed fee, as follows: Class A, \$1,000; class B, \$600; class C, \$400; class D, \$200. No member may conduct his business in any place where liquor is sold, nor in any place objected to by the executive committee.

All association rebate orders, when properly drawn by members in good standing, must be honored without question. Whenever a ticket or coupon purchased of a member by a passenger is not accepted for passage, through no neglect of the passenger, and the passenger is obliged to pay fare, the full amount of fare so paid must be returned to the passenger. Whenever a ticket is sold without recourse, wholly or in part, this must be stated in writing to the passenger at the time of such sale. All disputes, whether between members or between patrons and members, must be referred directly to the executive committee as a board of arbitration, from whose decision appeal lies to the annual convention. If a member fails to make good any written or verbal guaranty to a passenger, the guaranty must be made good by the association, when so decided by the executive committee, and the amount must be charged to the member. Any transaction between a member and any person or corporation whereby the system of ticket brokerage may be liable to injury or degradation is declared to be a misdemeanor; so also is the buying of employees', complimentary, or stock passes. The punishment for a misdemeanor is reprimand, fine not exceeding \$100, suspension (one or all), or expulsion, at the discretion of the executive committee. If the offense is such as to cause pecuniary damage to either a patron, corporation, or member, the executive committee may also require such restitution from the offender as they may deem proper. No member is permitted to have any transaction relating to ticket brokerage with a broker who is not a member of the association, nor with a suspended member. A member who joins another association of ticket brokers is to be suspended or expelled, at the discretion of the executive committee.

The association maintains a committee on hostile legislation, consisting of one member elected annually by the convention. The committeeman receives a salary of \$2,500 a year. In the event of hostile legislation in any State, the members in such State, acting under the direction of the committee on hostile legislation, are to pay 50 per cent of the expense incurred, and the association is to pay 50 per cent.

Mr. Lindenberg also submits, as indicating the care with which the association tries to exclude improper persons, the form of application for membership and the reference blanks, which are to be filled by 3 members of the association, by a banker, and by 2 merchants, to all of whom the applicant for membership is required to refer. (321-324.)

B. Methods of business.—1. *General nature of business.*—Mr. LINDENBERGER, of the American Ticket Brokers' Association, says that the business of ticket brokers is to buy passenger tickets from the agents of railways and from passengers and to sell them to travelers below the published tariff rates. (318.) The brokerage business depends on the existence of inequality and discrimination in the passenger business. If the roads treated the public with exact and equal justice, there would be no room for ticket brokers. A universal rate of 2 cents a mile would destroy the broker's business. (355.)

2. *Scalping tickets.*—Mr. LINDENBERGER says that it is a common practice for a ticket broker to buy a ticket to some through point "which is perhaps a competitive point, and upon which very likely some one of the various roads in this line are anxious for business and will pay a commission," sell the ticket to a passenger to an intermediate point, and give the passenger a rebate order on a broker at that place. Passenger agents sometimes come to brokers and ask them to send business over their road, offering, for instance, to extend the time limits on any ticket that may expire. Sometimes they pay a commission and sometimes they do not. (352.)

3. *Furnishing-rate sheets.*—Mr. LINDENBERGER says that a common method of ticket brokers favorably situated for securing tickets is to issue furnishing-rate sheets to their correspondents. Suppose a passenger asks a Washington broker for a rate to Denver. The regular fare is \$48. The broker may have a ticket to Buffalo or Cleveland or Pittsburgh or Chicago. He examines his rate sheets for a furnishing rate from a broker in the city which he has a ticket to. The customer takes the part-way ticket and an order upon the correspondent in the intermediate city for a

ticket to finish his journey. He will probably save \$3 or \$5. If the Washington broker has no ticket, and if the furnishing rate is low enough, he may be able to buy a regular ticket at local rates to the intermediate point and still allow the customer a saving over the through rate. (320.)

4. *Mileage books.*—Mr. LINDENBERGER says that ticket brokers deal largely in mileage books. They are usually bought by the broker direct from the railroad companies and sold to patrons who need a smaller quantity of mileage than that contained in a full book. If the customer is known to the broker, he may be permitted to return the book by mail. Otherwise he pays the full value and receives a rebate from a correspondent of the ticket broker in the city he is bound for. In the New England States and New York and on many roads in other parts of the country books are good in the hands of the bearer, though there are regulations which nominally restrict the use of them to the purchaser or to persons connected with him in a family or business way. In a letter written by the general passenger agent of the Lehigh Valley Railroad, this company's books are spoken of as good in the hands of the holder, though the ordinary restrictions are printed upon them. Ten years ago Mr. Lindenberger's own business was very largely in mileage books. They were bought almost exclusively from the railroads direct. Indeed, it is dangerous to buy them otherwise. He has known a dishonest man to sell his mileage book to a broker, report to the company that it was lost, and have it taken up on the train and returned to him. (318, 354.)

Mr. Lindenberger says that in several parts of the country only interchangeable mileage books are now sold. In the territory of the Central Passenger Association a thousand-mile book, good on 37 roads, is used. The passenger pays \$30 for the book, and when he has used all of the 1,000 miles he is entitled to a refund of \$10 on returning the cover. West of Chicago there is a book called the Sebastian book. When the passenger buys a ticket of a railroad company he takes a receipt, and those receipts are filed in the book. When he gets up to, say, 2,000 miles, he can turn them in and get a rebate. In Michigan there is another called the Northern Mileage Book.

Since the reduction of rates can be got on these books only when the cover is turned in by the original purchaser, they can not be bought and sold by brokers. It sometimes happens that a traveling man has not \$30 to invest in a book, and he gets a broker to buy a book and carry it for him, charging him a percentage. Mr. Lindenberger knows of brokers who carry as many as 200 books for these special customers. (319, 353.)

Mr. Lindenberger says that when each road sold its individual mileage books traveling men were usually allowed 3 cents a mile for their fare by their employers, and they were able to buy mileage from brokers at about 2½ cents. The three-fourths of a cent was one of the perquisites of the business. Now, in the territory where the interchangeable mileage books are issued, the houses furnish the mileage books. (352.)

5. *Railroad spotters and mileage books.*—Mr. LINDENBERGER says that a broker sometimes puts out a mileage book, guaranteeing it to the purchaser, as brokers always do, and the purchaser turns out to be a railroad spotter, who gives up the ticket to the road and comes back with a receipt to show that it has been taken up by the conductor. The broker has to refund the money. Mr. Lindenberger quotes a newspaper article, apparently written on the basis of information obtained from the railroads, in which the following passage occurs: "A feature of this testing the market, which perhaps is not generally known to the public and which hits the brokers the hardest, is the lifting of the mileage tickets. All such tickets bought up on the market are confiscated by the two passenger associations, and in a year's time it means an immense financial loss to the brokers, who are just so much out of pocket. When very severe tests of the market are being made, the associations oftentimes get outsiders, in the guise of traveling men, to help, and in this manner much mileage is secured from the scalpers which otherwise they would not let go, because of their fear of the 'spotters.'" (334.)

Mr. Lindenberger declares that a prominent passenger agent in Michigan, desiring to increase travel on his road, put large quantities of mileage books in the hands of brokers and guaranteed them. For some time there was no trouble; "but suddenly the passenger agent changed his mind and issued orders to his conductors, and a great many of these books, which we had a right to assume had been bought under that understanding, were taken up. For books costing \$20 I got in some cases no more than a ride of 100 miles—\$2—and the loss to me was \$18. There was no recourse unless we went into court and published the circumstances, and that does not pay." (340.)

6. *Rate-war tickets.*—Mr. LINDENBERGER says that brokers are often useful to the public in giving the benefit of rate-war reductions to persons who would not otherwise get it. Thus, in 1898, there was a rate war for eight months in Canada. Tickets were sold at about half the usual rate, but outside of Canadian territory regular tariff rates were charged. Thus, in Windsor, one could buy a ticket to Toronto for \$3.30, but across the river in Detroit one had to pay \$6.60. The brokers of Detroit sent to their Western correspondents, giving the prices at which they would supply, on prepaid orders, tickets to Toronto and Eastern points. The prices were usually \$1 above the war rate. It was only through brokers that these rates could be obtained in the United States. The agents of the railroads in Detroit were absolutely forbidden to give customers any information about rates across the river. Mr. Lindenberg mentions other similar instances. (319, 320.)

7. *Excursion tickets.*—Mr. LINDENBERGER says that ticket brokers not only buy the return parts of excursion tickets from travelers, but through their correspondents in other cities they are often able to handle both the going and the return coupons. The railroads often give brokers advance information of these excursions, and the brokers are able to arrange by correspondence to handle the tickets. (319.)

C. *Relations to railroads.*—1. *Support of brokers by connivance of railroads.*—Mr. LINDENBERGER says that the growth of ticket brokerage to the immense proportions it assumed from about 1876 to 1896 was due almost entirely to the direct encouragement and support of the railways. Nearly every railroad of importance employed brokers; and when a road could not make satisfactory arrangements with established offices, new offices were opened. When Mr. Lindenberg became a ticket broker 19 years ago, he started with the regular issues of three lines of road, and in the following years dealt on the most friendly terms with all the great lines that looked to Detroit for business. The purpose of the railroads in using brokers was to get competitive business which they could not reach otherwise. New lines which desired a quick introduction to the public would place tickets with brokers. The weaker lines, failing to secure a living share of the passenger traffic, would often find that their only means of escaping the receiver was to call in their help. The brokers, with correspondents all over the country, can quickly influence a large passenger traffic over any line if the tickets are put low enough. (326.)

Mr. Lindenberg states that it was proved some years ago before the Senate Committee on Interstate Commerce that such roads as the New York Central and the Pennsylvania had dealt through brokers, and that 95 per cent of the business of the ticket brokers of the United States was done with the railroads direct. This does not mean that each individual broker bought almost all his tickets from the railroads. One broker at a starting point in the East, New York or Boston, starts a ticket west, and it may travel from New York to San Francisco. It was originally purchased from the railroad direct by the broker, and it is used from point to point. The dealings of the brokers with the roads are less of late years, "especially in the last year, when the traffic associations are the whole thing." Mr. Lindenberg does not think that the business of ticket brokerage could be carried on, at least to anything like its former extent, without the dealings directly with the roads. "Where a broker would have perhaps anywhere from thirty, fifty, to one hundred thousand dollars invested in stock, he would necessarily have to do the comparatively small business that is done through tickets that passengers don't use and through excursion tickets." This would greatly injure, Mr. Lindenberg thinks, the general public. The brokers would either be driven out of business or be driven to less public locations.

Mr. Lindenberg says that it would be possible to exhibit written contracts which have been made between ticket brokers and railroad officials for the selling of cut-rate tickets in bulk, but it would be in violation of a business agreement and he would not think it right. Of late years such agreements are simply a matter of honor between the ticket broker and the railroad men. "For instance, a ticket broker may write to a general passenger agent that he wants something, that he can do him some good, and instead of getting a reply by mail a district passenger agent or a traveling passenger agent comes in and talks the matter over and says, 'We will do so and so,' and that contract stands. The agent will say, 'Buy tickets reading over our road, report to us the forms and numbers at the end of the month, and a check will follow.' That is the general custom of doing business, and, to the credit of the roads, there are very few instances on record where the contract has been violated to the slightest extent."

This witness also says that when a railroad pays a commission to brokers on tickets sold over its line the rate is usually about 10 per cent. The broker usually receives the same as an agent. (350-352.)

Mr. Lindenberg declares that the acceptance of commissions from railroads for selling tickets over their lines is not an unlawful act; but if the railroads have made agreements among themselves which are violated by the payment of such commissions, those agreements are themselves unlawful, as combinations in restraint of trade. (355.)

Mr. Lindenberg says further that railroad companies when they are in an agreement not to cut rates will often pay a commission to brokers, stipulating that the rate must not be cut. The brokers work for those particular lines and get business for them. The brokers have many customers who are friends of years' standing, and will buy of them rather than of the regular agents at the same rate. A regulation that all tickets must be sold at tariff rates will not destroy the brokers' offices. But the passenger associations now say how many outside offices a railroad may have, and if an antisculping law were passed, and men could not sell tickets without a certificate from a railroad company, the passenger associations would then control the business. (357.)

2. *Effect on railroad tickets.*—Mr. LINDENBERGER says that in the latter part of 1898 the railroads cut off second-class rates generally throughout the Southwest, without making any corresponding reduction in the first-class rate. The effect was that while the lowest rate between New Orleans and Louisville, prior to January 1, 1899, was \$13.50, the lowest rate after that date was \$19; the lowest rate from Chicago to Austin, Tex., before January 1, 1899, was \$23.75; after that date \$32.15. He thinks the average difference was 40 per cent. Just before Mr. Lindenberg appeared before the commission the railroads again put second-class tickets on sale, reducing the minimum rates from New Orleans to Chicago from \$23 to \$16.50, from New Orleans to St. Louis from \$18 to \$12.50, and from New Orleans to Kansas City from \$24.35 to \$15.50. Reduced party tickets to various Northern points were also offered. This reduction of rates is attributed to the competition of ticket brokers in selling low-rate tickets by roundabout routes. (336.)

3. *Ticket brokerage and railroad competition.*—Mr. LINDENBERGER says that there is room for brokers as long as there is competition between railroads. "The broker thrives best when trade is bad and when rates are high. When people are making money the savings effected through brokers do not amount to so much to them; they are not so anxious to buy. When the railroads are doing lots of business they do not care for us. But when the railroad companies get in a close place and need business, they get out and look for it, and the ticket broker is in a position to give it to them." (350.)

D. Legitimacy of brokerage business.—1. *Attitude of brokers toward fraud.*—Mr. LINDENBERGER, of the American Ticket Brokers' Association, submits a copy of a circular issued by that association offering a reward of \$500 for the arrest and conviction of any member of the association who is guilty of forging a railway ticket, or who has changed the destination of a ticket, with intent to defraud. For the arrest and conviction of any ticket broker not a member of the association, for either of these acts, the association offers a reward of \$200. In a circular accompanying the announcement of this offer, the secretary of the association says that the offer is made to prove that the slanderous stories put in circulation by certain railway officials to the effect that it is the general practice of ticket brokers to forge and alter railway tickets are infamous falsehoods. The circular is also intended, however, as a warning to any ticket broker who may be tempted to dishonest practices that the association will spare neither energy nor money to put him out of the calling he has disgraced. (325.)

This witness declares that the value of fraudulent tickets that the railroads carry passengers on for which they receive no compensation, is very small indeed. Most fraudulent tickets are fraudulent simply by extension of a time limit. The railroads have actually been paid for carrying the passenger. Of course that is no excuse for the use of such a ticket. So far as brokers are concerned, ticket frauds are usually discovered through them. It has been the custom with railroad companies, and is really the most effective way of detecting frauds, burglaries, etc., as soon as they learn of a fraudulent issue of tickets, or of tickets being stolen, to notify a broker through the American Ticket Brokers' Association, and that information is sent by wire or by the first mail all over the United States. Every ticket broker is on the lookout for those tickets. The fraud can not continue long. It would be impossible in any case, however, for fraudulent tickets to be accepted on a road for any length of time without the consent of the auditing department. A ticket presented on a train is turned in by the conductor as soon as he finishes his trip, and by the next day it is checked up. There is less chance of fraudulent tickets being accepted by a railroad than of almost any kind of a fraud being perpetrated on a railroad, or a bank, or any other corporation. (359.)

2. *Guarantee of tickets.*—Mr. LINDENBERGER, of the American Ticket Brokers' Association, says that, by the custom of the business and the rules of the association, unless a broker has the passenger's written agreement to the contrary he is responsible for the ticket that he sells. The acts of all the ticket brokers in the American Ticket Brokers' Association are guaranteed to the public. Though the rules of the association provide for a written undertaking by a passenger to assume all risk of the goodness of a ticket, Mr. Lindenberg has never sold a ticket on such terms. He has never sold a ticket which he was not willing to assume the responsibility for. If he sells a passenger a ticket for \$8, the regular fare being \$10, and the ticket is refused, he is compelled by the rules of the association to make the passenger good. He pays not the \$8 that he received, but the \$10 which the passenger had to pay. (349, 350.)

3. *Buying of passes.*—Mr. LINDENBERGER says that the buying of passes is disreputable and dishonorable; he never bought one, nor sold one, nor permitted one to be sold in his office. "While railroad companies may issue passes improperly, for political purposes or otherwise, it does not justify brokers in handling them. We confine our operations to tickets that the railroad company receives its price for." He used to inform the railroad when a pass was offered to him for sale, but now he prefers not to see the pass. Very sad results sometimes come from the revelation of such breaches of confidence to the officers who have issued the passes. (358.)

4. *Passenger tickets—Printed conditions as contracts.*—Mr. LINDENBERGER does not think that the conditions printed by railroads upon their passenger tickets constitute contracts. If such a ticket is a contract, why does it not require the revenue stamp which the law compels to be placed on every business contract? On almost every ticket there is a statement that the railroad will be responsible for only a certain amount of baggage; but this announcement does not hold in law. (355.)

The witness considers that the railroads do a wrong in requiring any person to sign a name on a ticket or a mileage book. As to the question of forgery in signing the name of another under such circumstances, Mr. Lindenberg remembers reading of one case in California where the Southern Pacific Company tried to punish a man for signing another man's name, and the court decided that the original purchaser in selling the ticket necessarily gave the purchaser authority to use his name in that connection. (354.)

E. Testimony of Mr. Blanchard on ticket brokerage.—Mr. LINDENBERGER refers in detail to the testimony of Mr. George R. Blanchard before the Industrial Commission in condemnation of ticket brokerage.¹ He takes up Mr. Blanchard's propositions point by point.

In respect to Mr. Blanchard's statement, that ticket brokerage is prohibited by the laws of 10 States, Mr. Lindenberg says that the legislatures of 36 States have refused to pass such laws; that in 2 of the 10 States the highest courts have declared the laws unconstitutional, and the law is inoperative in the 8 States where it exists. As to the prohibition of ticket brokerage in Canada, Mr. Lindenberg says that when the law went into effect there were only 3 brokers in the Dominion, so that there was no power to organize resistance; but at that time, and for many years after, the Canadian roads openly paid commissions to brokers in the United States, and it is probable they are doing so to-day. The traffic in tickets by individual passengers and by hotel clerks is common in Canada, and Mr. Lindenberg never heard of a prosecution under the law.

As to the condemnation of ticket brokerage by the Interstate Commerce Commission, that was published in December, 1896, and though the commission has since made three annual reports and has treated exhaustively all the other principal subjects relating to transportation, it has ignored ticket brokerage. It is probable that a closer acquaintance "has taught them the error of their earlier judgment." As to Mr. Blanchard's statement that the best moral sense of the commercial world is against the business of ticket brokerage, Mr. Lindenberg undertakes to show how the supposed manifestations of this moral sense have been obtained. He quotes in full a circular said to have been issued on December 10, 1897, from the "Antiscaling bill headquarters, Shoreham Hotel, Washington, D. C." It calls attention to the necessity of bringing all possible influence to bear on the new members of the House Committee on Interstate Commerce. For this purpose railroad officers are asked to open correspondence "with the president of each and every society, organization, etc., requesting reduced rates for conventions and meetings, with a view that you secure the aid of such organizations in passing favorable resolutions," and individual letters to Senators and Representatives. The circular also suggests that "it may be necessary to again organize throughout the country for an aggressive campaign in securing petitions in every town along the lines of railways." It is assumed that the

¹ See Reports, vol. iv, pp. 666-670.

local agents of the railroads will be instructed to get these petitions, and it is suggested that they be instructed to secure at the head of each petition the name of the most prominent man in the town. The circular also suggests that unless the bill is passed in both Houses at the present session, it will probably be almost impossible to secure favorable action for some years.

Mr. Blanchard says that the cessation of scalping means the stoppage of many illegal practices which create unauthorized discriminations in passenger affairs. Mr. Lindenberg's reply is that the cessation of ticket brokerage means the destruction of competition, but that the broker in some degree prevents discrimination. In the offices of railways discriminations are constantly going on. Social and political debts are paid by passes and special-rate tickets, and shippers and men of influence are constantly favored. Holders of tickets on which the limits have expired can get the time extended if they have influence enough. The ordinary passenger has to submit to the regular rules, except for the relief secured through ticket brokers. Mr. Blanchard says that resold tickets cut the local fares and produce rates not authorized by the railroads and prohibited by law. Mr. Lindenberg replies that the reduction of rates is an advantage to the public, and that after the railroad has received its price for transportation it is not injured if the transportation is used by one person rather than another.

As to charges of stealing, counterfeiting, and fraudulently altering tickets, and of false representations as to routes, connections, etc., made by brokers, Mr. Lindenberg replies that the ticket broker is often better qualified and is more disinterested in giving accurate information than the authorized agents of rival lines. The agent of a railroad gives information only about his own road; the broker is equally ready to give information about all. As to stealing and forging, every State has laws against these crimes, and the American Ticket Brokers' Association has a standing offer of a reward for the arrest and conviction of persons guilty of them in connection with railroad tickets.

Mr. Blanchard declares that scalpers have induced conductors not to cancel tickets taken up in order that they might be resold. Mr. Lindenberg declares that in an experience of 19 years he has personally known of but 3 or 4 cases of this kind, and he has reported them to the railroads interested. Mr. Blanchard also accuses the brokers of having corrupted clerks and ticket distributors in some railway general offices by inducing them to purloin tickets. Mr. Lindenberg says that such things have no doubt occurred, but no evidence that they are common has been laid before legislative bodies during the last 10 years.

The evidence of wrongdoing on the part of ticket brokers which the railroads have used to create public feeling against them is of no tangible value whatever. The witness refers particularly to a pamphlet entitled "Museum of Ticket Scalping Iniquity," in which pictures are given of tickets which are said to have been altered and plugged. There is only one case in which an accusation is brought against a particular person; such phrases as these are used: "A scalper did so and so;" "this was done by a ticket broker."

Mr. Blanchard says that scalpers cause railroad wars. Mr. Lindenberg replies that the rate wars of Canada, where ticket brokerage is prohibited, refute the statement. Mr. Blanchard declares that the cessation of scalping would not lessen public facilities, "because each company could retain the services of an experienced scalper by conferring upon him a proper appointment as agent." Mr. Lindenberg suggests that this is an acknowledgment that experienced scalpers are a benefit to the traveling public; but he adds: "If the broker was regulated by the rules of the combine he would be quickly robbed of the very attributes that now make him a public convenience."

Mr. Blanchard complains that the rules and decisions of the Interstate Commerce Commission do not reach scalpers' practices. They hold only the railways accountable. While a company can only change its fares by 3 days' notice as to reductions and 10 days' notice as to advances, the scalpers can change them either way daily or hourly. Mr. Lindenberg sees no objection to a requirement that a broker file rates. "It is safe to say that should this be required the law would be equally as well obeyed as is the law relating to interstate commerce by the average railroad."

Mr. Blanchard asserts that if scalping were abolished the average fares paid by passengers would not exceed those which prevail under its continuance. The railroad will redeem the unused coupons of through tickets. If the passenger takes the coupon to a scalper he will get less than the railroad would give. If the passenger who ultimately buys it gains, the passenger who sells loses. Mr. Lindenberg replies that Mr. Blanchard is "misinformed." He illustrates the working of the redemption of tickets with detailed figures. The first-class rate from New York to Chicago, by way of Buffalo, is \$17; the cheapest rate from New York to Buffalo is \$8;

the difference, \$9, is what the road would give in the redemption of the coupon from Buffalo to Chicago. The lowest first-class fare from Buffalo to Chicago is \$12. The broker would give the passenger \$10 for his coupon and sell it to another for \$11; each of the passengers would save a dollar and the broker would have \$1 for his profit. Mr. Lindenberger gives several other similar instances. He adds that a great many excursion tickets are sold for the fare one way or less; the return coupons have no redemption value. The railroad company has offered to give the transportation for the money received, and there is no reason why it should not be called on to give it, and it makes no difference whether the transportation is called for by A or by B.

Mr. Blanchard argues that passenger ticket brokerage is an evil, because, in his judgment, anyone would admit that a similar brokerage business in freight transportation would be an unjustifiable evil. Mr. Lindenberger replies that on the contrary the interests of the people who pay freight rates would be greatly promoted if there were brokers in that line. "The average shipper would gladly welcome some method of evading the often arbitrary and excessive rates extorted from freight shippers." (330-341.)

F. Antiticket-brokerage laws.—1. *State laws.*—*Agitation by railroads.*—Mr. LINDENBERGER declares that with the concentration of railway interests and the forming of pools and traffic associations a system of persecution against ticket brokers has been inaugurated by the railroads. The legislatures of all the States of the Union have been repeatedly solicited to pass antiscaling laws. Such laws have been got through in only 10 States, and in 2 of them—New York and Texas—they have been declared unconstitutional. The railroads have not succeeded in getting such unjust laws passed in the other 37 legislatures nor in Congress. Efforts have been made in Congress to this end for a dozen years. Four years ago, for the first time, a bill was got through the House, but it failed of consideration in the Senate. The same thing happened 2 years ago. It is a fact worthy of note, Mr. Lindenberger thinks, that the times selected for passing these bills in Congress were directly after Congressional elections. "The bill is very unpopular with the people, and the Congressman who would vote for it stood the chance of losing the support of a large number of his constituents." In support of this opinion, Mr. Lindenberger quotes a circular said to have been issued to the railroad officers by the committee employed to urge upon Congress the passage of the antiscaling bill during the session of 1897-98. (326, 331.)

2. *Antiscaling laws unconstitutional.*—Mr. LINDENBERGER submits the text of the decision of the New York court of appeals, November 22, 1898, holding that the antiscaling law is unconstitutional. The court points out that while the title of the act refers to frauds in the sale of passenger tickets, there is nothing in the body of the statute to indicate that it is prompted by a desire to check fraud. The court declares that the buying and selling of passenger tickets is a perfectly normal and unobjectionable business. "[I confess I am unable to see how such a sale defrauds a transportation company. If a transportation company sells a ticket from New York to San Francisco, it undertakes to carry the holder from one place to the other. It costs the company no more to carry one person than it does the other. How, then, can it be defrauded or in any way prejudiced by the transfer of such a ticket by the purchaser to another person?" The statute in question restricts the liberty of citizens of the State to engage in the business of ticket brokerage. It is a violation of the State constitution and void unless it constitutes a valid exercise of the police power. But this can not be maintained. No attempt is made to exclude persons of bad character from the business, nor are the public authorities given the right to determine by examination or otherwise the character of the persons to be engaged in it. The transportation companies alone are invested with the power to admit to it whomsoever they will. Stringent rules may doubtless be enacted to punish those who are guilty of dishonest practices in the conduct of such a business; but to cut up, root and branch, a business that may be honestly conducted to the convenience of the public and the profit of the persons engaged in it, is beyond the legislative power.

Mr. Lindenberger says that Texas is the only other State whose highest court has declared the antiscaling law unconstitutional. Such decisions have been rendered in the lower courts of Illinois. A decision to the contrary effect was rendered by the supreme court of Illinois, but under circumstances which deprive the decision of the credence which ordinarily attaches to the decision of the supreme court of a State. A subsequent decision of the circuit court of Cook County, cited in full by Mr. Lindenberger, says: "Our supreme court, in what is alleged to be a fictitious case presented to it, based upon an indictment charging an infraction of the statute under consideration, was led to proclaim its constitutionality." A motion was afterwards made in the supreme court, says the circuit court of Cook County, to expunge the

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opinion from the record, on the alleged ground that the court was imposed upon and falsely induced to render a decision sustaining the constitutionality of the act. The court by a vote of 4 to 3 refused the motion, on the ground that the parties who made it were strangers to the record; but "made the novel and significant announcement that the judgment of affirmance in the Burdick cases, and the opinions of the court in deciding them, are conclusive only as between the parties to those cases. This announcement was made knowingly, and there can be no mistaking its meaning in view of the record made in the case." (341-349.)

3. *Attitude of newspapers toward antiscaling bill.*—Mr. LINDENBERGER says that the promoters of antiscaling legislation have claimed some 381 newspapers as opposed to ticket scalping. Mr. Lindenberg declares that if only 381 out of the vast number of newspapers of the United States advocate the antiscaling law, it does not speak well for the proposition; but, he adds, the articles in these papers, as shown by the clipping bureaus, were nearly all from the same pen. It has often happened that the same article would appear simultaneously as an editorial expression in 40 or 50 papers. Mr. Lindenberg gives a series of quotations from various papers on the ticket brokers' side of the controversy. The Denver Republican is quoted as saying of the railroads: "They have done all they could to defeat and nullify and overthrow the interstate-commerce law and are still evading and defeating its provisions in every way possible. They are unwilling to allow any protection to be granted to the public and still demand that they themselves be protected from the ticket brokers by an amendment to the law which they themselves condemn." Another paper says: "Have railroad companies become so helpless that they need to call in the strong arm of the Congress of the United States in order to save themselves from the burden of carrying a poor man for the same price they have contracted to carry a rich man. Such legislation, though generally couched in language intended to deceive the public as to its true intent, is but an effort to aid rich and powerful corporations to reap a reward at the expense of the common people." Mr. Lindenberg adds a long list of papers from which, he says, similar expressions may be taken. (326-328.)

4. *Attitude of labor organizations toward antiscaling bill.*—Mr. LINDENBERGER declares that almost every labor organization in the United States, except the railroad organizations, have protested against the antiscaling bill. He quotes resolutions passed by the American Federation of Labor, by the Knights of Labor, and by the National Building Trades Council. The American Federation of Labor has protested against antiscaling legislation at each of its last four conventions. Mr. Lindenberg quotes the president of one of the great railway organizations, which had passed a resolution asking Congress to pass the antiscaling bill, as saying to him: "When I buy a railroad ticket, that ticket is mine, and I have got a right to do what I please with it." Mr. Lindenberg is confident that this is the actual sentiment of every individual member, even of the railroad brotherhoods, who has given the subject any thought, whatever the resolutions of the organizations may declare. (328-330.)

5. *Government license of ticket brokerage.*—Mr. LINDENBERGER, of the American Association of Ticket Brokers, declares that reputable ticket brokers, and especially members of his association, would be glad to have ticket sellers licensed by the Government. They do not want a license issued by the railroads and subject to their rules. They would be glad to have their business supervised by the Government and to have the supervision extended over all sellers of tickets, railroads as well as brokers. If a man violated the law his license could be withdrawn, and his career as a ticket man would end. (338.)

G. Miscellaneous evidence as to passenger traffic.—1. *Passenger rates.*—Mr. SCHIFF, of Kuhn, Loeb & Co., bankers, declares that passenger rates have been changed very materially in recent years, and have gone down per mile just about one-half. The State of New York in the charter granted to the New York Central road fixed a maximum rate of 2 cents per mile. Naturally the tendency of the railroad is to maintain the rate at 2 cents as long as it can, but it transports passengers to-day at considerably less than 2 cents a mile. (774, 775.)

2. *Through tickets, checking of baggage.*—Mr. LINDENBERGER points out that while a limited through ticket may be good for a stop at certain junction points, baggage will only be checked to the destination of the ticket. For instance, a ticket from New York to Chicago may permit the holder to stop off in Detroit; but he can not get his baggage there unless by paying an excess baggage rate, the same as if his baggage had been carried to Chicago and brought back. Again, from Eastern points tickets are sold to Los Angeles by way of San Francisco, or to San Francisco by way of Los Angeles, at the same price as to either point direct. A passenger with baggage checked to San Francisco may wish to discontinue his journey and get his baggage

at Los Angeles. "The company confiscates the ticket, although they may not have carried the baggage or the passenger one mile, and are paid their proportion of the through rate by the company issuing the ticket." (337.)

3. *Second-class tickets.*—Mr. LINDENBERGER declares that second-class and first-class passengers have exactly the same accommodations and rights. The only difference is that a second-class ticket will not be accepted on a sleeping car. A railroad company can not force a second-class passenger to ride in a smoker. A smoker is not second class. (p. 357.)

4. *Immigrant tickets.*—Mr. LINDENBERGER says that newly arrived immigrants are able to get cheaper rates than American citizens can get for exactly the same service. The business at the Atlantic ports is so controlled by a pool that no person other than one who has arrived from some foreign port can buy an immigrant ticket. His name must appear on the manifest of some steamship company. In many instances an immigrant rides side by side with an American citizen who pays \$2 or \$3, or in some cases as much as \$5 more, simply because the railways, in a pool organization, control all the immigrant business. (356.)

5. *Pullman Palace Car Company.*—Mr. WILSON, of the Cincinnati Board of Trade, holds that the Pullman Palace Car Company has offered the most valuable facilities that have been furnished to the railroads and probably the most equitable. Its management has enabled the railroad companies to afford to the public better service than could have been maintained by any other system. The merging of all the other palace car lines into the Pullman Palace Car Company has been simply the survival of the fittest. The most powerful railroads have failed to furnish an equivalent service. (696.)

6. *Discrimination against New York—Passenger traffic.*—Mr. LANGLEY, representing the Merchants' Association of New York, testifies that that association has been in existence for 4 years. It has 1,300 members, and is composed of merchants, manufacturers, bankers, and men in other business interests. The direct members pay an annual fee of \$25, and the associate members, who are distributed throughout the United States, pay nothing. The aim of the association is to foster the trade and welfare of New York. The main reason why the association was established was because of the advantages given to certain Western cities by the railways over New York. As an instance, may be taken the running of excursion trains. A certain territory lying near St. Louis is considered as tributary to that city as a market. The railways introduced excursion rates with the object of encouraging merchants to go to that market. The same plan was followed in respect of other Western cities. The result was that those Western cities became possessed of a trade which had formerly been done by the merchants of New York. New York, if not discriminated against, will be able to hold her own in any of the markets of the United States, even as against the Western cities, in territory which would naturally be considered territory tributary to them. The first steps taken by the association were to have the railroads grant to New York the same privileges as they had granted to the Western cities in the matter of rates. The New York merchants do not ask for discriminating rates. All they want is to be put on a relative basis of equality. Philadelphia and Boston are likewise competitors of New York, but the practice of having excursion rates to those cities was not adopted as it was with the Western cities. The merchants of Boston, Baltimore, and Philadelphia have taken action somewhat similar to that of the Merchants' Association of New York. (859-860.)

VII. THE ANTHRACITE COAL SITUATION.

A. Relation of railroads to coal industry. Alleged community of interest.—1. *Description of anthracite coal roads.*—Mr. SAWARD, of the Coal Trade Journal, says that the railroad companies which bring anthracite coal to tide water are: The Pennsylvania, running to Perth Amboy; the Lehigh Valley, to South Amboy; the Reading, to Port Reading; the Jersey Central, to Port Johnston and Elizabethport; the Delaware and Lackawanna, to Hoboken; and the Delaware and Hudson and the Erie, running to Weehawken. New roads engaged in the business are the Ontario and Western and the Delaware, Susquehanna and Schuylkill. The product of the Lehigh anthracite district naturally goes to Perth Amboy and Port Johnston; that of the Schuylkill region to Port Reading, and that of the northern or Wyoming district to Weehawken, Hoboken, and during the summer to Newburg. The Reading handles the larger portion of the harder coals, and the Lackawanna, Delaware and Hudson, and Erie handle most of the free-burning coals. (508.)

Mr. WALTER says that about half of the total freight traffic of the Lehigh Valley Railroad is in coal. The hauling of general merchandise is steadily increasing,

especially because of the growth of cities and towns along the line of the railroad. (546.)

2. *Relation of Reading Company to subordinate companies.*—Mr. HARRIS, until recently president of the Reading Company, says that the Reading Company owns the stock of the Philadelphia and Reading Coal and Iron Company, which owns a large body of anthracite lands and operates mines; also the stock of the Philadelphia and Reading Railway Company, which owns, leases, and controls railroads. The latter company is the successor of the Philadelphia and Reading Railroad Company, but none of the securities of the Philadelphia and Reading Railroad Company are now outstanding. The Reading Company in its present form has been in existence since 1896. Its chief obligation is a general mortgage secured by the properties of the other companies, which takes up the old mortgages issued by these companies. The Philadelphia and Reading Coal and Iron Company and the Philadelphia and Reading Railway Company have large issues of securities, but these are held by the new company. (597.)

Mr. GREENE, of the Audit Company of New York, says that the Reading Company is a Pennsylvania corporation with special powers, enabling it to hold the stock of other corporations. The laws of Pennsylvania prohibit railroad companies from owning mines. The Philadelphia and Reading Railroad Company and the Philadelphia and Reading Coal Company were therefore separately organized, while the Reading Company, under a charter giving it special powers, owns the stock of both. Under this authority, also, the Reading Company has bought the stock of the Central Railroad of New Jersey. (471.)

3. *Relation of railroads to coal companies.*—Mr. McLEON, former president of the Reading Railroad says that each of the anthracite coal railroads owns all or a large part of the stock of coal mining companies which are thus practically departments of the railroads. These coal companies mine coal and also buy coal from independent operators. They pay freight to the railroad companies in the same way as other shippers, the accounts being kept separately from those of the railroad. (561.)

Mr. HARRIS, until recently president of the Reading Company, says that the Reading Coal and Iron Company does not sell its coal to the railroad company, as many of the individual operators do, but that it sells the coal itself and pays the railroad company for transportation at precisely the same rates as are charged to individual operators who ship on their own account. (600.)

Mr. STEARNS, president of Cox & Co., says that he does not know whether railroad companies in Pennsylvania have the right to operate coal mines directly. As a matter of fact, most of them own the stocks of mining companies, which are thus practically entirely controlled by the railroads. The Pennsylvania Railroad Company acquired most of its coal properties from the Northern Central Railroad and other railroads which it absorbed. The witness believes that in each case where railroads control coal companies the coal company is operated separately from the railroad company. This was certainly the case of the Pennsylvania Railroad. The Pennsylvania owns all of the stock of the Susquehanna Coal Company and controls the Lykens Valley Company and the Mineral Railroad and Mining Company. (579.)

Profit on transportation and on mining.—Mr. GREENE, of the Audit Company of New York, says that in the case of the railroad companies which maintain separate coal companies proper principles of accounting demand that the business should be kept entirely separate. As a matter of fact, it is not possible in the anthracite regions to calculate the profits of the railroads and the coal companies accurately. The railroad companies, in order to get tonnage, sometimes operate mines at a disadvantage. Moreover, it is exceedingly difficult to keep the accounts of a mine and to know the actual operating expense. This is especially true because there is a certain amount of work, known as dead work, in every mine, which has no direct relation to the amount of coal produced. It is a matter of opinion whether the cost of this dead work should be charged to improvements of the mine or to operating expenses or divided between those accounts. (474.)

4. *Control of coal lands by railroads.* (See also Independent operators, p. CXXXV.) Mr. SAWARD asserts that the anthracite coal lands are now to a very large extent owned by the railroads or their subsidiary companies. They virtually control the situation. The reason for going into the coal business was the necessity of a permanent transportation business. At first many individuals produced anthracite coal in very small mines and with small capital. These mines soon gave out and the railroads were in danger of bankruptcy. Therefore in order to secure permanent traffic they secured properties, directly or indirectly, and made developments on a larger scale. (506.)

Mr. McLEON says that in 1900 out of 47,000,000 tons shipped the individual operators mined 16,000,000 tons, or about one-third, and the railroad mines shipped the rest. On the Lehigh Valley there is a much larger proportion of individual

operators. The company mined in 1900 2,922,000 tons out of 7,875,000 tons carried. The Reading mined 7,065,000 tons out of 9,874,000 tons. The Central Railroad of New Jersey mined 4,133,000 tons, while individual operators along that line mined 1,670,000 tons. *The New York, Ontario and Western mined 1,086,000 tons and the individual operators 906,000 tons. (563.)

Mr. CHILDS, of the Ontario and Western Railroad, thinks there would be some opportunities in the lower anthracite region, in the neighborhood of Pottsville, for independent operators to buy up coal lands and start into business. Quite an amount of land has recently been sold in this district. In the Wyoming district the railroads control a pretty large proportion of the field, though there are occasional sales. (503.)

Mr. RICE thinks that anthracite coal lands are very difficult to buy, that they are largely held by the railroad companies, and that sales are chiefly made to those companies. It is relatively expensive to mine on a small scale and few people care to start into the business. (743.)

Control of future coal supply by combination.—Mr. STEARNS, president of Coxe Bros. & Co., says that the Reading Railroad is generally considered to have the largest supply of coal. The Lehigh Valley and the Delaware and Lackawanna railroads have also large reserve supplies. The coal land which is owned by the Jersey Central is all quite thoroughly developed. A combination of the Reading, Erie, Lehigh Valley, and other roads having the largest reserves will give these companies a very strong strategical position in the future as the supply becomes more limited. (587.)

5. *Community of interest among anthracite coal roads.*—Mr. WOODLOCK, railroad editor of the Wall Street Journal, says that while there are no definite figures regarding the common ownership of the anthracite coal roads, it is a thoroughly well-understood fact that Mr. J. P. Morgan represents a group of interests that are dominant in the Reading, Lehigh Valley, Jersey Central, Delaware, Lackawanna and Western, and Erie railroads, and that it is believed that these interests are taking steps to control the Delaware and Hudson. The five roads first named, including the Susquehanna and Western, which is owned by the Erie, carried in 1900 about 72½ per cent of the anthracite shipments. It is believed that the Pennsylvania Railroad and the Delaware and Hudson are in general sympathy with the combination, and if these be included 92½ per cent of the tonnage is accounted for. Of the remainder, Coxe Brothers, owning the Delaware, Susquehanna and Schuylkill Railroad, get about 3½ per cent. The Ontario and Western Railroad is a free lance, but practically makes the same rates and prices as other roads.

Mr. Woodlock believes that there is already a sufficient community of ownership to assure absolute control of the anthracite coal situation. He does not think that it is the intention of the capitalists to bring all the anthracite coal roads under one single ownership and management, nor to buy up all of the anthracite coal production. Such monopoly would be injudicious, especially by provoking legislation. It is the intention rather to agree upon prices. This is nothing new, since agreements have practically been made since 1885. Under the present arrangement, however, the agreements will be more effective.

Mr. Woodlock says, further, that the representatives of Mr. Morgan are to be found in the directorates of the Reading, the Lehigh Valley, and the Erie railroads. Mr. Morgan himself has very large capital, and besides he represents various prominent financial interests which support him in such operations as these among the anthracite coal roads. Mr. Morgan is also interested in the New York, New Haven and Hartford, although that has other affiliations. (451-455.)

Mr. HADDOCK, independent coal operator, says that he believes the common reports regarding the establishment of a community of interest among the anthracite coal roads to be well founded. He understands that leading stockholders in the different companies have exchanged stock in such a way as to harmonize the interests. Probably the railroads thus brought into harmony control 60 or 70 per cent of the anthracite coal tonnage. The statement as to the recent establishment of this community of interest is not denied by the parties and the bankers who have made the arrangements. (526.)

Mr. STEARNS, president of the Coxe Bros. & Co., says that he understands that railroads controlling practically 80 per cent of the anthracite traffic are now working in harmony under a community of interest. All the railroads are working together except the Pennsylvania, the Ontario and Western, and the Delaware and Hudson. The witness knows these matters chiefly through the newspapers. The Delaware, Susquehanna and Schuylkill Railroad, which belongs to Coxe Bros. & Co., is in no sense a "Morgan road." There is a newspaper report that the Ontario and Western has recently been brought into the community of interest, but the witness does not know as to its correctness. (588, 589.)

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Mr. WALTER says that he has no definite information as to the tendency toward community of interest, at least as regards other railroads than the Lehigh Valley. There are gentlemen who are directors of other railroads and also of the Lehigh Valley. The purpose is not to establish an agreement or consolidation, but the presumption is that if a man is interested in several properties he will consider the interests of each in the light of the interests of the others.

This witness thinks that there is no tendency toward absolute consolidation and control of the anthracite business. The business is so complicated and each company has such different problems that it would be difficult for one body of men to manage all the properties. Moreover, the fact that only a part of the traffic of the respective railroads is in anthracite coal, and that they have differing interests as regards their other traffic, makes combination more difficult. About half of the total traffic of the Lehigh Valley is in general merchandise, the remainder being in coal. (545, 546.)

Mr. HARRIS, until recently president of the Reading Railroad, says that the Reading Company, the Central Railroad of New Jersey, the Erie Railroad, and the Lehigh Valley are working in substantial harmony. These roads represent about 57 or 59 per cent of the entire transportation of anthracite coal. There is a slight degree of harmony between these and the other leading railroads. Still the relations of the Pennsylvania Railroad to those which are combined is essentially that of an ordinary business competitor. The New York, Ontario and Western is one of the more recently constructed roads, and has never worked particularly in harmony. The Delaware and Hudson is also quite independent, and the witness knows of no movement toward bringing it into community of interest. The Pennsylvania ships about 12 per cent of the anthracite coal, the Delaware and Hudson about the same, the New York, Ontario and Western about 4 per cent, and Coxe Bros. & Co., who are entirely independent, ship about 4 per cent. The witness does not speak of the Delaware, Lackawanna and Western. He says there is undoubtedly a desire on the part of the railroads already working in harmony to bring the others into the community of interest. (598, 599, 608.)

Mr. McLEOD says that he knows of no tendency toward actual consolidation of the different railroads. The tendency toward a community of interests is evident and understood by everyone. The witness feels confident that such community of interest is desirable both in the case of the anthracite roads and of other railroads. He declares he has no financial interest involved, but that he believes the economies of combination will result in benefit to the public. He does not believe it is the intention of those concerned in the movement to rob the public, nor could they do so if they would. (571.)

Mr. SAWARD, editor of the Coal Trade Journal, denies that there is any thorough-going combination among the anthracite coal roads. It is true that the Vanderbilts, Rockefellers, and other great capitalists are interested as shareholders in several of the different coal-producing and coal-carrying companies. It is also a fact that the Lehigh Valley, the Erie, the Reading, and the Central Railroad of New Jersey are more closely united than the other roads. The Reading has recently bought a sufficient number of shares of the stock of the Central Railroad of New Jersey to control it. (513.)

Mr. CHILDS, of the New York, Ontario and Western Railway, asserts that the community of interest between anthracite roads does not seem to have affected the competition in the business, which is still very lively. The Ontario and Western has not entered into any form of combination or community of ownership, nor has it been approached with a view to bringing it in. The witness does not know whether Mr. Morgan, Mr. Rockefeller, or others, who are interested in the other anthracite roads, own stock in his own road. Mr. Depew is a member of the board of directors, but the witness does not think that he has a large block of stock. The Ontario and Western has many business connections with the New York Central, and it is natural that there should be some representative of the New York Central on its directorate. (502, 504.)

Mr. RICE does not think that it would be wise to attempt a consolidation of the railroads carrying the anthracite traffic. He doubts whether the consumer would be seriously affected, being protected by the competition of bituminous coal, but the operation of such varying interests under one head would be impracticable, and the witness sees no advantage in it. (738.)

Effect of combination on small producers.—Mr. STEARNS, president of Coxe Bros. & Co., does not think that the establishment of a community of interest between the railroads will enable them to drive out the independent operators. If the attempt were made to do so by reducing the price of coal, the large interests, which handle the greater volume of coal, would suffer more than the smaller interests. At the same

time the elimination of the independent operators would strengthen the community of interest and would save a considerable amount of trouble to the railroads in maintaining a firm price. (585, 589.)

The New York Central Railroad in the anthracite field.—Mr. McLEOD says he does not believe that the New York Central Railroad as a corporation has any interest in the anthracite region or any intention of building a railroad there. He understands that some of the stockholders are interested in some of the anthracite coal roads. (571.)

Legal difficulties hindering monopoly of anthracite coal.—While Mr. GREENE believes that absolute consolidation of the various anthracite mines and railroads would be desirable, he points out that legislation in the various States, and especially in Pennsylvania, makes such consolidation difficult. The constitution of Pennsylvania especially contains provisions directed against monopoly. To be sure, by a circuitous method the Reading Company, which is chartered in Pennsylvania, has been able to control railroads and mines at the same time, although direct operation of mines by railroad companies is prohibited in Pennsylvania. (469, 471.)

Attempted combination of 1893.—Mr. CHILDS, of the Ontario and Western Railroad, says that Mr. McLeod, of the Reading Railroad, tried to lease the Jersey Central and Lehigh Valley in 1893, in order to effect a combination of the anthracite roads. Then he branched out and tried to control the New York and New England and the Boston and Maine roads, but this was too much of an undertaking, so that whole scheme failed. (503.)

6. *Recent purchases of anthracite coal lands by railroads.*—Mr. WOODLOCK, railroad editor of the Wall Street Journal, declares that it is pretty clear that the owners of the leading railway companies reaching the anthracite coal region are trying to buy up a large part of the few remaining coal lands in the hands of independent operators. The Ontario and Western bought quite a block of land from the Lackawanna Iron and Steel Company and about 600,000 tons of yearly production besides. The Erie Railroad has bought the Pennsylvania Coal Company, which produces about 6 per cent of the total anthracite tonnage. Mr. Woodlock does not think that these purchases were due to a desire to eliminate the independent operators, or to acquire absolute monopoly, but rather to prevent the independent operators from establishing a competing railroad, which would take away from the present railroads a large part of the tonnage of individual operators which they now carry. The Pennsylvania Coal Company had just taken up the proposition to establish a new coal road, the Delaware Valley and Kingston.

The purchase by the Erie Railroad was conducted through Mr. J. Pierpont Morgan, who first bought out the Pennsylvania Coal Company himself, and later sold it to the Erie. The syndicate, headed by Mr. Morgan, is believed to have taken its commission in the form of Erie first preferred stock, \$5,000,000 of which was issued in connection with the deal. Mr. Woodlock thinks that the price paid for the Pennsylvania Coal Company was exceedingly high. (451-453.)

Mr. HADDOCK, independent coal operator, explains the occasion for the recent purchases of coal lands by the railroad companies. He says that about 1898 the independent operators, feeling that it was impossible to get reasonable rates for transportation, projected a new railroad from the Lackawanna region to tide water, believing that the saving in transportation would justify the expense. This road was to be known as the New York, Wyoming and Western. Various mine operators had pledged tonnage to it. The Temple Iron Company, which the witness understands to be controlled by the various railroad companies, bought up most of the mines which had pledged this tonnage, and the enterprise was abandoned.

Some of the remaining independent operators afterwards planned the construction of a railroad to tide water (the Delaware and Kingston), following the bed of the Delaware and Hudson Canal. The Pennsylvania Coal Company, in particular, was cooperating in this enterprise. Very recently the Erie Railroad has bought up the Pennsylvania Coal Company at a high price, and the construction of the railroad has had to be abandoned.

It was more profitable to the operators to sell out in each of these cases at the big prices offered, freeing themselves from the risks of mining and of business. (521, 522.)

Mr. STEARNS, president of Coxie Bros. & Co., says that about three years ago the independent operators made an attempt to build a railroad through Scranton to tide water, with a view to securing a lower rate of freight. Later an attempt was made to build a line along the old Delaware and Hudson Canal to Kingston. Both of these roads were blocked by the buying up of mines upon which they would have to rely for tonnage. The Erie bought out the Pennsylvania Coal Company, and it is the general assumption that this was designed to prevent the building of the line to Kingston, which would especially have served that company. The New York, Ontario and Western also bought out several collieries which would have been

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shippers over the proposed road. The prices paid by the railroads for these mines were high, but it is probable that they are making a profit by operating them and transporting the coal produced. The price paid for the Pennsylvania Coal Company was about \$32,000,000. (588, 589.)

Mr. HARRIS, former president of the Reading Company, says that there was apprehension on the part of the railroads over the proposed extension to tide water of the Erie and Wyoming Valley Railroad, which could, perhaps, have secured 7 per cent of the tonnage. (603.)

Purchase of coal interests by Erie system.—Mr. THOMAS, president of the Erie Railroad, says that substantially all the capital stock of the New York, Susquehanna and Western Railroad is owned by the Erie, which has exchanged its own stocks for it. The Erie has also recently bought the Pennsylvania Coal Company, which owned the Erie and Wyoming Valley Railroad, extending from Hawley to Scranton, and from Hawley to Lackawaxen. The price paid was \$32,000,000 in 4 per cent bonds, and \$5,000,000 in preferred stock. The Pennsylvania Coal Company had a capitalization of only \$5,000,000, but it was established more than 38 years ago.

The motive of the Erie in acquiring the Pennsylvania Coal Company was to guarantee the stability of its transportation. For 38 years it has had close relations with the Pennsylvania Coal Company, but the Erie itself did not reach into the heart of the anthracite region.

Another motive of the Erie in making this purchase was because it has felt in the past that it did not always get a fair share of the freight rate on the coal which it hauled. Reaching only the edge of the coal field it had to pay large sums to the Erie & Wyoming Valley and other roads which first hauled the coal. Finally, the Erie desired to secure a permanent coal supply for its own use. The road consumes 350,000 tons of anthracite yearly. (552, 553.)

Mr. McLEOD thinks that the purchase of the Pennsylvania Coal Company by the Erie Railroad was a wise step for the railroad. It secures to it a tonnage which might otherwise have gone elsewhere. The Pennsylvania Coal Company had a very large amount of unmined coal which the Erie will now transport. The price paid was high, but probably the property was worth it, because anthracite coal gets more valuable as the supply is reduced.

The debt incurred by the Erie in this purchase will be paid off by a sinking fund, to which 10 cents for each ton of coal mined is added. The witness considers this a very wise arrangement. Owners of coal lands are beginning to see that they must do something to liquidate the debts which they have incurred as the coal is exhausted. The profits of the Erie on its coal may be apparently for the time being less than those of less conservative companies that set aside no sinking fund. (572, 573.)

Purchase of lands by Ontario and Western.—Mr. CHILDS, general manager of the New York, Ontario and Western Railroad, says that when it began business in the anthracite region in 1890 it had no direct control of mines. It desired to get control of large mining interests in order to insure profitable transportation. A branch from the main line had been built to Scranton, 54 miles, at a heavy expense, \$2,500,000 to \$3,000,000, and millions more had been invested in branch lines and equipment. Contracts with individual operators, running only a few years, could not be relied upon to assure business to the railroad and earning of interest on its bonds. In some earlier instances loans were made by the railroad for the improvement and development of coal properties, on condition that the coal be shipped over the railroad until exhausted. Within the last 2 years the railroad has absorbed, indirectly, about 80 per cent of the producing capacity reached by it. It bought a majority of the stock of the Elkhill Coal and Iron Company and of the Scranton Coal Company, and advanced money to these companies to buy up smaller mines owned by individual operators, and to promote the development and improvement of the mines. The railroad company, under its charter, could not probably legally mine coal directly. It has made contracts with the two companies named to secure the transportation of all the coal which they shall hereafter produce. In this purchase of the control of coal lands the Ontario and Western is merely following in the steps of the other anthracite roads, the object being to insure a permanent transportation business. (479, 480.)

Purchase of coal lands by Reading Company.—Mr. HARRIS, late president of the Reading Company, says that that company has not made any effort recently to buy up independent coal operators. Practically all of the Reading's lands were bought by Mr. Gowan many years ago. The witness does not think there have been any large purchases of coal lands by the Reading during the past 8 years, nor does he recall any purchase made by Mr. McLeod. (604.)

7. *Purchase of Central Railroad of New Jersey.*—Mr. HARRIS, until recently president of the Reading Company, states that the Reading Company has recently bought a majority of the stock of the Central Railroad of New Jersey, paying for it at the rate of \$160 per share. This price is somewhat higher than the recent range of prices of

stocks of the Jersey Central; but a good many years ago it sold as high as \$150. The number of shares bought was 145,000, costing \$23,200,000, and bonds of the Reading Company were issued to cover this amount. In a certain sense the aggregate capitalization of the two companies is increased by this transaction, but the Central was earning a dividend of from 5 to 7 per cent on its stocks, and at that rate its earnings will pay the interest charges on the debt incurred by the Reading without making it a burden on the general earnings of the Reading. The purchase practically simply changes the personnel of the ownership of the stocks of the Central.

Mr. Harris disclaims any knowledge as to the motive of the bankers in bringing about this control of the Jersey Central by the Reading. He says that J. P. Morgan & Co. represent the owners of the controlling interest in the Reading. The commission charged for the transaction in the purchase of the Central Railroad of New Jersey was not, Mr. Harris believes, more than the ordinary and reasonable commission. The witness believes that the bankers turned over the shares of the Central Railroad of New Jersey at the same price which they paid for them. Of course the commission had to be provided for in the issue of securities.

In explanation of the advantages of this combination Mr. Harris points out that the two railroads naturally constitute one system. All business of the Reading coming from the South or Southwest to New York has to be carried over the Jersey Central about 30 miles. A good deal of bituminous coal is hauled by the Reading from West Virginia to Allentown, and from there goes 90 miles over the Jersey Central to New York. Business going from Philadelphia over the Reading to Bethlehem, Pa., is carried from there over the Central to Scranton.

The witness does not know of any plan for the absorption of the Lehigh Valley road by the Reading. He does not know, however, what bankers and large stockholders may be doing in the purchase of stocks. The combination of the Central and the Reading is not likely to have any influence upon the Baltimore and Ohio or the Pennsylvania railroads. The Baltimore and Ohio furnishes a great deal of business to the Reading, but is not especially its competitor, nor, on the other hand, is there any combination or community of interest between them. (599, 607-609, 610.)

Mr. McLEOD says that in 1892 the Reading Railroad leased the Central Railroad of New Jersey. The State of New Jersey brought suit to cancel the lease, but the witness thinks no decision was rendered, the suit being discontinued after the Reading went into the hands of a receiver. He thinks that the provision of the laws of New Jersey which restricted the lease of the Lehigh Valley and the Central Railroad of New Jersey to a Pennsylvania corporation would not prevent an actual purchase. He understands that the Reading has recently acquired a controlling interest in the Central Railroad of New Jersey, but he thinks the laws of New Jersey prevent an absolute combination and consolidation of the two roads. (572.)

Mr. RICE says that the recent purchase of a controlling interest in the Jersey Central by the Reading Company is the third time that the Reading has acquired control of that company. In the first instance, the Reading borrowed money on the Jersey Central stock which it held, and was not able to retain the stock when the loans were called. In the second case the lease of the Jersey Central was dissolved by the New Jersey courts. It was expected in 1893, when the Reading secured control of the Jersey Central and Lehigh Valley, that the other coal roads would act in harmony. The main reason why the combination failed was that it did not understand the necessity of reducing prices and making its profits through economies. Instead it attempted to increase prices, and could not sell coal. (737; 738.)

With reference to the high price paid for the stock of the Central of New Jersey, Mr. GREENE says that while the price was above the average for a long term of years, holders of large amounts of stock are frequently unwilling to sell at market prices. Moreover, the combination between the Central of New Jersey and the Reading may greatly increase the value of both properties. The Central owns most valuable terminal facilities, partly now unused, on the Hudson River. If these are sold out to another company which can make use of them, a proper payment for them should be made. It is fair to assume that a profit will be made out of the investment, even though stocks be bought at high prices. There is no such thing as an actual value of one of the anthracite roads, if one means the cost of reproduction. It is, however, questionable, in the opinion of Mr. Greene, whether a new road could be built into the anthracite coal fields for less than the capitalization of existing roads. (476.)

B. Relation of railroads to independent operators.—1. *Anthracite Coal Operators' Association.*—Mr. FLEMING, secretary of the Anthracite Coal Operators' Association, says that this association consists of various smaller so-called independent operators who sometimes own mines in their own right and sometimes lease them.

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The members of the association produced up to 1901 about 34 per cent of the entire output. Quite a number of them have sold out recently to the railroad companies, and the present percentage will probably be about 29 or 29½.

The object of the organization was to strengthen the small operators in their relations with the large corporations. It has been the constant effort of the association to obtain more reasonable rates of transportation. (535).

2. *Number of independent operators and their proportion of tonnage.*—Mr. HADDOCK, independent coal operator, says that it is very difficult to determine just what an independent operator is. Strictly speaking, an independent operator is one who mines his own coal, and sends it to the market and sells it himself, or through a commission agent. The great majority of the smaller operators and mining companies, ordinarily called independent, sell their coal to the various railroads or railroad coal companies under contracts, which leave them by no means independent. It has been claimed that the independent operators of both these classes represent about 30 per cent of the total tonnage, but they are growing fewer each year, and the figures are uncertain. The feeling of the owners and managers of the great railroads is that the freight rate is open to attack so long as there are really independent operators. The new contracts on the 65 per cent basis which are being made bind the operators to the railroad for the entire life of their property. In Mr. Haddock's opinion, so many will sign these contracts that no more than 5 or at the outside 10 per cent of the production will remain to the independent operators who conduct their own shipments, as Mr. Haddock does himself. (521, 522, 531, 532.)

Mr. FLEMING, of the Anthracite Coal Operators' Association, says that the independent operator is defined ordinarily as the man who owns mines, irrespective of the way in which he sells his coal. If reference be made to independent shippers and sellers there will probably hereafter be comparatively few; most operators will find it more advantageous to contract with the railroad companies to sell the coal to them. Mr. Fleming is not authorized to make any complaint on behalf of the independent operators. (542.)

Mr. STEARNS, president of Coxie Bros. & Co., says that the number of independent operators in the anthracite region is being gradually reduced by the acquisition of their properties by the railroad companies and other large operators. There has been a substantial decrease in the output of the independent operators in the last few years. The witness does not think that these operators have been forced to sell out, but believes that they did so because they could get a very good price. He thinks that there is no discrimination against them by the railroads in any way. He understands that there are some lands in the Schuylkill region which are now on the market, although it is true that the really desirable coal lands are about all now owned by those which are really operating mines. If lands could be obtained, an independent operator could start into business on as favorable terms as those already in the business.

The Lehigh Valley Railroad has a larger proportion of independent operators than any other of the railroads. (579, 580, 588.)

Mr. SAWARD states that the independent coal operators probably at present produce but a small fraction of the total output of anthracite coal—not more than 20 per cent. Of this proportion by far the greater part is sold directly to the railway companies at the mines under the percentage contract arrangement. Some individual operators still sell their own coal through commission houses. John C. Haddock is one of the largest of these operators. (508, 509.)

Mr. GREENE, of the Audit Company of New York, says that four or five years ago, when he was connected with the anthracite coal business, the independent producers controlled between 28 and 30 per cent of the tonnage. In the case of one or two of the railroad companies the independent tonnage was a very large proportion of the total tonnage. (468.)

Mr. HADDOCK says that there are more independent coal operators in the northern anthracite field than in the Schuylkill field, where the Philadelphia and Reading absorbs most of the territory. In the Lehigh field there have been many changes in ownership recently. (522.)

Mr. HARRIS, until recently president of the Reading Company, says that out of eight or nine million tons shipped by the Reading Company, perhaps one million tons are produced by independent operators. In most cases there is no financial relation between these operators and the railroad. In a few peculiar instances they are brought together. Thus in one case the individual operator mines partly on lands belonging to the Reading, and the Reading mines partly on his lands on account of the geological conditions. (600.)

3. *Attitude of independent operators.*—Mr. THOMAS, president of the Erie Railroad, asserts that the independent operators, including those who ship for themselves, along the Erie road are apparently entirely satisfied with conditions. The most amicable relations have existed. It is, to be sure, the fashion if a man fails in business, in this as in other industries, to charge the failure to the railroad company rather than to lack of ability or application. Mr. Thomas says, further, that the profits of the independent operators are greater than those of the railroads proportionately. The witness has known individual operators who a few years ago were carrying dinner pails, and who now live at the Waldorf-Astoria and run automobiles. (549, 556.)

4. *Coxe Brothers & Co.*—Mr. STEARNS, president of Coxe Bros. & Co., says that the mines of that company are located in the Lehigh anthracite region. The company employs about 3,500 men, and in 1900 shipped 1,032,577 tons of coal of its own production; its total production, a small part being used for local purposes, amounting to 1,246,592 tons. The company purchased from Mr. C. Pardee 529,021 tons, which it shipped, making the total shipments 1,561,598 tons. Of this amount 1,071,357 tons were sent to Perth Amboy and 149,209 tons to points on the railroad lines east. The company shipped to Buffalo for lake shipment 190,870 tons. The Coxe company produces and hauls about 3½ per cent of the entire output. (576, 581.)

5. *Plymouth Coal Company.*—Mr. HADDOCK, of the Plymouth Coal Company, says that when running at full capacity his company employs from 1,000 to 1,100 men. It usually works more days than the mines controlled by the railroad companies, simply because Mr. Haddock, shipping his own coal, has insisted on the right to secure cars, and to be free from dictation as to output. (533.)

C. *Percentage contracts and freight rates.*—1. *Percentage contracts with independent operators.*—Mr. SAWARD, editor of the Coal Trade Journal, says that the great bulk of the coal hauled by the anthracite roads is produced by those roads themselves or their subsidiary companies. By far the largest proportion of coal produced by independent operators is brought to tide water under a contract by which the railroad company receives 40 per cent of the tide-water price and the individual operator 60 per cent. Operators are therefore interested in keeping the price of coal high. (509.)

Mr. STEARNS, president of Coxe Bros. & Co., says that for several years the great majority of the independent operators have sold their coal to coal companies affiliated with the railroads. The operators receive 60 per cent of the tide-water prices and the railroad company receives 40 per cent, guaranteeing the sale and paying all selling expenses as well as transportation. The railroad assumes the actual title to the coal at the breaker and the operator has no responsibility. The settlement is made with the independent operators monthly on the basis of the prices received during the preceding month. (577-580.)

Mr. CHILDS, general manager of the New York, Ontario and Western Railway, says that when that road reached the coal fields in 1890, it made contracts with individual operators agreeing to carry their coal to tide water, and to receive for transportation 40 per cent of the tide-water price in case of prepared sizes. The actual form of the contract was a purchase of the coal at the mine by the railroad. At first, part of the terminal charges at tide water were paid by the individual operators, but after several years the railroad assumed all these expenses, paying the operator 60 per cent of the average tide-water price, free from all commissions, terminal charges, etc. Thus, if the tide-water price should be \$3, the price to the operator at the mine would be \$1.80 net.

Mr. Childs states further that the practice of the other railroads, with regard to the purchase of coal on the percentage plan, is practically the same as that of the Ontario and Western. On some of the roads part of the individual operators ship to tide water independently, paying the freight charges and selling the coal directly. On the Ontario and Western, however, all or practically all operators sell to the railroad at the mine. On shipments west, as well as on those to tide water, the Ontario and Western usually buys the coal from the operators on a percentage system.

At the time of Mr. Childs's testimony, February, 1901, a revised contract with the operators was under consideration by the Ontario and Western and other railroads. This provided for the payment to the operators of 65 per cent instead of 60 per cent of the tide-water price on prepared sizes of coal. (496-498.)

Mr. McLEOD says that it was through his influence that the present system of percentage contracts with individual operators was introduced as a general system. Prior to that time there were some contracts by which the railroads hauled coal to the seaboard and sold it, allowing the operators a percentage of the price. There were such contracts on the Lehigh Valley by which the operators received 55 per

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cent. Mr. McLeod canceled these contracts and made others on the 60 per cent basis. The coal by this arrangement is sold by the producer to a coal company affiliated with the railroad. The coal company sells it and receives its 40 per cent of the price, while 60 per cent goes to the individual operator. Out of the 40 per cent the coal company must pay freight to the railroad company with which it is affiliated.

Mr. McLeod thinks there is practically no difference in the new contracts on the 65 per cent basis except as to the rate allowed. He understands, however, that the new contracts are to cover all the coal in the ground of the operator signing the contract. The contracts made by Mr. McLeod ran 7 or 8 years. They were considered very generally satisfactory. (562, 563.)

Mr. FLEMING says that many years ago the contracts between the railroad companies and the coal operators allowed the operators only 40 or 45 per cent of the tide-water price of coal, although some contracts made the percentage vary in accordance with the amount paid to labor. After that for a time the rate was 55 per cent of the tide-water price. From 1892 to 1898 the contracts allowed the operators 60 per cent of the tide-water price, while the present contracts which are being made are based on 65 per cent. (536.)

Mr. WALTER says that the auxiliary companies of the Lehigh Valley Railroad buy part of the coal produced by independent operators on the percentage basis. The rate paid to operators at the time of his testimony, February, 1901, was 60 per cent of the tide-water price. A contract on the basis of 65 per cent was then under discussion with the probability that it would be adopted. (543.)

Mr. HADDON, independent coal operator, says that since the time of the attempted combination by Mr. McLeod, in 1892, the railroads have offered to independent operators to buy and transport their coal, paying 60 per cent of the price received at tide water on the prepared sizes. This was considered a concession at the time, since individual operators were protesting vigorously against the rates that were being charged for transportation. The present movement for an increase of the percentage to 65 has grown out of the desire of the railroad companies to suppress the construction of a railroad by the independents. (522.)

Mr. WOODLOCK says that the railroads have had contracts with the independent coal operators by which the rate of transportation was based on the price received for coal at tide water. The railroads would take the coal to market and give the producer 60 per cent of the price received at tide water. About 2 years ago the project of an independent railroad from the anthracite coal region began to be pushed and the other railroads have felt themselves forced to make a concession. The proposed new contracts give the operators 65 per cent of the tide-water price, the railroads accepting 35 per cent as the payment for freight. (454.)

Mr. HARRIS, until recently president of the Reading Company, asserts that he does not know whether more than half of the coal produced by the independent operators along the Reading Railroad is sold to the Reading Coal and Iron Company or not. In most of the other regions more than half of the operators do sell to the railroad companies. (600.)

2. *New 65 per cent contracts.*—Mr. THOMAS, president of the Erie Railroad, says that most of the anthracite coal produced by independent operators reached by that railroad is bought by the railroad through a subordinate company, on the percentage contract system. At present (February, 1901), the operators receive 60 per cent of the tide-water price. The Erie, together with other railroads, was at that time arranging for a contract allowing the operators 65 per cent, and the witness had no doubt that the arrangement would be completed. It was not a condition of the contract that all the operators should accept it, but the witness thinks that the railroad is entitled to the acceptance of most of the operators. He believes the operators are generally well satisfied.

Mr. Thomas further affirms that these new contracts cover the entire life of the property of the various operators; that is, the Erie agrees to purchase all the coal in the ground, and the operator to sell it all. (549.)

A copy of the form of the proposed 65 per cent contract was submitted by Mr. Childs. It contains a promise on the part of the producer or seller to deliver to the railroad company all the coal which it produces. The railroad company agrees to take as much coal as the market will permit, dividing fairly the demand between the various collieries, in proportion to their capacity, with no preference for mines operated by itself. The division of tide-water price is different in the case of other classes of coal than in the case of the larger prepared sizes. The main clauses of this contract are as follows (496, 498, 505-507):

DIGEST:—THE ANTHRACITE COAL SITUATION. CXXXIX

"This agreement, made and executed in the city of Philadelphia, Pa., this — day of —, nineteen hundred —, between — (hereinafter called the seller), party of the first part, and — (hereinafter called the buyer), party of the second part, witnesseth:

"First. The seller hereby sells, and agrees to deliver on cars at breaker to the buyer, all the anthracite coal hereafter mined from any of its mines now opened and operated, or which it may hereafter open and operate on the premises intended to be covered by this contract, and any which shall be reclaimed from culm banks on said premises, viz:

"Shipments to be made from time to time as called for by the buyer. The buyer to give on the 25th of each month, notice of the quantity as nearly as practicable buyer will require for next month, and arrange to take the coal in as nearly equal daily or weekly quantities as in its judgment the requirements of the market will permit. The buyer to use its best efforts to find a market for the seller's coal so as to enable the seller's collieries to be worked as many days as practicable, with due regard to the general market conditions, and to give orders for shipment which will enable the seller to work its collieries as many days in each year as other collieries work similarly situated.

"The buyer agrees that it will not discriminate in favor of its own mines, or any persons, firms, or companies with which it has contracts to buy coal, but that the quantity to be ordered monthly shall be a just proportion of the entire quantity of coal agreed to be purchased by the buyer, measured by the colliery capacity of the respective sellers. It being understood that so far as practicable the quantity ordered shall not be less than a just proportion of all the anthracite coal which the requirements of the market may from time to time demand. The colliery capacity shall be determined as of the 1st of January in each year by the parties hereto, and, on their failure to agree, the president for the time being of Girard Trust Company shall select a suitable expert for this purpose. Should any marked change take place affecting the productive capacity of the colliery, either the buyer or the seller may call for a new determination of the colliery capacity as of the beginning of any quarter of the calendar year.

"Second. The buyer agrees to pay and the seller agrees to accept the following prices for said coal, when prepared in accordance with the standard hereinafter set forth, and delivered f. o. b. railroad cars at the breaker:

"For all sizes above pea coal, sixty-five (65) per cent of the general average free on board prices of said sizes received at tide points at or near New York, between Perth Amboy and Edgewater, computed as hereinafter provided.

"For pea coal fifty (50) per cent of the general average f. o. b. price for pea coal at said tide points at or near New York when the said price is two dollars and fifty cents (\$2.50) per ton or less, and for each advance of ten (10) cents per ton in the said f. o. b. price above two dollars and fifty cents (\$2.50) the proportion paid the seller shall be increased one (1) per cent until the percentage paid for pea coal reaches sixty-five (65) per cent.

"For buckwheat coal No. 1, forty (40) per cent of the general average f. o. b. price at said tide points at or near New York when the said price is two dollars (\$2.00) per ton or less, and for each advance of ten (10) cents per ton in the said f. o. b. price the proportionate price paid the seller shall be increased two (2) per cent until the said f. o. b. price reaches two dollars and fifty cents (\$2.50), after which the proportionate price paid the seller shall advance one (1) per cent for each ten (10) cents advance in the f. o. b. price above two dollars and fifty cents (\$2.50), as in the case of pea coal above mentioned. Provided that nothing herein contained shall oblige the buyer to pay for buckwheat No. 1 coal a rate higher than for pea coal.

"For all sizes smaller than buckwheat No. 1 the seller shall receive twenty-five (25) cents per ton f. o. b. railroad cars at breaker, and for each ten (10) cents increase in the general average f. o. b. price above one dollar and thirty cents (\$1.30) a ton at tide, the price shall be increased five cents per ton; but it is understood that the buyer shall have the option to decline to take these smaller sizes in excess of the proportion taken from the buyer's own collieries and operations.

* * * * *

"Fifteenth. If by reason of changes in trade or colliery conditions the seller is unable to operate its mines without financial loss on the basis of this contract, and the buyer declines to modify this agreement, the seller may submit the questions involved to the said board of arbitration, and, if the board decides that the seller can not operate its mines without loss on the basis of this contract, and if the buyer and seller can not agree on a modification of this contract, then this contract shall cease and determine.

"Sixteenth. It is also understood and agreed (anything herein contained to the contrary notwithstanding) that if at any time or times the average f. o. b. price at tide for sizes of coal larger than pea coal shall be less than three dollars and fifty cents (\$3.50) per ton, then the seller may at its option temporarily suspend mining and cease all deliveries hereunder until the said average price shall reach three dollars and fifty cents (\$3.50) per ton; provided, however, that two weeks' notice of intention to stop deliveries shall in such case be given by the seller to the buyer; and, if any question arises as to price being less than \$3.50, it shall be submitted to the permanent arbitration board."

Mr. STEARNS, president of Cox & Co., testifying in April, 1901, said that he understood that the new 65 per cent contracts had not yet gone into force. He believes that the contracts were drawn up by a conference between a committee of independent operators and a committee representing the railroad companies. Their session lasted for several weeks. The witness understands that the proposition was offered by all the railroads alike. He has been told that the operators of the Pennsylvania line have signed the agreements, but that none of those on the other lines had signed them up to a few days before his testimony. It was his impression, however, that the contracts would be adopted.

Mr. Stearns says that the new 65 per cent contracts are intended to cover the entire output of the mines of the independent operators in the future, excepting in the case of those made by the Pennsylvania Railroad. The earlier 60 per cent contracts mostly ran for a period of years and have for the most part expired. It is his opinion that the new contract is being proposed by the railroads with a view to securing control of the business and preventing competition. Mr. Stearns understands that the 65 per cent rate of the new contract applies only to the prepared sizes. In the case of pea coal, the operators, he believes, are to receive 50 per cent, and in the case of the smaller sizes, 40 per cent of the prices. (577-580.)

Mr. HADDOCK, independent coal operator, says that the new contract proposed by the railroad companies, allowing the operators 65 per cent of the tide-water price of coal, is conditioned upon the agreement to sell all of the coal to the railroad company for the entire life of the property. The railroad companies also desire a large majority of the operators to sign the contracts before the new arrangement is put into effect. This will practically tie up very nearly all of the independent operators. (531, 532.)

Mr. WALTER says that the new contracts on the 65 per cent basis which are being made provide that the entire product for the life of the collieries shall be sold to railroads, but that there are many limitations and stipulations in connection with this provision. (545.)

Mr. FLEMING declares that while the operators would like to get a larger proportion of the tide-water prices they are very generally satisfied with the new 65 per cent contract. Out of the 35 per cent which it receives the railroad company must not only pay freight, but also the selling expenses.

The witness, as the representative of the Anthracite Coal Operators' Association, is not authorized to make any complaint whatever. He says that he would rather not answer the question whether he knows of any cause for complaint. (537, 542.)

Mr. Fleming thinks that the new 65 per cent contracts are in some cases made for the entire future product of the mines, but that in other cases they are for shorter periods.

The witness stated further that under these contracts the railroad agrees to buy from the operator "as much as it requires." It certainly could not agree to take an amount which it could not dispose of. In many cases, however, companies are allowed to sell on their own account any excess above the amount which the railroad company agrees to take from them. (536, 537.)

Mr. Fleming stated in February, 1901, that most of the members of that association were signing the new contracts providing for the 65 per cent basis on tide-water prices. The witness says no doubt that the new arrangement will go into force. The operators find it much more advantageous to enter into these contracts and avoid the necessity of having offices of their own, or branches at a number of different places for disposing of the coal, which involves large expense. (537.)

Mr. HARRIS, late president of the Reading Company, stated in April, 1901, that the new 65 per cent contracts had not, so far as he knew, yet gone into effect, but that he believed the individual operators were generally satisfied with them. In the Reading territory the operators have not objected on the ground that the contracts require them to sell their entire future output for the life of the mines to the railroad. (610.)

3. *Freight rates on anthracite coal. Comparison with bituminous coal.*—Mr. FLEMING, secretary of the Anthracite Coal Operators' Association, says that the majority of the

members of that association sell their coal to the railroad companies under percentage contracts, so that there is no question with them as to freight rates. On the relatively small proportion which operators ship or sell on their own account they make complaints frequently.

Mr. Fleming declares himself unable to compare the charges per ton per mile for hauling anthracite coal with those for hauling bituminous coal. Some years ago bituminous coal was being hauled from West Virginia to tide water for three mills per ton per mile, but that was exceptional. It was really a losing rate. At the same time the average rate on anthracite was about nine mills. There are frequent complaints as to the disparity in the rates on the two classes of coal, but there is good reason why soft coal should be carried cheaper. The entire product is of the same grade and can be dumped from the train into a vessel. Anthracite is in different sizes and of different qualities, which must be kept apart. This coal must therefore be put in storage piles or held in cars or on barges subject to demurrage charges. (536, 539, 540.)

Mr. SAWARD, of the Coal Trade Journal, says that it is no longer worth while to pay much attention to schedule rates of transportation on anthracite coal, since practically all coal is hauled on a percentage contract by which the railroad receives 40 per cent of the tide-water price for transportation. When coal is at \$4 the railroad receives \$1.60. If the average distance to tide water from the anthracite fields is 160 miles, it makes 1 cent per ton per mile. The rate per ton per mile thus varies in accordance with the tide-water price. The rate is higher than on soft coal, but the two are entirely different in their nature and in the cost of transportation. (509.)

Mr. STEARNS, president of Coxie Bros. Co., says that the distances from the anthracite mines to tide water vary considerably. The difference between the distance of the Lehigh region and the Wyoming region is comparatively slight. From the Schuylkill region the coal is usually shipped to Philadelphia.

There have been complaints at times by the independent operators that the rates charged for transporting coal were excessive, especially as compared with bituminous coal. The witness understands, however, that bituminous freight rates have recently been increased. In his judgment it is proper that the rates on anthracite should be higher than those on bituminous coal. The cost of transportation in itself is perhaps not greater, but there are several different sizes of anthracite coal which must be kept separate, necessitating frequently storage in cars or in bins or vessels. Moreover, the cars in which bituminous coal is hauled are usually returned with some load—iron ore, iron, or some other product. In the case of anthracite coal the cars usually return empty. (579.)

Mr. HADDOCK, independent coal operator, says that bituminous coal is hauled to tide water at much lower rates per ton per mile than anthracite coal, but he thinks it would be necessary to ask the railroad men the reason for the difference. (530.)

Mr. CHILDS, of the New York, Ontario and Western Railway, says that that road does not receive nearly as much as 10 mills per ton per mile on anthracite coal, nor does he think any road ever received as much as that. The average receipts per ton by the Ontario and Western for the year ending June 30, 1899, were \$1.128 for the distance of 214 miles, from Scranton to Weehawken. (During the summer months vessels are loaded at Cornwall-on-the-Hudson, 54 miles nearer.) The charge thus runs from 6 to 7 mills per ton per mile. The relative rate is higher for the shorter routes, of which the shortest is the Delaware, Lackawanna and Western, 145 miles. (496, 497.)

Mr. Childs says that the railroad tariffs in effect on his road from the anthracite coal fields are: To Buffalo, \$2 per ton; Chicago, \$3.50; St. Louis, \$4; tide water, \$1.75. But practically all the coal carried by this road is on the percentage basis. (496.)

Mr. McLeod says that the average freight rate to tide water from the anthracite coal fields is about \$1.50 per ton. He knows of one colliery where the average rate for some time has been only \$1.36 per ton, amounting to 7 mills per ton per mile. (565.)

Mr. HARRIS, until recently president of the Reading Company, says that he does not think it is the purpose of the railroads in the anthracite coal field to put up the freight rates by combination among themselves. As a matter of fact, freight rates have not been secretly cut much in recent years. They have been gradually reduced during the past 6 or 8 years. A few years ago the general rate from the mines to tide water was about \$1.70 a ton. It is now about \$1.30, but varies greatly. (600.)

4. *Relative freight rates under percentage contract and under tariffs.*—Mr. HADDOCK says that he has always refused to enter into contracts for the sale of his coal to the railroad companies on the 60 per cent basis. He has preferred to remain independent. He does not want to have to rely on other persons to find markets for him.

Another reason why Mr. Haddock has preferred to conduct his own shipments is because of the limitation on output imposed by the railroad companies under the percentage contract.

Nevertheless, Mr. Haddock asserts that it would have been more economical for him to enter the percentage contract than to insist on selling his own coal and paying the freight rates. The railroad companies have not made a freight rate to independent shippers as low as the 40 per cent of tide-water price which they accept in the case of the contracts. He has always insisted that the individual operator who sells his coal to the railroad company at the mine ought to be put on the same level with the operator who prefers to send his coal to tide water, and that, because of the selling expenses, which the latter class of operators must incur, they ought to have a freight rate equal to less than 40 per cent of the tide-water price. In the case of the new contracts, giving the railroads 35 per cent, the witness thinks that the absolutely independent operator ought to have his coal transported at a rate equal to 30 per cent of the tide-water price, and he expects to be able to fight it out on that basis. (523, 532, 534.)

Mr. THOMAS, of the Erie Railroad, says that at the present time (February, 1901) the freight rates on anthracite coal to tide water vary from \$1.15 to \$1.40 per ton, the latter rate being on the prepared sizes and the smaller rate on the pea coal and other small sizes. These rates the witness states are about the same as the proportion of the tide-water price going to the railroad company under the percentage contract system at the 40 per cent rate.

The witness does not think that the independent operators who ship for themselves are entitled to as favorable a rate as that proposed by the new contract allowing the railroad company only 35 per cent of the tide-water price. These new contracts give the railroads a stability of business, while the independent operators may ship to-day and not at all to-morrow. (549, 550.)

5. *Profits of anthracite coal roads in relation to rates.*—Mr. WOODLOCK, railroad editor of the Wall Street Journal, declares that the anthracite coal roads have never been very profitable, and draws therefrom the conclusion that they have not kept freight rates nor the price of coal unduly high. Some of these roads have been repeatedly in bankruptcy. Even at present, in very prosperous times, most of them are making no more than reasonable dividends. While the Jersey Central and the Reading are doing much better than formerly, their increased earnings are chiefly due to general merchandise traffic and not to coal traffic. The Delaware and Hudson and the Lackawanna have always made good profits, but their capital was low at the start. There is a distinct prejudice among investors and speculators against the securities of most of the anthracite roads. It is felt that the anthracite coal is expensive to mine and expensive to handle. It must be broken up and screened and sorted. The cars having different kinds of coal can not be mixed.

As regards the freight rates, it is more profitable, Mr. Woodlock believes, to handle bituminous coal at 2 or 2½ mills per ton per mile than anthracite coal at 9 mills per ton. Most of the anthracite coal has to be hauled over the mountains, up steep grades. As a general thing, bituminous coal originates at the top of the grades, and can be hauled very easily. This is especially true on the Chesapeake and Ohio and Norfolk and Western roads. (453, 454.)

6. *Methods of fixing anthracite freight rates.*—Mr. McLEOD, former president of the Reading Railroad, says that freight rates on anthracite coal are made in the same way as on other merchandise. The freight agents get together and discuss rates. There have been no important changes in recent years. (561.)

7. *Case of Coxie Brothers v. Lehigh Valley Railroad, 1889.*—Mr. HADDOCK, independent coal operator, refers to the case brought by Coxie Bros. & Co. against the Lehigh Valley Railroad Company as an illustration of the great difficulty of securing just rates on anthracite coal. This large and powerful company made a complaint before the Interstate Commerce Commission in 1889 that the rates to tide water were excessive. It was a year or a year and a half before the decision of the commission was rendered, which was in favor of Coxie Brothers. Then the railroad company took an appeal, and the rate prescribed did not go into effect. Meantime Coxie Bros. & Co. were without their required relief, and were forced to build about 40 miles of railroad, connecting their properties with various other railroads, in order to compel the railroads to give them reasonable rates of transportation. (525, 535.)

Mr. STEARNS, president of Coxie Bros. & Co., says that Coxie Brothers built the Delaware, Susquehanna and Schuylkill Railroad, as he understands, for the purpose of connecting all of their mines with one another and with different main anthracite railroads in order that the output of the company might be sent over whichever road was desired and that the most favorable terms might thus be secured. The road connects with the Lehigh Valley, the Philadelphia and Reading, the Pennsylvania, and the Central Railroad of New Jersey. It extends from Gum Run Junction, on the Pennsylvania Railroad, to Hazleton, Drifton, Beaver Meadow, and Oneida.

At present Coxe Bros. & Co. ship all of their own coal to tide water over the Lehigh Valley Railroad in their own cars and trains. The company has a traffic agreement with the Lehigh Valley which has as yet several years to run. The witness is in doubt whether it is as profitable for him to ship coal in this way as it would be to sell it to the railroads on the 65 per cent basis. He says that he not only has to bear selling expenses, but that the plant is constantly depreciating and that there are many other expenses. The witness does not think that Coxe Bros. & Co. ever sold coal to the railroads on the percentage contract system. He believes that the Coxe Brothers formerly had some special traffic arrangement with the Reading Railroad Company. He knows of no other firms or corporations which have relations to the railroads similar to those which now exist in the case of Coxe Brothers.

The distance from the junction of the Delaware, Susquehanna and Schuylkill Railroad with the Lehigh Valley to Perth Amboy is 125 miles.

The westward shipments of Coxe Bros. & Co. are made over the Pennsylvania Railroad both to points along the railroad and to Buffalo, from which latter point coal is shipped by water. (576-578, 590.)

Mr. McLEOD does not think that the independent operators during the time when he was president of the Reading were generally dissatisfied with freight rates and conditions. He does not think that the case brought by Coxe Brothers against the Lehigh Valley Railroad indicated a general attitude of complaint on the part of the operators. One individual might have a grievance which others did not have. (573.)

8. *Transportation of anthracite to New England.*—Mr. McLEOD says that the New England States take 11 per cent of the anthracite product. It is carried to them largely by water. The rates differ from time to time according to the supply of vessels. The Reading takes most of its coal for New England to Philadelphia whence it is shipped by the Delaware River. Other companies take their coal to New York and vicinity for shipment. All-rail rates are determined by the same influences as other all-rail rates. (561, 562.)

Mr. THOMAS, president of the Erie Railroad, says that much of the anthracite coal consumed in New England goes by water. The Erie ships some of its coal for New England by way of Fishkill and Newburg. In the case of coal hauled by rail in this way the charge from the anthracite fields to the destination is composed of two rates, that to the Hudson River, and that made by the New England railroads. The New York, New Haven and Hartford Railroad gets a much larger proportion per ton per mile than the road west of the Hudson gets. There is no through rate with an equal proportion per mile to each road. The reason for this arrangement is that the New Haven road practically has a monopoly of certain territory, although in other places it is subject to competition from other railroads and from water transportation. There are also many points on the Boston and Maine and other New England roads where transportation of coal is virtually a monopoly in the hands of a single railroad. Mr. Thomas does not think, however, that there is usually a disposition to exact excessive rates on account of such monopoly. (553.)

Mr. CHILDS, of the New York, Ontario and Western Railway, says that nearly all shipments of anthracite coal to New England, both by his railroad and by other anthracite roads, are made by water from the terminals. Most anthracite coal is used at large cities near the coast. Coal, for example, is shipped to Boston by water, and from there short distances by rail. A small amount of coal goes over the Poughkeepsie bridge, and some is transferred by floats from New Jersey to points on the New Haven road, from which it goes by cars. For these reasons Mr. Childs does not see any combination of railroads attempting to control the anthracite trade in New England. (500, 501.)

Mr. STEARNS, president of Coxe Bros. & Co., says that Coxe Bros. & Co., ship a considerable amount of coal to New England, but that this is mostly sold free on board Perth Amboy, although sometimes it is sold delivered at points reached by water. Where the coal has to be hauled by rail the purchaser must take care of the freight rate. (585.)

9. *Lake shipments of anthracite coal.*—Mr. STEARNS, president of Coxe Bros. & Co., says that company shipped about 200,000 tons of coal over the lakes by way of Buffalo in 1900. Boats are chartered from different owners. The freight rates on the lakes vary greatly. They have been as low as 20 cents per ton from Buffalo to Chicago, and as high as \$1.25. Coxe Bros. & Co. have their own agents in Duluth, Chicago, and Milwaukee for handling their coal. (504.)

D. Alleged discrimination against independent operators.

1. *Freight rates.*—Mr. STEARNS, president of Coxe Bros. & Co., says that the railroads charge the coal companies which are connected with them regular tariff rates for hauling coal. He does not know whether it would be legal for them to charge a lower rate or not, but believes if they should do so independent shippers would find

some way to stop it. In any case the payment of freight by the railroad coal companies to the railroads is simply taking money out of one pocket and putting it into another and it does not matter to either what the rate is.

The witness has heard statements made that the railroad companies operated their coal companies at a loss, but made up by the profit on transportation. From his own experience the witness thinks that the coal companies ought to make a small profit on mining. In his judgment, however, an independent operator who could get control of a proper body of coal would get the same facilities for transporting to the markets as those who are already in the business. He has never heard of the alleged fact that the Erie Railroad Company charges the Delaware and Hudson 60 cents a ton for hauling coal to tide water, while charging independent operators \$1.60. He does not think that the recent combination of the anthracite roads is designed to discriminate against independent operators. (500, 582, 588.)

2. *Discrimination in western freight rates.*—Mr. STEARNS, president of the Coxe Bros. Company, says that the freight rates from the anthracite region to the west are published by the railroads each spring, and that Coxe Bros. & Co. pay the regular published rates. The witness believes that all operators pay the regular published rates and that there is no discrimination. He does not believe, however, that independent operators ship their coal west to any extent. Most of those shipping east ship on the percentage contract system. (583.)

3. *Restriction of output and of supply of cars of independent operators.*—(See also *Percentage contracts*, p. CXXXVIII; *Allotment of tonnage*, p. CXLVII.)—Mr. HADDOCK, independent coal operator, asserts that under the contracts made by individual operators, by which they sell coal to the railroads on the basis of a percentage of the tide-water prices, the railroad companies determine how much each operator may ship. The contracts themselves stipulate that the railroad companies shall determine the amount. This is done more or less arbitrarily by the officers of the railroad. (524, 527.)

The witness has preferred to ship his coal independently, because he could then insist upon producing as much as he pleased, and upon demanding an adequate supply of cars. In 1884 and 1885 the railroads did not supply cars sufficient to enable Mr. Haddock to operate 27 days in 3 months. After difficulties lasting for a year or more he served notice on the railroad company that if it failed to supply enough cars it would be necessary to hold the railroad for the damages. The matter was fought out, and there has been no serious difficulty since. The absolutely independent operator is thus likely to be in a position of greater advantage than the operators who make contracts with the railroad companies, although the witness does not know just what treatment the railroads give to other operators who are in the same position as himself. There are complaints from other operators of a shortage of cars, but the witness does not know how just they are. The witness would expect to have to restrict his output if he went into contracts with the railroad companies. He has occasionally sold coal to the companies, and they were quite willing to take it on the percentage basis.

Mr. Haddock is disposed to admit that there must be some restriction of production because of the fact that the demand for anthracite coal is so much less in the summer than in the winter, and that coal can not satisfactorily be stored. But the restriction is not always a just one. Some of the independent operators prefer to have a voice in determining their own production, and in ascertaining the market requirements. They have succeeded in getting a voice in the matter, "but it has been at quite a cost." Mr. Haddock does not explain just what is meant by this phrase, saying that he does not wish to be pressed to speak on the subject, or to incriminate anyone, although he would not have the word incriminate unduly emphasized. It has been a way beset with difficulties. (524, 526-527.)

Mr. STEARNS, president of Coxe Bros. & Co., says that while he was connected with the Pennsylvania Railroad he heard plenty of complaints from independent operators to the effect that there was an insufficient supply of cars, but that as a matter of fact the Pennsylvania Railroad supplied cars more freely to the independent operators than to its own subordinate coal companies. The witness believes that the Lehigh Valley and other railroads try to distribute cars fairly. There are times when no road has cars enough to supply the demand. The complaint brought by Coxe Bros. & Co. in 1889 was not on the ground of discrimination in furnishing cars, but on the ground of excessive freight rates. (586.)

Mr. HARRIS, late president of the Reading Company, emphatically asserts that there is no discrimination in freight rates or in the supply of cars as between individual operators and the coal company affiliated with the Reading Company. The coal company is charged precisely the same freight rates as the individual operators, and this has always been the rule. The distribution of cars is made on the basis of a careful estimate of the productive capacity of each colliery. The railroad has an officer who visits the collieries and finds out how much they can produce. The aggregate number of cars is distributed in proportion to the relative productive

capacity. Any private operator along the Reading line would admit that the apportionment has been equitable. If an operator increases the capacity of his colliery by any improvements, the railroad's official examines the improvements and changes the allotment accordingly. Every operator is perfectly free to increase his capacity. (600, 601.)

Mr. WALTER says that on the Lehigh Valley Railroad about 60 per cent of the coal is shipped by independent operators, this being the highest percentage on any of the railroads. Independent operators get cars even more freely than the companies connected with the railroads. It is not the policy of the Lehigh Valley to try to get absolute control of the region. There is no restriction upon the amount of coal an operator may ship except in so far as he voluntarily agrees to it. Of course every operator thinks he ought to have a larger share of the business. Since the whole region can produce much more than the market will take, the general interests are conserved by a reasonable division. (545.)

Mr. CHILDS, of the Ontario and Western Railroad, asserts that there is no discrimination in furnishing cars or allotting tonnage to independent operators. On the Ontario and Western the independent operators do not work their mines any fewer days during the year than the companies connected with the railroads. (504.)

Mr. SAWARD, of the Coal Trade Journal, thinks that the independent operators have little reason to complain of discrimination in furnishing cars. There is always a season in fall when there is a shortage of cars for all producers alike, but this lasts only a short time. (509.)

Mr. FLEMING, of the Anthracite Coal Operator's Association, thinks that the railroads are perfectly fair in furnishing cars to independent operators. The tendency seems to be to give the independent operators preference over the companies controlled by the railroads, since the number of days worked by an independent operator is usually greater than the number of days worked by the railroad mines. As in any large industry there are times when cars are scarce. The Anthracite Coal Operators' Association under those circumstances brings influence to bear, but the witness is not sure that it has any effect. The situation is much better than it was two years ago, when Mr. Brooks complained before the Industrial Commission of shortage of cars. The railroads have added decidedly to their equipment. (536, 537.)

E. Production of coal—Restriction and allotment of output.—

1. *Production and consumption of coal.*—Mr. SAWARD, of the Coal Trade Journal, asserts that there is constant tendency to overproduction of anthracite coal and that the capacity for production is greater than the demand. During December, 1900, and January, 1901, the monthly production was from 5,000,000 to 5,250,000 tons. At that time the demand was good, so that there was possibly prospect for the taking of 60,000,000 tons in a year, but ordinarily the market will not take that amount. The witness thinks that there is practically no regulation of the amount of production at present, but that it would be desirable if there were, in keeping the trade more steady. Elsewhere, however, speaking of community of interest between the coal roads, he implies that there is a growing degree of control over the amount of production. (511, 512.)

Mr. STEARNS, president of Coxie Bros. & Co., says that the demand for anthracite coal varies greatly according to season. The amount of coal which the market will take is quite definitely limited.

There is a constant temptation to operators to increase their productive capacity. It costs so much to store anthracite coal that producers prefer to be able to supply the demand in the winter months by contemporaneous production. In order to be able to meet this demand each mine wishes to extend its workings so that the productive capacity becomes much in excess of what would be needed if the mines ran uniformly through the year. The fact that certain collieries are becoming exhausted prevents the increase in productive capacity from becoming as great as would otherwise be the case. (587.)

Mr. THOMAS, of the Erie Railroad, says that the anthracite mines of the country are capable of producing 60,000,000 tons a year, but that the country will consume only about 45,000,000 tons. The fact that production during the winter of 1900-1901 was being carried on at the rate of 60,000,000 tons per year was explained altogether by the great shortage occasioned by the closing of the mines in September and October on account of the strike. The anthracite mines have never been able to work more than 235 days in the year. If more coal were produced it would have to be thrown into the river. (555, 556.)

Mr. CHILDS, of the New York, Ontario and Western Railway, says that coal operators necessarily restrict their output at certain times because of the lack of demand. On his railroad it has happened that out of 4,900 cars used more than 3,000 were

loaded with coal for which there seemed little demand. Under these circumstances the supply of cars to the mines must be restricted. The output is usually in excess of the market from about February to May, while the demand is often in excess of the output in the fall. It is a mooted question whether it pays to store anthracite coal. The cost from waste and handling would amount to about 40 or 50 cents per ton. The quality of coal also deteriorates during storage. Nevertheless, the Ontario and Western has just been building a storage plant which will hold from 120,000 to 130,000 tons. (499, 500.)

Mr. HARRIS, former president of the Reading Company, says that in 1895 the output of anthracite coal was 46,500,000 tons. Though this may have been exceeded since, the excess has been slight. The demand is quite limited, and any increase in output would very considerably affect prices. (602.)

2. *Distribution of anthracite consumption.*—Mr. McLeod says that Pennsylvania, New York, and New Jersey consume about 70 per cent of the product of anthracite coal; the New England States take 11 per cent, the West about 12 per cent, the South 4 per cent, and Canada about 3 per cent. The consumption in the West is increasing with considerable rapidity, chiefly because of the development of the country. The exportation to Canada increases comparatively slowly. (561, 562.)

Mr. SAWARD asserts that not more than 10 per cent of the anthracite coal produced is shipped to the West. The shipments to Buffalo are about 2,000,000 tons per year. The prices in the West vary between summer and winter about 50 cents a ton, as at Eastern markets. Colorado produces some anthracite coal, about 90,000 tons in 1900, but the area is small. Occasionally a cargo of anthracite coal goes by vessel to the Pacific coast, but Omaha is about the most distant Western market reached by rail. (516, 519.)

3. *Discussion of policy of restriction of production.*—Mr. McLeod declares that the idea that the price of coal is enhanced by a restriction of the output is a great bugaboo. There is no restriction when the coal can be sold at a profitable price at all. The demand is a very inelastic one. If the market will take 50,000,000 tons of coal at a fair price, scarcely 3,000,000 tons more could be given away. To be sure more might be sold if the price were \$1.50 or \$2 cheaper per ton, but that would bankrupt all producers and would not ultimately benefit consumers. (565.)

Mr. FLEMING, of the Anthracite Coal Operators' Association, implies that the mines are producing at practically their full capacity. The output in 1900 was about 47,000,000 tons. More could not be produced without a different class of miners. The miners will not work more time. Although the present rate of production (January and February, 1901) is about 5,000,000 tons per month, that can not be kept up. In order to produce that much a great deal of dead work is necessary. This is largely done during the summer time, when the market requires little coal. Some collieries might produce more than they do by pressing hard, but it would not be advisable; hasty mining is dangerous.

Mr. Fleming denies that there is any agreement among the railroads or operators to restrict production. There are times when the market simply will not take the coal produced and when it can not be stored. This is especially true in the summer. (538.)

4. *Fluctuations in demand and storage.*—Mr. McLeod, former president of the Reading Railroad, says that there are certain months in the year when the actual consumers of anthracite coal scarcely buy it at all. The average consumer waits until the cold months. Some dealers have storage places and the producers have to make special rates to them in order to get them to take the coal and store it. If it were not for this practice, and for the practice of storage by the producers and the railroads themselves, the mines could not be operated during the summer at all, and men and investment would stand idle. There is a disposition on the part of the railroad companies to establish storage facilities. Mr. McLeod, as president of the Reading, built two storage bins near the mines which could hold 300,000 tons. The Reading also had a large depot at Fort Richmond, and others along the New England coast. The Lehigh Valley has large storing places at Perth Amboy. In the absence of such methods of storage it would be impossible for the collieries to mine or for the railroads to transport enough coal in the winter to keep up with the demand. (565.)

Mr. THOMAS says that an attempt is being made to store coal in order that the inequality of the demand during the year may be equalized somewhat. It is very difficult, however, to store coal economically. It involves rehandling, waste, and breakage, and there is a certain amount of deterioration in the appearance of the coal, which gets dull after standing, so that customers will not pay so much for it. Another difficulty in the problem of storing coal arises from the fact that the existence of large stocks constitutes a menace to the market and the maintenance of reasonable prices. (556, 556.)

5. *Allotment of tonnage to railroads and its relation to restriction of output.*—Mr. HADDOCK, independent coal operator, admits that there must be some restriction of the production of anthracite coal, particularly because the summer demand is so light and storage is difficult or impossible. He does not think, however, that the restrictions are always just. He understands that there is practically an agreement between the great railroad companies as to the proportion of the total tonnage which each shall carry. The figures of the allotments are published from time to time, and the annual tonnage of each railroad remains usually fairly constant. At the same time there are wrangles from time to time between the railroads as to their percentages. Many years ago the Reading Company handled almost one-third of the entire product. The aggressiveness of its competitors gradually forced its percentage down to the present figure, 20.7. At one time the entire trade was upset for several months by a dispute as to whether the Reading should receive an extra 1 per cent allotment. After the companies have decided upon their proportions they allot to the individual operators, who sell to them under contract, the percentages which each shall be allowed to produce. (525, 527.)

Mr. McLEOD submits the following table as showing the present allotment or distribution of the anthracite coal tonnage between the leading railroad companies. (571.)

	Per cent.
Philadelphia and Reading	21
Lehigh Valley	15.65
Delaware, Lackawanna and Western	12.57
Central Railroad of New Jersey	11.48
Pennsylvania Railroad	11.32
Erie Railroad	11.51
Delaware and Hudson	9.55
Delaware, Susquehanna and Schuylkill	4.26
Ontario and Western	2.86

Mr. SAWARD, of the Coal Trade Journal, does not make a very clear statement as to the method of allotting the tonnage, but implies very directly that there is an informal agreement between the leading railroads as to the proportion which each shall carry of the total output. He says that the proportion carried by each road has not changed much for a considerable number of years. He refers to the Reading road as being "entitled to 21 per cent." Afterwards he states that this is merely the actual proportion carried; "that is the way it figures out." At the same time the road could produce more; it has the necessary colliery capacity. But "why should they attempt to double the tonnage? They can't sell more than so much coal." The witness does not explain why one road might not increase its own proportion although the total should not be increased, but asserts that it is not done because coal can not be sold at a profit. He also says that the Pennsylvania Railroad has never participated in a proportionate arrangement; "it has been a free lance * * * against the rest of them." Nevertheless, its proportion of the tonnage has remained fairly constant, in the neighborhood of 10 per cent. These statements, in connection with the statements of Mr. Saward regarding agreements as to prices, seem to show clearly his belief in the existence of an informal understanding between the roads as to the output. (514, 515.)

Mr. HARRIS, former president of the Reading Company, denies that there is any definite agreement regarding the respective proportions of the total output of anthracite coal which shall be handled by each railroad company.

The reasons why the various railroads do not change the proportion of their output materially are because they can not make rapid changes, on account of the difficulty and expense of developing new collieries; because each has certain territory which it can supply more economically and naturally, and each produces, to a certain extent, a particular class of coal for which there is an especial demand; and because, finally, if any railroad should increase its output greatly it would disturb the market very seriously. The present division of output has been reached after many years of conflict. The proportions have not been greatly changed during the past 15 years. Whether the railroads have been working in reasonable harmony or absolutely out of harmony, it has made little difference in the proportion of the coal which each handles. The witness does not think that the variation of any company in recent years has been more than 2 per cent. As the result of this experience it is recognized by the Reading and other roads that each shall not exceed its percentage materially, so as to encroach upon the business of the others.

It is sometimes charged that the Reading Company is more anxious to increase its share of the tonnage than the other railroads. This charge, Mr. Harris declares,

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is not well founded. While this company has more undeveloped land than other companies, it could not develop it more rapidly, because most of its land is very expensive to work. The fact that the Reading is chiefly a Philadelphia corporation, while the other companies are controlled in New York, perhaps leads them to complain against it. The output of the Reading now is about the same proportionately as it has been for 20 years. In the very early days the Reading carried half of the product, but at that time it had almost the only access to the markets of the East. Other roads have been built, and the product handled by the Reading has not increased as rapidly as that handled by the others. The New York, Ontario and Western opened no new fields, but simply bought collieries which had been shipping over other railroads, so that it did not introduce a disturbing element into the division of tonnage. (601-603.)

Mr. RICE thinks that there was for years a system of allotment of tonnage between the railroads. He does not know whether it is in effect now. Some such control of output is necessary or the coal lands would be rapidly developed at ruinous prices. There is not enough demand for all the coal that could be produced. (743.)

Mr. THOMAS, president of the Erie Railroad, says that that company transports 27,000,000 tons of freight yearly, of which about 6,000,000 is anthracite coal, an equal amount bituminous coal, largely from Pittsburg and vicinity, and 15,000,000 tons miscellaneous merchandise.

During the calendar year 1900 the Erie shipped 5,200,000 tons of anthracite coal, of which it mined about 700,000 tons and bought about 900,000 tons for sale at tide water. A large part of the tonnage comes from other railroads; 1,100,000 tons from the Delaware and Hudson, and 1,900,000 tons from the Pennsylvania Coal Company, which operates the Erie and Western Railroad, and which has since been bought by the Erie. (548.)

Mr. CHILDS, of the New York, Ontario and Western Railway, denies there is any limitation on the output or the shipments of the anthracite roads. There is no agreement as to the percentage of the total output which the companies shall handle, nor any agreement of any sort. In 1896 an attempt was made to allot the tonnage by percentages, but it was never consented to. As a matter of fact, the Ontario and Western has been steadily increasing its tonnage. It shipped about 3 per cent of the total in 1896 and about 3.7 per cent in 1900. It could increase 2 or 3 per cent more, or without limit, if it had the capacity. (500.)

Mr. Childs says that the New York, Ontario and Western Railway terminates at Scranton and reaches part of the Wyoming anthracite coal field. In 1900 it did 3.75 per cent of the transportation of anthracite coal. It has gradually increased its proportion from about 3 per cent in 1896. (496, 500.)

Mr. McLEOD denies that there is any formal agreement as to the percentages which the respective railroads shall haul. Most of the percentages have been established simply by custom in the past, each railroad trying each year to do about the same business as before. The percentages have changed little for 15 years or more. It is true that the Reading at one time, about 1870, carried a third of the entire production, while its present percentage is 21 per cent. The reduction was due, however, merely to the failure of Mr. Gowan, president of the Reading, to increase his facilities and to mine and market his proper proportion of the consumption. For 15 years he produced only about the same quantity of coal yearly as at the outset. As the total production had greatly increased, the percentage of the Reading naturally fell off. When Mr. McLeod became president, he undertook to increase the Reading's percentage by business methods.

Other statements of Mr. McLeod imply that the reason why the railroads maintain practically the same percentage each year is merely the fear of ruinous competition if they undertook to encroach upon one another. The design of the Reading in 1893 in seeking to control certain New England roads was that it might have the right to haul over its own lines the coal demanded by the New England territory covered, since it is a well-recognized rule among the different coal roads that each has the right to transport coal going to lines owned or controlled by itself. (564-567.)

Mr. STEARNS, president of Coxie Bros. & Co., says that several years ago there was an allotment of the percentage of the anthracite output which each railroad should ship, made by some sort of an agreement, but he does not think that any attention is paid to the allotment now. Everybody ships all he desires to ship. Mr. Stearns's own instructions, as president of Coxie Bros. & Co., are to sell all that can be sold without sacrifice, without cutting prices. The witness does not know of any conference between the sales agents and the officers of the railroads to determine the amount that shall be produced. During the years he has been connected with Coxie Bros. & Co. he has not been called to any such conference. It is true that the proportion of coal shipped by each of the companies has not varied much during several

years past. Coxe Bros. & Co. are shipping about 3½ per cent of the output, and their proportion has remained nearly constant. Each railroad fears to try to sell much more coal, because some other would then try to get even, and the result would be a general demoralization of the trade. The last demoralization of this sort was 3 years ago. The witness does not think it would be possible for his company or any of the other companies to double the output by shading the prices without causing a general war of price-cutting.

Mr. Stearns does not know that the Reading Railroad has been considered a more uncertain factor than the other railroads in the establishment of an allotment. (578-583, 590.)

Mr. THOMAS denies that there is any agreement among the railroads for the allotment of tonnage. There was such an agreement during 1896 between several of the anthracite roads, fixing a specific percentage which each should carry. The agreement continued for one year, when it expired by limitation, and has never been renewed. There is not even a moral obligation upon the respective railroad companies not to transport more than a certain amount of coal, but long experience has thoroughly established "the tonnage that honestly belongs to each road and is marketed by it." The markets are fairly well divided by territory. The Erie knows that if it tried to dispose of more coal it would be to destroy its own profits. If it went into the territory of some other road and reduced the price of coal, it could add to its transportation for a time, but there would be retaliation and reduction of rates and prices.

The witness admits that there is some consultation regarding output and prices, but declares that there are no agreements, express or implied. "We are at liberty to and we do mine and market as much anthracite coal as we can profitably find an outlet for." Railroad managers are like other people; none of them think that their share of the business is large enough. The witness does not think that the Erie gets enough of the transportation, but it can not make money by increasing its production. The increase of the production might lead to lower prices and temporarily benefit the public, but in the long run it would not. (550, 554.)

Mr. WALTER, president of the Lehigh Valley Railroad, says that his company transports something over 15½ per cent of the anthracite coal product. The percentage has been about the same for the past 3 or 4 years. There is no definite allotment to this or any other railroad. The road endeavors to conform to its proportion of the tonnage for which there is a market. The witness thinks that at the time of his testimony, February, 1901, all of the roads were producing freely because the market could take all that was produced.

Mr. Walter says, further, that the Pennsylvania Railroad has not always been thoroughly in harmony with the other roads, but that he would prefer not to discuss the Pennsylvania's policy. It is hardly proper to speak of it as a free lance, because controversies have been so frequent and so violent between all of the roads that the term can be applied as well to one as the other.

The witness asserts that the Lehigh Valley would be perfectly free to extend its tonnage from 15 to 20 per cent if it were "prepared to take the consequences." The consequences would be disastrous, leading to general competition and general disturbances. Nevertheless, such action on the part of railroads has been frequent in the past. It is true that the proportion of coal handled by the Reading road was formerly greater than it is now. (543, 545, 547.)

Mr. HADDOCK says that years ago the Pennsylvania Railroad Company carried all the coal that was offered, refusing to enter into agreements for the limitation of output or the fixing of prices. The collieries along the road worked practically full time. The railroad was a very disturbing factor in the attempted agreements. The witness thinks that the policy of the Pennsylvania has changed at the present time, and that it works in substantial harmony with the other railroads. (532.)

F. Prices and the effect of combination.—1. *Alleged agreements between railroads as to prices.*—Mr. SAWARD says that in 1874 there was a meeting of coal producers and an agreement as to prices, but that this broke up in 1876. There was another attempt at an agreement in 1886 or 1887. In 1891 and 1892 Mr. McLEON, by his combination succeeded in advancing the price of coal \$1.75 per ton within five months. But this also broke down. There is at present no formal agreement between producers regarding prices, no "cast iron agreement." At the same time the prices made by different producers are practically uniform for the same grade of coal. One producer may make a discount of a few cents to get trade. There is no such thing as the fixing of the price, but each producer knows that his coal is worth the same as that of the others. If a man inquires the price of coal at one office and goes from there to another he is likely to find it the same. It can not be said that there is an anthracite coal trust, because in order to have a trust or to have an agreement regarding prices, there must be parties entering into the agreement, with signatures and

documents. At the same time it is a fact that changes in prices are usually made *simultaneously*. When the customary advance from summer to winter prices is made circulars are issued by each railroad company or large dealer, and these usually make the same prices and are issued at the same time. A coal dealer is likely to get, about the 1st of the month, when these changes are made, half a dozen circulars quoting the advanced prices, which are all practically alike. The witness does not know how to explain this uniformity. "Possibly it is hypnotism. * * * I do not know but there is a telephone" by which consultations are held regarding the prices which shall be charged. There is certainly a mutuality of interests. This system of informal communication "seems to be a wonderful invention; it beats writing on a piece of paper and putting a signature to it" because there is no record kept of it. At the same time this can not be called a combination because if any producers refuse to agree to the prices they can not be compelled to do so. "The Pennsylvania Railroad has always been on the outside, as the saying is," but it generally follows the market pretty closely. The producers "are not cutting each other's throats." It is a good thing they are not. (512, 513, 517.)

Mr. HADDOCK, independent coal operator, says that there are "agreements among gentlemen" which prevent any of the great anthracite coal roads from cutting prices materially. Mr. Haddock has never been taken into the confidence of those making these agreements, but the simultaneous movement of prices in the past has shown clearly that there was an understanding among them. Still the attempt which has been made in past years to change from the lower summer prices to the higher winter price at precisely the same time, in the case of all dealers, has not always been successful. (526, 529.)

Mr. STEARNS, president of Coxie Bros. & Co., believes that the sales agents of the railroads have occasional meetings to discuss prices, probably twice a year. However, Coxie Bros. & Co. are not represented at these meetings. He does not think that prices are fixed at these meetings but that they discuss prices in a general way.

Mr. Stearns says that he believes that the Philadelphia and Reading Railroad prepares a circular of prices for anthracite coal, which is followed more or less by the other producers and railroads. He does not know whether this circular is issued by the Reading without consultation with other companies or not. It does send the circular to the other companies. The price of all is nearly the same, although each producer gets more if he can. Coxie Bros. & Co., usually get a somewhat higher price than that fixed by the Reading, because of the high grade of coal produced. (582.)

Mr. HARRIS, until recently President of the Reading Company, says that the sales agents of the anthracite coal roads have never acted as a unit. It is to their interest to act together, but they do not do so. Competition has often been carried beyond a point which is to the interest of either producer or consumer. At the same time there are conferences among the selling agents of the coal companies. The Reading Company always issues a circular stating the prices at which it will sell coal. Quite frequently other companies follow these prices, but the Reading does nothing to make them do so. Last year, in several cases the prices were not followed by others. It rests entirely with the companies. The Reading Company itself varies its prices somewhat from those published in the circulars. Moreover, there are differences in prices according to the grade and quality of the coal. (599, 603, 604.)

Mr. MCLEOD says that he does not know whether other companies follow the lead of the Reading in fixing their prices for coal, but that he believes that when he was president of the Reading it had considerable influence in that direction. (572.)

Mr. CHILDS, of the New York, Ontario and Western Railway, asserts that there has never been any agreement between railroad companies or their sales agents to fix the price of coal, not even informally. No two companies sell coal at exactly the same price. There is a substantial similarity in prices. One company publishes a rate and the others are likely to publish similar prices. When the coal is actually sold the price on the printed schedule is not often realized. This is true, according to Mr. Childs's statement, not merely at tide water but at Buffalo, Oswego, and other points where coal is shipped West. The price among the different owners and dealers at these points is usually about the same, but one company may have an extra supply of a certain size and will shade the price a little. It would pay the producer to go from one to the other and get quotations. The variation would probably range from 5 to 25 cents per ton.

Mr. Childs says further that some years ago the sales agents handling the anthracite coal used to hold monthly meetings and that he attended some of them. The time was chiefly taken up by accusations of cutting rates. Meetings have not been held at all for about two years. The witness does not believe that there is any agreement among the larger roads regarding prices, to which his road is not a party.

Such an agreement would not be effective unless all the roads were in it. Even though the roads agreeing might control 85 or 90 per cent of the output, those controlling the smaller output could make the price, especially in a dull period, when the demand was less than the supply. (499, 505.)

Mr. THOMAS, president of the Erie Railroad, says that there are no agreements regarding the output of coal or the prices, but that there are consultations between the different railroad companies. No business can be carried on without consultation. Usually some one of the larger companies, particularly the Reading, leads off in prices and the rest follow. The prices of coal vary somewhat also according to differences in quality and the tastes of buyers. (554.)

Mr. FLEMING, of the Anthracite Coal Operators' Association, denies the existence of any system of agreements regarding prices. He denies that the price of coal is fixed. It varies according to the reputation of the coal and its quality. There is a divergence as great as 70 cents per ton at present between extreme classes of coal. There are no two coals of the same kind. Each company issues a circular of prices regarding its own coal.

The witness admits that there was an attempt at an agreement during Mr. McLeod's time (1892), but says it lasted only 3 months. He does not make clear how great variations there may be between coals of practically the same quality. He says that the people who have a given class of coal would all try to get just as much for it as the market would allow. Mr. Fleming asserts further that he does not know of any meetings of sales agents during the past 5 years. (538, 539.)

2. *Prices of independent operators.*—Mr. HADDOCK, independent coal operator, declares that he makes the price of his own coal, but that the rates fixed by the railroad companies are a very important factor in determining the price which he will fix. This must necessarily be so because of the large proportion of the output which the railroads handle. Sometimes Mr. Haddock's company makes a price higher or lower; in particular it is likely to shade prices somewhat and to be more responsive to changes in the market. In order to move a few thousand tons of coal he might make a concession in price, which the railroad companies would not care to meet, especially because they have so much wider markets. Mr. Haddock has never been a party to any agreement as to prices, but is governed not a little by the prices fixed by the railroads which do agree. (525, 529.)

3. *Recent movement of prices—Effect of strike and of combination.*—Mr. STEARNS, president of Cox & Co., submits detailed statements of the prices received by that company for different sizes of anthracite coal each month since 1891. The following table shows the prices of the larger or prepared sizes of coal by months:

Average f. o. b. tide prices received during years shown for coal mined by Cox Bros. & Co., the Cross Creek Coal Company, and Cox Bros. & Co., Incorporated.

PREPARED SIZES OF ANTHRACITE COAL.

Month.	Perth Amboy.						All tide points.			
	1900.	1899.	1898.	1897.	1896.	1895.	1894.	1893.	1892.	1891.
January	\$3.44	\$3.369	\$3.56	\$3.653	\$3.164	\$3.382	\$3.941	\$4.327	\$3.591	\$3.804
February	3.566	3.349	3.564	3.624	3.197	3.261	3.819	4.227	3.462	3.722
March	3.616	3.317	3.619	3.649	3.152	3.203	3.805	3.97	3.504	3.661
April	3.466	3.416	3.661	3.638	3.311	3.183	3.542	3.676	3.561	3.671
May	3.577	3.442	3.735	3.655	3.473	3.207	3.579	3.774	3.674	3.728
June	3.561	3.466	3.737	3.743	3.567	3.196	3.611	3.87	3.805	3.817
July	3.707	3.517	3.554	3.907	3.689	3.196	3.61	3.962	3.945	3.843
August	3.654	3.477	3.499	3.881	3.892	3.183	3.448	4.054	4.078	3.829
September	3.896	3.504	3.555	3.937	3.974	3.162	3.375	4.073	4.259	3.874
October	4.103	3.60	3.579	3.859	3.921	3.216	3.378	4.165	4.263	3.937
November	4.14	3.609	3.523	3.772	3.866	3.34	3.387	4.068	4.215	3.95
December	4.243	3.72	3.42	3.689	3.787	3.333	3.329	4.047	4.223	3.854
Average	3.761	3.49	3.589	3.716	3.516	3.237	3.535	3.967	3.81	3.799

The price of pea coal is usually from \$1.30 to \$1.50 lower than the price of the prepared sizes. The price of buckwheat coal is from \$1.75 to \$2.25 lower than that of the prepared sizes, while rice and barley coal bring prices still lower. The following table, compiled from statistics submitted by Mr. Stearns, shows the average price by years for the different sizes of coal and the average for all the sizes. The last figure is of course a weighted one, obtained by dividing the total receipts by the total tonnage. (489-491.)

Prices of anthracite coal, 1891-1900.

	1900.	1899.	1898.	1897.	1896.	1895.	1894.	1893.	1892.	1891.
Prepared sizes	\$3.761	\$3.49	\$3.589	\$3.716	\$3.516	\$3.287	\$3.555	\$3.967	\$3.81	\$3.799
Pea coal	2.324	2.217	2.198	2.079	2.019	2.289	2.513	2.469	2.274	2.45
Buckwheat coal	1.905	1.739	1.733	1.684	1.599	1.824	1.988	1.769	1.672	1.706
Rice coal	1.49	1.402	1.466	1.445	1.352	1.397	1.481	1.265	1.374	1.416
Barley coal				1.55	1.403	1.335	1.424	1.277	1.34	1.475
Pea and dust (screenings made at tide shipping points).....	1.509	1.504	1.504	1.487	1.455	1.557	1.538	1.525	1.489	1.602
All sizes anthracite coal	2.815	2.528	2.636	2.725	2.495	2.625	2.847	2.991	3.085	3.025

Mr. SAWARD stated, in February, 1901, that the wholesale price of anthracite coal at tide water was about \$4.25. In New York and Brooklyn the price was higher, in view of the terminal charges and transfer charges of about 20 cents per ton. The lowest price which the witness has known for coal at tide water was \$2 or \$2.25. This was in 1876 when, on account of overproduction, there was an auction sale of 500,000 tons of coal. That price was altogether extraordinary. Soon after coal was selling for \$6 per ton, the average at that period being about \$4 or \$5 per ton. The expense of mining was even higher now than it was at that time.

The price of anthracite in February, 1901, was, in Mr. Saward's judgment, about 20 or 25 cents higher than one year previous. The increase in wages after the strike of 1900 amounted to from 13 to 16 cents per ton. Eighty-five per cent of the cost of producing anthracite coal goes to the wages.

Mr. Saward explains that the largest part of the increase in price after the strike of September, 1900, was due to the regular seasonal fluctuation, which usually amounts to from 50 to 75 cents. The demand for coal during the summer months is so much less that the price is regularly cut, and advanced again in the fall. (510, 511, 516.)

Mr. FLEMING says that the price of anthracite coal in February, 1901, was about 30 or 35 cents per ton higher than a year before. He thinks the increase was largely due to the strike of 1900, which made coal very scarce. The price has been comparatively regular from 1897 to 1900. The witness doubts if there has been an advance in the average price of more than 15 cents per ton. The prices are much lower than they were during the latter part of the seventies and the eighties. (541.)

Mr. CHILDS, of the New York, Ontario and Western Railway, says that the average price of coal from 1894 to 1900 at tide water was \$3.48 per ton for the prepared sizes, everything above pea coal. The average price for 1900 was \$3.756; for 1899, \$3.393. The price in December, 1900, was \$3.75. The advance in price during the winter of 1900 and 1901 was attributed by Mr. Childs to the strike of 1900, which kept the mines practically in idleness for 2 months, and which produced a scarcity of coal in the face of a strong demand. The price of coal is controlled almost entirely by the supply and demand. The witness questions whether the cost of mining has much to do with it. The advance in wages after the strike was supposed to equal 10 per cent, but presumably this advance is not in itself a determining factor in prices. (499.)

Mr. WALTER asserted that the price of anthracite coal at the time of his testimony, February, 1901, was reasonable. He thought that the price to consumers was about 25 cents higher than one year before. He attributes the higher price to the strike of 1900. (543, 546.)

Mr. HARRIS, former president of the Reading Company, affirms that the price of anthracite coal, after the reduction of 50 cents per ton in April, 1901, was about the same as in April, 1900—about \$4 per ton for the prepared sizes in New York. The April price has a number of times during the past years been as high as it was in 1901. The railroads working in harmony have no desire, Mr. Harris thinks, to increase prices further. (603.)

Mr. STEARNS, president of Coxie Bros. & Co., stated that in April, 1901, the prices announced in the circulars of the railroad companies were as follows: Broken coal, \$4; egg, \$4.25; stove, \$4.50; chestnut, \$4.50. From these prices, however, a reduction of 50 cents per ton was ordered during the month of April; 40 cents during May; 30 cents during June; 20 cents during July, and 10 cents during August. It is regularly the custom to reduce the prices about 50 cents a ton in April or about that time on account of the decrease in the demand during the summer months. The witness states his belief that the general range of prices in April, 1901, after this reduction, was practically the same as the year before. Elsewhere, however, he

states that the prices of coal were raised after the strike of 1900 somewhat more than the increase in wages secured by the workmen required. The strike left the market quite depleted of coal. The average price for some time after the strike was about 50 cents higher than before. At present, however (in April), the market is full of coal and the prices which prevailed immediately after the strike can no longer be maintained. See also table above. (582, 583, 586, 587, 594.)

Price of coal to consumers.—Mr. WALTER says that there is a considerable difference between the price of coal to wholesale dealers and the price to consumers. The margin between the two prices depends largely on the character of the facilities of the dealer. Many years ago the methods of handling coal were very primitive, but the tendency now is to concentrate the business of distribution into fewer hands, using labor-saving devices, and presumably the cost is reduced. (543.)

4. *Future effect of community of interest on prices and the public.*—Mr. HADDOCK, independent coal operator, thinks that it will not be wise policy for the anthracite combination to put prices higher than they are at present. He believes that the men in charge of the combination are probably wise enough not to jeopardize the future of their business by insisting upon extravagant prices, but he can give no guaranty as to their behavior. The question whether the public will receive any benefit from the economies of combination will depend on how the power of the combination is used. There ought to be an attempt so to use this power that the demand shall be increased rather than decreased. The railroads ought to endeavor not to incur the hostility of the people. Hostile public opinion was one of the chief causes of the failure of the combination which Mr. McLeod undertook.

It is probably true that a reduction in the price of coal, 50 cents or \$1 per ton, would increase the consumption considerably, but it is debatable whether it would be wise to make such reduction under present conditions, either from the standpoint of the producer or of the consumer. It is not wise for the consumer to insist upon mines and railroads being run at a loss.

A very important factor in determining the future price of anthracite coal will be the general condition of the country as regards prosperity. When everyone is prosperous little objection is made to paying a somewhat higher price for anthracite coal. (530, 531.)

Mr. SAWARD does not think that the community of interest between the different railroads, which he admits to exist, will result in advancing prices beyond the rates prevailing in 1901. It would be the greatest folly for the railroads to attempt to get higher prices. The present price is a fair and profitable one. There is no danger of decreased consumption at the present rates. In a sense the railroads may be said to be charging the last penny that the public will stand since a further advance would reduce demand. They might have the power to advance prices further but they would not exercise it.

Mr. Saward thinks it is greatly to the interest of the general public and of the State of Pennsylvania that there should be some agreement as to prices. In the absence of such an agreement there has been in the past violent competition which has made prices ruinously low and which has forced the railroads into bankruptcy. The Reading Railroad has been repeatedly in the hands of a receiver. If prices were not kept up the entire anthracite industry and the railroads connected with it would be ruined. (513, 517.)

Mr. GREENE, of the Audit Company of New York, formerly connected with the anthracite coal business, thinks that whatever degree of monopoly might be established within the anthracite coal field, it would be physically impossible to put up the price of coal for any length of time. Anthracite coal is to a certain extent a luxury which can be dispensed with. There is severe competition from bituminous coal. Especially in Chicago and other Western cities a high grade of bituminous coal is very largely burned in grates and furnaces, only a small proportion of the total coal used being anthracite. Then there is the competition of oil and gas for heating and cooking purposes. Some time in the future it may readily be that in our great cities heat will be furnished by large electric plants burning bituminous coal. Already in New York one building is heated in this way.

Mr. Greene does not think that a combination between the anthracite producers and the bituminous producers, with a view to keeping up the price of both classes of coal, is feasible. The bituminous coal fields are not limited like the anthracite. Bituminous coal underlies a large part of the whole country. When, a few years ago, a great strike occurred which was supposed to affect practically the whole field, coal kept coming to the market from other places.

Mr. Greene is willing, accordingly, to trust to the ordinary forces of competition and business to regulate the prices of anthracite coal. This must be the reliance in every trade, just as one corner grocery is counted upon to keep down the prices of

another corner grocery. The main reliance is on the enlightened selfishness of producers. The limit of the price of anthracite coal has probably already been reached. (469, 470.)

Mr. STEARNS, president of Coxie Bros. & Co., does not believe that it will be possible for the anthracite coal roads, by virtue of their recent combinations, to put the price of coal up to an exorbitant figure. He supposes that about 80 per cent of the railroads are working under a community of interest. That proportion is not sufficient to give monopolistic control in the fixing of prices. The 20 per cent could break the market at any time. The witness does not think either that it has been or will be the policy of the railroads to follow the small producers into particular markets and cut the prices there in order to drive them out of business. The competition of bituminous coal and other substances is especially powerful in keeping down prices. The witness thinks that the prices during the winter of 1901 have been about as high as the market will stand. (586, 587.)

Mr. HARRIS, until recently president of the Reading Company, says that if there were absolutely free competition among the anthracite roads, and if each produced all it could, the price of coal would be undoubtedly reduced, but he does not believe that the people are benefited by ruinous competition. It is not the purpose probably of those who are buying controlling interests in the different railroads, with a view to bringing them into harmony, to give the advantage wholly to the public. They are making the combination in order to prevent ruinous competition and the sacrifice of securities. No combination of this sort can be made powerful enough to govern the situation absolutely. None of the plans of this sort in the past has ever worked successfully.

The railroad companies recognize very generally, however, that it is not to their financial advantage to put the price of coal higher than it is now. It would immediately increase the competition of bituminous coal if this were attempted. (603, 609.)

Mr. McLEOD does not think that it will be possible for a combination among anthracite producers and transporters to put up the price of anthracite coal to an unreasonable figure. On the contrary, prices could be reduced by the economics of combination. If the attempt were made to advance the prices the people simply would not take the coal. Anthracite coal is virtually a luxury and people are not compelled to use it. The competition of bituminous coal and of other methods of heating is effective upon prices. The witness thinks, however, that the present prices (April, 1900), are not as high as they should be in order to afford a reasonable profit to the railroads and that it would be possible to put them somewhat higher. Aside from competition, a further safeguard to the people against excessive charges is always the power of public opinion. (569.)

Mr. HADDOCK, independent coal operator, thinks that the suggestion that 5 or 10 per cent of the anthracite coal product outside of a combination, would be able to fix the price for the entire product would be absurd. (532.)

5. *Effect of competition of bituminous coal and other fuels.*—Mr. McLEOD, former president of the Reading Railroad, asserts that in 1896, the last year for which he has accurate figures, only 71.72 per cent of the anthracite coal produced was of the domestic sizes, while 28.28 per cent was pea coal or smaller coal. In 1872 only 5.92 per cent of the coal sold was of this smaller size; in 1878, 10 per cent, and in 1888, 19 per cent. Formerly the smaller sizes were thrown away altogether, but ways have been found to market them and the old dumps are being worked over.

All this smaller coal, continues Mr. McLeod, comes into competition with bituminous coal, and since bituminous coal can be produced at about half the cost of anthracite 28 per cent of the anthracite product has to be sold at a loss of \$1 per ton on the average. That is to say, it is sold for \$1 less than the average cost of producing a ton of coal of all sizes. It costs as much per ton to produce a small size as the larger sizes. In fact the larger sizes can not be made without making the smaller sizes. All the coal coming from the mine is crushed in order to get the different domestic sizes. It is then run over screens, and after this through troughs where little boys pick out the slate. As the coal passes over the screens the finest goes through first. Then the coal passes successively over screens with larger meshes and the larger sizes are obtained. In order to get the large sizes, which bring the higher prices, the smaller sizes are necessarily manufactured. It pays better to sell them at a low price than to throw them away. Nevertheless, Mr. McLeod declares, the loss of \$1 per ton on the smaller sizes must be made up by prices for the larger sizes. The aggregate price for all sizes must be sufficient to pay the aggregate cost of all sizes. There is no use for these smaller sizes except in competition with bituminous coal. (562, 567, 569.)

Mr. STEARNS, president of Coxie Brothers & Co., says that the sizes of coal from chestnut up are called prepared sizes. The largest size is known as lump or broken

coal. The sizes from pea coal down are called small sizes. The largest increase in demand for anthracite coal in the last few years is for small sizes. Only a few years ago pea, barley, and rice coal were thrown away. These small sizes are only a by-product incidental to the "manufacture" of the larger sizes. Twenty years ago, or less, there was a much greater demand for lump coal. Ten to 20 per cent of that could be sold. Now the demand is for stove coal and other intermediate sizes. More thorough breaking up is therefore necessary, and the percentage of pea coal and other small sizes is thus necessarily increased. (578, 583.)

Mr. Stearns believes that it is impossible to put the prices of anthracite coal very high because of the competition of other fuels. The larger sizes are somewhat of a luxury, and the smaller sizes compete directly with bituminous coal for steam purposes. The household consumption of coal is being met with competition from gas stoves, while in the apartment houses bituminous coal is burned in the steam heating and other heating apparatus. While the producers of anthracite do not calculate upon a definite differential between the prices of the larger sizes of anthracite coal and the prices of bituminous, they can not advance the price of anthracite to an exorbitant extent without running the risk of having it supplanted by soft coal. The consumption of soft coal is increasing more rapidly than that of hard coal, and it promises to be constantly a more serious rival. The small sizes of anthracite coal come into direct competition with bituminous coal (583, 585.)

Mr. THOMAS, president of the Erie Railroad, asserts that under no circumstances can excessive prices be charged for anthracite coal. Anthracite is not a necessity but a luxury, used because of its greater cleanliness and convenience. The competition of bituminous coal is constantly growing. The increased demand has been chiefly in the smaller sizes used for steam purposes, which meet the competition of bituminous. There is little increase in the consumption of the larger or prepared sizes. This demand grows only as the number of dwelling houses increases, and the increase of houses is more than offset by the competition of coke, gas, oil, and other methods of heating, and by the development of larger apartment houses which do not use anthracite. The consumption of bituminous coal is increasing at a much greater ratio than that of anthracite. (555.)

Mr. HADDOCK, independent coal operator, thinks there is a distinct limitation upon the price of coal through the competition of bituminous coal, gas, etc. The present prices, since February, 1901, are probably about the top. About 25 to 30 per cent of the production of anthracite coal at present is represented by the small sizes, pea coal, buckwheat coal, etc., which come strictly into competition with bituminous coal for steam purposes. It is true that some of this smaller coal is now being reclaimed from the old culm heaps, change in market conditions having made it profitable to do so. Mr. Haddock's own company feels that it pays better usually to send the material in the culm heaps down into the mines to be used as sustaining pillars.

Further competition is encountered by anthracite coal by the use of gas, especially in the summer time. Moreover, even at present prices, plants are being established, such as that of the New England Gas Company, which, using bituminous coal, furnish light, heat, and power, and make coke. Though prices might be forced up to an extravagant figure for a short time, a reduction would be bound to follow. (528, 529.)

Mr. CHILDS, of the New York, Ontario and Western Railway, says that bituminous coal competes severely with the sizes of anthracite coal which are used for steam purposes, including lump coal, broken coal, and the finer sizes below pea coal. Over 40 per cent of the anthracite coal is steam coal. The proportion is greater than formerly, because a larger share of the fine coal, which was formerly thrown on the culm piles, is now utilized. Moreover, the old refuse in the culm piles is now being worked over. The demand for domestic sizes of anthracite, with which bituminous coal competes to a less extent, has not increased so much as the demand for steam sizes. When the price of anthracite is put up, bituminous coal tends to displace the steam sizes of anthracite. Moreover, in Chicago and other Western cities the demand for anthracite coal for domestic purposes is relatively much less than in Eastern cities, more soft coal being used.

The competition of bituminous coal is held by Mr. Childs, accordingly, to place a limit upon the price of anthracite coal. Just what the maximum would be he does not know. It is true that there has been no falling off in business in view of the recent increase of 30 cents per ton in the price of anthracite, but it would not be advisable to make a further increase of 50 cents. (501, 502.)

Mr. HARRIS, former president of the Reading Company, asserts that the price of anthracite coal is quite strictly limited by the competition of bituminous coal and of gas. Electricity is a product of the second order produced by coal, so that it can not be called a direct competitor. (602.)

Mr. FLEMING of the Anthracite Coal Operators' Association, asserts that bituminous coal is most emphatically a competitor of hard coal. The consumption of anthracite is, in fact, falling off proportionately. Gas and steam are replacing it in office buildings and in houses. (537, 541.)

Mr. WALTER says that bituminous coal comes into competition with the smaller sizes of anthracite under many conditions. Fully 35 per cent of the anthracite product is subject to this competition and the proportion is constantly increasing. (548.)

Mr. SAWARD, of the Coal Trade Journal, does not think that bituminous coal and anthracite coal enter into competition with one another at all. Each has its distinct use and value. Soft coal is not burnt in houses, at least in the East. It is true that some of the minor grades of anthracite coal have lately been pushed for use as steam coal. Much of this coal was formerly wasted. These grades sell usually at a lower price. The witness does not see, however, that the competition between these coals and soft coal is an important element in fixing the price of other grades of hard coal. It is true that a large amount of soft coal is used in cities which try to prevent the smoke nuisance, methods having been devised for doing away with the smoke in the case of bituminous coal. The proportion of the anthracite coal used for steam purposes is hardly more than 25 per cent. Formerly perhaps 40 per cent was used for these purposes, but gradually domestic coal is being made out of coal that formerly went into the largest steam sizes. Mr. Saward admits, however, that when the price of anthracite coal went up in 1900, as the result of the strike, there was an increased demand for bituminous coal, resulting in some instances in a higher price. (510, 512.)

Community of interest—Bituminous coal.—Mr. HADDOCK, independent coal operator, thinks that there is a growing application of the idea of community of interest as regards bituminous coal. There have been agreements between the great railroad companies regarding prices, and their violent competition is at present ended. All such agreements, however, depend for their success upon the prosperous condition of the country. When the demand for coal falls off the agreements are likely to be broken. (531.)

Mr. FLEMING, of the Anthracite Coal Operators' Association, says that he knows of no association of soft-coal dealers or producers in New York. Most soft coal comes to the seaboard as the property of individual operators. Some of the large soft-coal companies buy the product of the smaller companies and ship it, as in the case of the anthracite field. (539.)

6. *Economics and advantages of community of interest.*—Mr. WALTER, of the Lehigh Valley Railroad, says that he sees no tendency to bring the mining and handling of coal into fewer hands. At the same time he believes that the practice of acting in harmony is a great advantage. Under the competitive conditions which have existed in years gone by it has been difficult to discuss the intricate questions of business in a reasonable manner without prejudice on the part of the different concerns. The witness thinks that any arrangement which will promote harmony will ultimately benefit the consumer as well as the producer.

The economy of combination will not, however, in Mr. Walter's judgment, come especially in connection with the transportation of freight by shipment from the nearest regions to the respective markets. The anthracite coal from one region differs greatly from that from another. The different markets demand particular classes of coal for particular purposes. In a very cold country the people prefer the very hard coal, while in a warmer section they use a softer grade which burns more rapidly and consumes itself entirely. (544.)

Mr. McLEOD declares that it is very desirable from the standpoint of the public, as well as of the producers and transporters of coal, that the business should be carried on by great corporations working in harmony with one another. He believes the more the subject of combination among the anthracite roads is studied the more the plans will be approved by the people. A close control of the business by these corporations will produce better results than ruinous competition which would so injure the producers and transporters that they would ultimately have to charge people more for coal. The fact that anthracite coal can be sold only about six months of the year makes it especially necessary that great corporations should produce the coal, having capital sufficient to store it and to carry large quantities for several months. In the case of bituminous coal, where the demand is uniform and where the methods of production are simple, there is less occasion for combination. Anthracite coal is practically a manufactured commodity, and large investments in breakers and other facilities are necessary. In the opinion of the witness people are getting coal cheaper now than ever before as a result of the conduct of the business by large operators and of the increasing harmony between the railroads.

Mr. McLeod, who was especially active during his presidency of the Reading in bringing about community of interests between the different anthracite roads, declares it was his idea to benefit both consumers and corporations by bringing all the interests into harmony. He designed to give the people half of the profits from economy, and to pay dividends with the remainder upon stocks which had previously paid none. In his judgment there was no danger nor possibility that such a combination should raise prices and injure consumers.

One of the chief economies which Mr. McLeod planned and which he thinks should still be carried out was by the elimination of middlemen. The witness declares that it costs him \$1.50 a ton more to get coal into his cellar than the retail dealer in New York pays for it. There are twice as many dealers in every town as are necessary. The fact that there are so many makes it necessary for them to have a large percentage of profit in order to live at all. Mr. McLeod thinks that the distribution of coal should take place directly to the consumer from the railroad. He would establish large depots in each city, having coal pockets from which coal could be shot directly into the carts of those who would take it to the consumer. At present it is hauled to yards of coal dealers and then reloaded again at unnecessary expense. One pocket station in connection with each of the railroads reaching Washington from the north would be ample to supply the entire city. Mr. McLeod thinks that by this method of distributing coal it would not cost more than from 30 to 50 cents to get it from the railroad to the consumer instead of \$1.50 per ton. The only way in which such an economy can be brought about is by combination among the railroads.

Mr. McLeod says further, that there is usually a considerable degree of competition between retail coal dealers, although in some cases they have associations which combine to keep up prices. He thinks many retailers deliver short weight. (568, 569, 575.)

Mr. GREENE, of the Audit Company of New York, formerly concerned in the anthracite-coal business, declares that there is a tremendous economic waste in the production and transportation of anthracite coal, which makes desirable community of interest, and especially consolidation of the different interests. Although anthracite coal is confined to a small area of about 400 square miles, and is in a sense a natural monopoly, the ownership of the field is so greatly divided among individuals and different railroads that business is most uneconomically conducted. In the first place, each railroad feels that it must have tonnage. The railroads have gone into the mining of coal principally to secure transportation for themselves. The result is that coal is often hauled longer distances and over steeper grades than would be necessary if some other railroad handled it. Another result is that many mines which are very expensive to work are operated in order to give the railroads tonnage. There is a great difference in the expensiveness of operating mines. Many of the mines of the Reading Railroad, for example, are especially expensive to operate, and this is true of the whole southern anthracite field. The character of the coal and the manner of its distribution is slightly different in other regions.

Another economic waste under the present system results from the fact that the railroads and the other producers do not market their coal properly—do not know how much coal is going to one place or another. The fact that each railroad has a large number of selling agents and other subordinates constitutes an economic waste.

In view of these wastes from competition Mr. Greene thinks that it would be advantageous, not only to the railroads but to the general community, to have an absolute consolidation of ownership of the railroads and the coal mines. To some extent community of interest, without absolute consolidation, would effect economies, but much less satisfactorily. For example, it would be impossible under mere community of interest to transport the coal which now passes over the Lehigh Valley road or the Reading to the Central Railroad of New Jersey, yet it might be much more economical for all the coal from certain districts to be handled by one road.

The witness thinks that by virtue of the economies of consolidation it would be possible to save fully \$1 per ton in the case of mining and transporting anthracite coal. He believes further that part of this saving would come to the consumer, and that it is to the interest of the general public to compel consolidation rather than the contrary. Probably 50 cents of the \$1 saved would go to the consumer, and a similar amount or less would go in the form of higher dividends to the railroads. At the same time the condition of the coal miners would be improved. The witness admits that there might be some question whether, by virtue of monopoly, the advantage of economies might not all go to the owners without a reduction of price, but he thinks that the various other forms of heating which compete with anthracite coal will always keep down its price, and that the pressure of public opinion would also be effective.

CLVIII INDUSTRIAL COMMISSION:—TRANSPORTATION.

We can rest perfectly sure that the public in the long run will get the benefit of economies through consolidation. (468-473.)

Mr. THOMAS, of the Erie Railroad, says that in the early days the anthracite-coal industry was highly profitable, and operators took little care to introduce economic methods. The same was true of transportation, and the methods are still exceedingly extravagant. For instance, there are mines on the western side of the Lackawanna Valley up on the hill, from which coal is hauled down into the valley and up the eastern side toward tide water; while mines on the eastern side of the valley carry coal down into the valley and up the hill on the other side going west. The Erie by its acquisition of the Erie and Wyoming Railroad expects to eliminate some of this waste in transportation. (556.)

Mr. HARRIS, until recently president of the Reading Company, supposes that a considerable economy might be effected by a community of interest or combination between the anthracite-coal roads. The cost of marketing especially could be reduced by eliminating many middlemen and commission merchants and putting the selling of coal strictly into the hands of the agents of the railroad companies. (599.)

Mr. WOODLOCK does not think that there can be any special economy effected by the common ownership of the anthracite coal roads or coal mines. There can be no physical union of the properties in most cases. Undoubtedly, however, a great economy would result from the establishment of a single selling agency. (452.)

Mr. HADDOCK, independent coal operator, says that there are some arguments in favor of combination in the anthracite business, especially because of the possible economy. Thus, there are four or five different operations in Luzerne County, and it would be better for everybody if they were combined into one. (534.)

G. Capitalization of coal roads and of reserve coal lands.—

1. *Capitalization and reorganizations of the anthracite roads generally.*—Mr. WOODLOCK, railroad editor of the Wall Street Journal, declares that it is generally recognized that the Reading and Erie railroads are heavily overcapitalized. The bankruptcies of the Reading have been largely due to its great capitalization based on unworked coal lands. The fact that after 4 years of steady prosperity the common stock of the reorganized Reading Company sells only at 30 (February, 1901), shows necessarily over-capitalization. In the reorganizations of the Reading and the Erie securities were increased rather than diminished. Thus, the Erie formerly had a capitalization of \$70,000,000 common stock. Now it has about \$50,000,000 preferred stock and \$112,000,000 of common stock. The common until very recently was scarcely worth anything. When Mr. J. J. Hill began buying stock recently it went up from 15 to 30, but it is still worth less than the old Erie stock was worth 8 years ago. (456.)

2. *Capitalization of the Reading Company.*—Mr. HARRIS, until recently president of the Reading Company, says that the present capitalization of the Reading Company includes \$28,000,000 of first preferred stock, \$42,000,000 of second preferred stock, \$70,000,000 of common stock, and \$63,000,000 of general mortgage bonds, besides other earlier bonds not yet matured. The bonds are gradually being increased, a provision of the mortgage authorizing the addition of \$20,000 at a rate not to exceed \$1,500,000 a year. When the maximum amount is issued there will be \$135,000,000, partly covering prior bonds now not matured. The present capitalization of the Reading Company and its leased lines is approximately \$250,000,000 of stocks and bonds. The witness believes that this sum is greater than the amount of the securities of the company before the reorganization of 1896, but the interest is lower, so that the fixed charges are less, and the increase in the stocks is less important because a company does not go into bankruptcy when it fails to pay dividends, but it does go into bankruptcy when it fails to pay interest. The witness is not especially familiar with the financing of the Reading Company, which was conducted by the bankers and owners of the railroad. There is no connection between the volume of securities and freight rates. The rates are made by freight agents, and the chief influence determining them is the rate made by competitors. (597, 598.)

3. *Receivership of the Reading Railroad.*—Mr. McLEOD says that the Reading Railroad has been in the hands of receivers four times. Some of these bankruptcies were caused by the fact that the company has increased its debts too largely in the purchase of coal lands. It has been forced by ruinous competition to sell coal below cost, and could not earn interest.

Mr. McLeod explains the receivership of 1893 under his administration as follows:

The Reading had leased the Lehigh Valley and Jersey Central, and found that those companies had \$13,000,000 invested in coal on hand and in carrying the accounts of individual operators. The Reading did not have that much capital, and Mr. McLeod had to borrow \$3,000,000 as a floating debt. At this time the panic of 1893 began. The witness had arranged to sell securities to get a working capital of

\$17,500,000 out of which to take up the floating debt of \$8,000,000, but on account of the panic the securities could not be issued and the Reading was forced into bankruptcy. (573.)

Mr. RICE, president of the Consolidated Rubber Company, states that some years prior to 1893 he was invited to join a syndicate to purchase the control of the Philadelphia and Reading Railroad. The syndicate was formed at the instance of Mr. F. B. Gowen, but at his death the burden was left upon Mr. Rice. A great deal more than a majority of the stock was bought, and although the company was at that time controlled by a voting trust, the control drifted into the hands of a syndicate, and Mr. McLeod was made president. The witness found that it would be advisable to reduce the road's indebtedness as it then existed by converting the income bonds into stock, and he prepared a plan for reorganizing the company under the name of the Reading Company. He went to Europe in 1891 to see the holders of bonds there, and during his absence Mr. McLeod began to pay interest on the income bonds, whereupon the holders of them were no longer willing to exchange them for stock. It was afterwards shown that this interest had not been actually earned, although the books had apparently shown that it had been earned.

Mr. Rice says further that at this time an attempt was made to secure the control of the New Jersey Central and the Lehigh Valley railroads. Both were leased. This increased the coal holdings of the Philadelphia and Reading enormously and required additional money. Mr. Rice went to Europe and secured the pledge of \$13,000,000 on the issue of bonds, but, much to his astonishment, after the bankers had paid in \$5,500,000 in cash, on February 1, 1893, the railroad was put into the hands of a receiver on February 20. The witness then went into litigation to have the management of the railroad investigated by the United States circuit court. He believes that one of the chief troubles leading to the bankruptcy was the attempt made by Mr. McLeod to control the Boston and Maine, the New Jersey and New England, and other interests which he was not able to control.

Mr. Rice asserts further that the Reading Company had been counting as assets various credits which were really of no value, and that the public was thus deceived prior to the bankruptcy. (737-739.)

4. *Attempt of Reading Railroad to enter New England territory.*—Mr. McLEOD explains the motive which led the Reading Railroad in 1892 to attempt to get control of the Boston and Maine and New York and New England railroads. It has been a well-recognized rule among the anthracite-coal roads for years that each has the right to haul the coal destined for roads controlled by itself. By acquiring the Boston and Maine and New York and New England the Reading could add to its tonnage about 3,500,000 tons, and could do it without precipitating a fight between the railroads.

Mr. McLeod says further that the Reading did not buy a controlling influence in the stock of the Boston and Maine. Enough stock was bought to give Mr. McLeod a standing with the other stockholders, and then largely through personal influence he persuaded them to make him president. (567, 574.)

5. *Capitalization of the Ontario and Western Railway.*—Mr. CHILDS, of the Ontario and Western, says that this railroad was reorganized in 1880. It had originally been built chiefly on the proceeds of bonds issued by towns. It was called a road without debts or traffic. It had over \$80,000,000 of bonds and was sold out for about \$4,000,000. The present capitalization, including stock and bonds, is about \$58,000,000. At the time of reorganization the holders of bonds were allowed to take common stock if they would pay an assessment of 20 per cent; most of them did so, and the capitalization was thus increased about \$50,000,000. The controlling interest in the stock is not held by a few men. The preferred stock is mostly represented by a voting trust. (502, 503.)

6. *Capitalization of coal lands and its effect on prices.*—Mr. HADDOCK, independent coal operator, says that the Philadelphia and Reading Railroad, which bought 100,000 acres of coal lands during the early seventies, was forced into this action largely by its competitors. The New York Central, the Delaware, Lackawanna and Western, the Lehigh Valley, and the Pennsylvania roads were all coming into the Schuylkill field and acquiring coal properties. Another factor, which led independent operators to sell out at that time, was the violence of the Molly Maguires, who made it very unpleasant for a man to remain in the mining business. Since these early purchases the Reading has acquired other coal property, directly or indirectly.

Mr. Haddock thinks that the capitalization of the Reading road, in order to carry its 100,000 acres of unworked coal lands, has not only resulted in the bankruptcy of the road but has also affected the price to the consumer. The amount invested by the Reading Company in coal property was about \$50,000,000, and the interest at first was 7 per cent. This was an annual charge of \$3,500,000, while the company did

not at the outset produce more than six or seven million tons yearly. The witness thinks that the amount of the Reading's debts for coal lands has not been cut down materially by reorganization, although the rate of interest probably has been cut down. There is constantly an effort to get out of the consumer interest on undeveloped land held for the supply of 50 years to come. The effort has not always been successful in the past. (523, 534.)

Mr. GREENE, of the Audit Company of New York, says that in some cases where the railroads have capitalized anthracite coal held in advance of actual operation, the people are doubtless paying prices and railroad charges which return some dividend on such investments. In general, however, the charges based on these investments in coal lands have been squeezed out by reorganizations. Mr. Gowan, of the Reading Railroad, tried thirty years ago to buy up the coal properties contiguous to that line, and to earn freight rates which would support the capital invested. He failed in this undertaking, since the rates and prices could not be kept up. The Reading has been twice reorganized. It is true that in the case of these reorganizations the total volume of stock and bonds has not been reduced, but the absolute fixed charges have been reduced. That is, bonds requiring payment of interest have been replaced by preferred and common stocks, and rates of interest on bonds are also lower. It is probable, Mr. Greene continues, that the present movement toward the consolidation of anthracite roads is partly designed to permit the earning of interest on the preferred stocks which have been substituted for these old bonds. The same is true of many railroad reorganizations and recent consolidations. (472.)

Mr. HARRIS, late president of the Reading Company, says that the various bankruptcies of the Reading Company have undoubtedly been due largely to the fact that it had bought up a large amount of coal land in advance of development. Most of these purchases were made at a very early time by Mr. Gowan. The witness is inclined to think that he did push that policy of buying up lands too far in the same way that the Reading and other railroads have made the mistake of building railroads too far in advance of the demands of traffic. The bankruptcy of the Reading Company has also been due to excessive competition between the railroads. If, however, it had not been burdened with debts, it would, of course, have been in a better condition to sustain that competition.

Mr. Harris thinks further that although the interest charges of the Reading have been reduced by reorganizations, and although there are now no specific interest charges based on the coal lands separately, it is undoubtedly true that the interest on these lands is still a charge upon the road. That is, if the Reading had spent less money in coal lands, it would now have less interest charges. Practically, however, this charge is taken from the stockholders who fail to receive dividends.

Mr. Harris explains further that one reason why the Reading has developed its lands slowly is because many of them are very expensive to work, and the coal could not be taken out in competition with that of other mines which were worked more cheaply. In the future, since the more accessible coal is rapidly being exhausted, the Reading lands will become more valuable and can be operated. (604-606.)

Mr. McLEOD does not think that the interest on the capital invested in reserved coal lands by the various railroad companies has added to the price to the consumer. He thinks that the economies coming from the large investments of the railroad companies have lowered prices. Nobody has made much money in mining coal except a few individuals who were especially favorably located. The Reading Railroad actually invested cash to the amount of \$75,000,000 in coal lands between 1870 and 1876. It has, however, been forced to sell coal as cheaply since this debt was incurred as before, and has had to compete with other railroads and producers. The large capitalization of the Reading in stocks can not influence prices, because no dividends have been paid for a long time. The Reading has \$112,000,000 of stocks earning no dividends. The Lehigh Valley has \$40,441,000, the Erie \$172,000,000, and the New York, Ontario and Western \$58,113,000 of stocks earning no dividends. The total of such stocks for the four roads named is \$382,554,000. (566.)

Mr. SAWARD does not attribute the bankruptcy of the Reading Railroad so much to the attempt to pay interest upon the bonds issued to purchase coal lands held undeveloped as to the excessive competition between the various producers of coal forcing down prices unduly. It can not be said that the people have been forced to pay higher prices for coal because of the large capitalization of the Reading road. A large part of its capital is in the form of stocks and these have not paid dividends, so that the earnings on them can not be counted in price. It is true that bonds were issued for some of the coal lands. The Reading has coal enough to last for 100 years. In a certain sense the consumer is paying the carrying charge on the investment in these future supplies of coal, but the witness does not think that the amount of this interest charge adds more than 5 cents per ton to the price of coal. Although the capi-

talization of the Reading is \$250,000,000, that is the basis for a great deal of other business besides the anthracite business. The road carries about 10,000,000 tons of anthracite coal, 5,000,000 tons bituminous coal, and 30,000,000 tons of general freight. Moreover the coal deposits in various other regions are being rapidly consumed, and the public will be glad later that the Reading has such a large supply. (517-519.)

Mr. THOMAS, of the Erie Railroad, says that originally the cost of carrying the interest on the money invested in undeveloped coal lands by the Reading Railroad may have been added to the prices or freight rates, but that the Reading has repeatedly gone through bankruptcy, and that it can secure no higher rates than the other railroads which have not the same burden. (555.)

Mr. CHILDS, of the Ontario and Western Railroad, says that the two coal companies which that railroad controls have in the neighborhood of 50,000,000 tons of coal in the ground, the production at present being about 2,000,000 tons per year. The witness thinks that it is proper to earn dividends on the investment in coal lands. It costs a great deal to start operations, put in breakers, shafts, tracks, etc., and thereafter the field must, of course, be worked for a good many years. Railroads entering the anthracite field have also large investments in their transportation facilities, and it is the part of prudence for them to acquire coal land enough to make sure of business as long as the life of the bonds of the railroads. (503, 504.)

Mr. RICE, who was formerly connected with the Reading Company, says that in a sense it is justifiable to capitalize the value of coal in the ground, but it is very difficult to know what its actual value is. The net value is very different from the gross value as shown by the present selling prices. There is no knowing whether the coal can be profitably mined. The value of the coal in the ground depends a great deal upon the general public opinion of investors as to what it will probably be worth. (739.)

7. *Overcapitalization resulting from recent purchases and consolidations.*—Mr. WOODLOCK declares that the price paid by the Erie Railroad for the production of the Pennsylvania Coal Company in 1900 was the highest ever paid for a block of coal lands. Bonds were issued to the amount of \$32,000,000, bearing 4 per cent interest. This represents an annual burden of \$1,280,000, equal to from 50 to 60 cents on each ton of the annual output of coal from these lands. It has been considered that the Reading Railroad paid a high price for its coal lands, which stand on its books as having cost \$70,000,000. But if the proportion of the total anthracite production belonging to the Reading should be capitalized at the same rate per ton of annual product as the amount paid for the Pennsylvania Coal Company, the capitalization of the Reading lands would be \$125,000,000.

In the case of the purchase of the control of the Jersey Central Railroad by the Reading Railroad, the Reading paid \$160 per share for 50 per cent of the Jersey Central's stock, and has issued 4 per cent bonds therefor. This is the highest price for the Jersey Central's stocks since 1881. The Reading undertakes a fixed charge of \$920,000 per year, which must be forthcoming in good or bad times.

Mr. Woodlock does not believe, however, that the heavy capitalization of the anthracite coal roads will have much effect upon prices of coal to the general public. If the railroads could get a big price for coal they would, of course, try to do so, but the witness believes that they realize that it is not judicious to attempt to do so, on account of the falling off in demand. What is needed is a steady market. (453-455.)

Mr. GREENE, of the Audit Company of New York, admits that some of the recent combinations and purchases by the anthracite coal roads have considerably increased capitalization. He does not think, however, that the fact that consolidation has been effected at high prices and at a time when all securities are high, will necessarily mean an increased burden upon the public. Consolidation will often create traffic, increase profits, and ultimately give the public the benefit in better service and lower prices. The witness questions whether a new railroad could be built into the anthracite coal field for less money than the capital of the existing roads. (475-478.)

Mr. HADDOCK, independent coal operator, says that the price paid in the purchase of the Pennsylvania Coal Company was so high that the annual interest charged on it will amount to about 50 cents per ton of output. (534.)

H. Duration of supply and cost of mining.—1. *Supply of anthracite coal.*—Mr. HARRIS, late president of the Reading Company, says that he does not think the supply of unmined coal held by that company will be sufficient to last 200 years. In fact, he believes that, taking the anthracite field as a whole, the production has about reached its maximum; he doubts whether it ever reaches 60,000,000 tons a year. Many mines are being worked out, and it takes time and large investment to open new mines.

The district in which the coal will be exhausted soonest is the eastern end of the Wyoming field, sometimes called the Lackawanna field. The western end of that field will last much longer, because the coal lies deeper and is more expensive to mine. The group of small basins known as the Lehigh region has passed its maximum production. Some of the Reading collieries in that region are exhausted and some are approaching exhaustion.

The great supply in the future is in the Schuylkill region, which contains more than one-half of the anthracite supply. In this region the coal is exceedingly hard at the eastern end and grows softer toward the western, until the Lykens Valley coal, belonging to the Pennsylvania Railroad, is reached. The Reading's coal lands are chiefly in this region, and it is because of the depth and expensiveness of mining that they have not been developed more rapidly. In some mines in other regions the coal has been nearer the surface, the bottom of the supply being not more than 100 or 200 feet deep. Around Pottsville, in the Schuylkill region, the bottom of the basin is supposed to lie 5,000 feet deep. Moreover, in the Schuylkill region the coal is much more full of slate. When the witness was in charge of the mines of the Lehigh Coal and Navigation Company he found that it was necessary to raise about three tons of mineral and about ten tons of water from an average depth of 600 feet for every ton of coal sent to market. (605-606.)

Mr. GREENE, of the Audit Company of New York, says there is an absolute limit of the amount of anthracite coal. It has been variously estimated that at the present rate of production the supply will be exhausted in from 50 to 150 years. Later on, moreover, coal which is more difficult to extract will have to be mined at a higher cost than at present. (475.)

Mr. FLEMING says that the estimate made by Mr. Griffith several years ago as to the future supply of anthracite coal is generally considered the best, and he believes that the general estimation was 100 years for all the regions. In the case of the Reading Company the supply at the present rate of production would last much longer. (540.)

Mr. THOMAS, president of the Erie Railroad, says that he thinks that 40 or 50 years will see the substantial extinction of many of the anthracite fields. The Reading is understood to have a supply for 100 years, but the mining in all the regions is constantly increasing in difficulty and expensiveness. (555.)

Mr. McLEOD, former president of the Reading Railroad, believes that the supply of anthracite coal is greater than is ordinarily supposed. He says that it has always been the experience that more coal is secured from a mine or district than was originally estimated. The witness thinks there is probably coal enough for the Reading Railroad for 200 years at least. He estimates the total amount of coal in the ground at 15,000,000,000 tons. There are several companies besides the Reading which have a very large reserve, but its reserve is much the largest, although the witness is not disposed to think that the time will ever come when the Reading will hold all the remaining coal land.

Many of the collieries already opened will, in Mr. McLeod's judgment, soon be exhausted, but their owners often have reserved lands which can be worked by new collieries. The witness estimates that in 10 years 10 per cent of the collieries in the Wyoming region will be exhausted, and in 40 years 75 per cent. It costs 20 cents per ton more to mine coal in the Schuylkill than in the Wyoming region, but there is a greater supply in the former region from which a large part of the future consumption of the country must be taken. (565, 566, 571.)

2. *Cost of mining coal.*—Mr. HARRIS, in connection with his explanation regarding the supply of anthracite coal and the character of the different fields, declares that the cost of mining is steadily increasing with the exhaustion of the more accessible lands, and that it will continue to increase. It probably costs from 75 cents to \$1 more to mine a ton of coal now than it did 20 years ago. The finest veins have mostly been worked out. Now veins are often mined which are not more than 2½ feet thick. The mines are deeper in most instances. While formerly it cost perhaps \$100,000 to open a mine, sinking a shaft 200 or 300 feet, some collieries now can not be worked before \$1,000,000 has been invested in preparation and shafts have been sunk 1,500 feet. There have been many instances in the past where mines have been opened by means of tunnels, which served to drain the water, but at present much of the coal which is being mined is below the sea-level and enormous pumping apparatus is accordingly necessary. The increased depth also adds to the expense of supporting the roofs of the mines on account of the enormous superincumbent weight.

The influences which have increased the cost of mining in the past will necessarily increase its cost further in the future, since the witness knows of no sufficiently powerful influences working the other way. The price of coal will ultimately have to be advanced if it is to cover the cost at all. (606, 607.)

Mr. McLeod declares that the average cost of producing anthracite coal, including charges for improvements, depreciation, taxes, and insurance, is \$1.59 per ton. If interest on the value of coal lands be added it brings the cost to \$1.90 per ton. This does not include anything for the coal except the interest on the value of lands held. The witness has also calculated that the average freight rate is about \$1.50 per ton to tide water. The average price at tide water for 20 years has been \$3.48 per ton, the highest price having been \$3.96 per ton (as the average for the year).

An important element to be considered in the cost, says Mr. McLeod, is the chance involved in the sinking of shafts. A new colliery plant must be established about every 30 years, since the coal which can be reached by one shaft is usually exhausted in that time. When the shaft is sunk it may be found that a vein which was perfect a few hundred feet away has broken and disappeared. The difference in the cost of mining in different shafts is very great and can not be estimated in advance.

There is a gradual increase in the cost of mining coal as the supplies become exhausted and the mines go deeper. In some instances there are as many as 16 veins and the lowest may be down 3,000 feet. It not only costs more to handle coal but in the deeper mines more water is encountered. The Reading mines have pumped in recent years 2½ tons of water for every ton of coal. (565, 570, 571.)

Mr. STEARNS, president of Cox & Co., says that it is very difficult to estimate the cost of mining coal. The local conditions in every mine and every seam of a mine vary. A seam may be in good condition to-day and to-morrow there may be an explosion or a fall from the roof or a flood which will result in very considerable damage. A mine can not be operated on a narrow margin of profit because of this uncertainty.

While there have been improvements in the methods of mining, and while there have been especially improvements in transportation of anthracite coal, which have reduced the cost, the actual cost of mining has not decreased, but has increased steadily, and will continue to do so. As mines become deeper it costs more to ventilate and pump them as well as to lift the coal. Interest on land held for future development ought to be included in the cost, but the witness seems to doubt whether the producers have usually been able to earn much interest on such investments. (584, 594, 595.)

Mr. WALTER says that 20 years or more ago the cost of mining anthracite coal was much less than at present. Most of the mining was done above water level; drifts or tunnels were used and the coal was above the level of these so that the mine drained itself. At present most mines are below water level and work by vertical shafts. Formerly the cost of opening a mine and establishing breakers, etc., was comparatively small, but now it is very much greater. The Lehigh Valley company is just completing one colliery operation which will cost over \$500,000. Twenty years ago many operations costing \$25,000 or \$30,000 would produce as much coal. There has been a vast improvement in the machinery and methods of handling coal, but the other items of expense have increased in greater proportion than the saving from these improvements. (544.)

Mr. SAWARD says that the expense of mining anthracite coal has increased during the past 20 or 30 years. Machines have been introduced but more difficult veins have to be worked. The price of powder has declined materially. It was formerly about \$2.75 per keg, and is now \$1.50. Powder, however, is not a very large item. About 1,500,000 kegs of powder and 4,000,000 pounds of dynamite are used in getting out 60,000,000 tons of annual product of coal. (511.)

Mr. Saward thinks it is impossible to get anything like accurate statements as to the cost of producing a ton of anthracite coal. One may take the reports of the companies showing the costs of operation and divide the cost by the number of tons produced. But this is usually misleading, because of the different methods of charging up expenses to different accounts. It is a frequent practice to charge to the account of permanent improvement expenses which should have gone into the running account of costs. Wages are about 85 per cent of the cost of production. (515.)

Mr. FLEMING, of the Anthracite Coal Operators' Association, declares himself unable to give any estimate as to the cost of producing coal. The cost varies greatly at each mine in accordance with the distance from tide water, the amount of track an operator uses, the thickness and character of the vein operated, the depth, etc. (540.)

Mr. WALTER says that the geological formation and characteristics of the different mining districts vary greatly and that the expense of mining differs accordingly. In general the Schuylkill and Mahanoy districts and the whole southern and middle western field is more expensive to operate than the northern field. The northern field is being worked more rapidly and will probably be exhausted sooner. (547.)

3. *Exhaustion of coal lands.*—Mr. STEARNS, president of Cox & Co., says that it was the practice of the Susquehanna Coal Company, which has affiliated with the

Pennsylvania Railroad, to set aside a certain amount of money yearly to cover the exhaustion of the coal property. It is the wisest policy to make such a provision; the company which does not do so will find itself out of capital when the mine becomes exhausted. (584.)

4. *Royalties on coal lands*.—Mr. SAWARD, of the Coal Trade Journal, says that the most fortunate men in the anthracite business is the owner of the lands, who does nothing, and who usually gets about 25 cents per ton royalty. (519.)

5. *Anthracite coal in Colorado*.—Mr. GRIFFITH, representing the Denver Chamber of Commerce, says that a considerable amount of anthracite coal is being produced in Colorado, and that it is generally believed that there is a large supply in the mountains. There is comparatively little difference in quality as compared with Pennsylvania coal. (857.)

1. Conditions of labor and relations of employers and employees.

—1. *Strike of 1900* (see also views of these witnesses as to arbitration, p. CLXIV).—Mr. STEARNS, president of Coxie Bros. & Co., says that some of the claims of the miners in the strike of 1900 were just. The conditions can be understood only by reference to the earlier relations of the employers and employees. In 1875 the operators agreed upon the sliding-scale system for the payment of miners. The price for each class of labor was fixed at a certain rate on the basis of a tide-water price of \$5 per ton for anthracite coal. For every advance or decline of 10 cents in the price of coal wages were to rise or fall 1 per cent. The price of coal fell so greatly at tide water, especially because of the reduction in freight charges between the mines and tide water, that it would have been unjust to the miners to let wages fall in that proportion. Accordingly the tide-water price was calculated on the basis of a freight rate of \$2.50 per ton in fixing wages, i. e., the actual freight was deducted from the tide-water price, and \$2.50 was then added. There had been an advance of wages during the summer of 1900 under the sliding scale of about 5 per cent. The miners demanded that the entire system be abolished, and also demanded an increase of wages and a reduction in the price of powder. Ten per cent advance was granted and powder was reduced from \$1.75 to \$1.50. The witness thinks that the reduction in powder would have taken place without a strike, and that probably there would have been an advance of wages without the strike. The witness seems doubtful as to whether the price of coal can be kept high enough to compensate the operators for the increase of wages. (593, 594.)

Mr. THOMAS, president of the Erie Railroad, declares that prior to the strike of 1900 in the anthracite field there had been no strike for 20 years. Labor was fairly well paid. The relations between the miners and their employers were largely personal. Employers had done much for the men by contributions, establishment of hospitals, etc. The chief difficulty was the lack of steady work. Professional agitators came into the country and took advantage of this last circumstance. They brought the great majority of the miners into the United Mine Workers and caused the strike. (557.)

Mr. HADDOCK, independent coal operator, thinks that the demands of the miners in the anthracite strike of 1900 were just. The railroad companies refused to arbitrate, but one of their reasons was the feeling that the men were irresponsible in carrying out the decisions of arbitrators or agreements. (533.)

Mr. WALTER, of the Lehigh Valley Railroad, says that the demands of the miners in the strike of 1900 were acceded to. He hardly knows whether to consider them just or not. The strike has not injured the railroad companies up to the present time, but has, if anything, been temporarily beneficial by permitting an exhaustion of the surplus stocks. The public is paying more for coal as a result of the strike. (546.)

Mr. SAWARD thinks that the contention of the United Mine Workers in the strike of 1900 was, in general, just. Moreover, the strike resulted to the advantage of the railroad companies themselves, by restricting production, which they had been unable to agree upon among themselves. The United Mine Workers claim now to have 80 per cent of the actual anthracite miners among their members. (519, 520.)

Mr. FLEMING, of the Anthracite Coal Operators' Association, thinks that while part of the demands of the miners in the strike of 1900 were perhaps just, the general demand was unfair. (542.)

2. *Violence in strike of 1900*.—Mr. STEARNS, president of Coxie Bros. & Co., says that the men at his collieries did not want to strike. Only at one colliery did any quit work at the beginning of the strike, only 54 out of 3,500 employed by Coxie Bros. going out. But the union men threatened and intimidated the miners who remained at work, called them "scabs," and used every possible means to make them quit. The number of men working was gradually reduced until October 11, when the

mines of Coxe Bros. & Co. were working at about half their capacity. At that time there was a riot at the mines and one of the watchmen was killed, while several other men were wounded. The company accordingly posted a notice that it would quit on account of the danger to the employees. (592.)

3. *Effect of strike.* (See also above, *Prices.*)—Mr. HADDOCK, independent coal operator, believes that the strike of the anthracite miners has had a beneficial result upon the operators and the railroads. The railroads had previously undertaken, not always successfully, to restrict production, in order to maintain high prices and rates of transportation. The strike restricted production and raised prices. Nevertheless, it was unfortunate that it should be necessary to resort to a strike to get these results. It is true that during and after the strike many retail dealers, who had made contracts to furnish coal at lower prices, lost considerable sums by the advance. (527, 528.)

Mr. McLEOD says that the strike of 1900 undoubtedly advanced the price of coal beyond what it would otherwise have been. There was a strike in 1887 which forced the price of coal from an average of \$3.67 in that year to an average of \$3.86 in 1888. The witness hardly thinks that the price of coal has gone up enough to recompense the producers for the higher wages paid to the miners. Perhaps the strike may be said to have resulted advantageously to the railroads and operators as well as to the miners, but the witness knows that the employers did not want the strike to occur. (574.)

4. *Labor organizations in the anthracite field.*—Mr. McLEOD is inclined to think that workmen make a mistake when they delegate their power to some other person or body, such as the labor organizations. He thinks that the men in their aggregate capacity can meet their employers directly. On the other hand, he implies that in the case of a great body of men like the anthracite coal workers some form of organization is necessary for dealing with employers at all. The policy of the witness when he was at the head of the Reading Railroad was not to raise the question whether a man belonged to a labor organization or not. He dealt with the men so long as they were respectful. Mr. McLeod thinks that the demand made by the anthracite miners in the spring of 1901, that they should receive formal recognition for the organization of the United Mine Workers, was unnecessary, since the fact that the operators actually dealt with the union in 1900 and advanced wages amounted to a recognition.

Mr. McLeod seems disposed to think that the concessions made to the miners in 1900 were justifiable, but he says that it often happens that when one concession is made workmen are encouraged to go on and make other demands which are not justifiable.

This witness thinks, further, that the miners will get higher wages as the result of the movement toward community of interest which is now going on. (575, 576.)

5. *Wages of coal miners.*—Mr. McLEOD says that he estimates the average wages of coal miners throughout the year at \$40 per month. About 12 per cent of the whole number are boys, who receive about half this rate. The greater cost of producing anthracite is shown by the fact that it requires 145,000 men to produce 47,000,000 tons of anthracite, while 91,000 men in Pennsylvania produced 73,000,000 tons (567).

Mr. McLeod says that some coal miners work by the day and others take contracts by the ton or car. The average wages for foremen above ground are \$2.71 per day; for mechanics above ground, \$1.92; for laborers above ground, \$1.29, and for boys under 16, 62 cents. Below ground foremen get \$3.05 on average; miners, \$2.40; laborers, \$1.63, and boys under 16, 89 cents. The average number of days worked is about 200 per year. (574.)

Mr. HARRIS, late president of the Reading Company, says that the Reading Coal and Iron Company has always been more than friendly to labor, and it has been disposed to recognize the right of the miners to organize. There has been less friction than in the case of any of the other coal companies. Mr. Harris believes, personally, that labor has the same right to organize as capital, and that it also has the power to do so. He thinks that organized labor should have a voice in fixing the wages and other conditions of labor. (611.)

Mr. STEARNS, president of Coxe Bros. & Co., says that during August, before the strike of 1900, the average earnings of men and boys in the mines of that company were between \$43 and \$44 after making all deductions. About half of the men included under this average were miners, the other half were common laborers, drivers, door boys, etc. This average, however, would not be typical for the entire year because the mines were working full during August, and they did not at all times. The witness submitted a statement showing the number of days worked each

month by the employees of Coxe Bros. & Co. at their various mines. The calculation is given by hours. Estimating 10 hours to a day, it appears that the total number of days worked ranged from 156 at one of the mines to 265 at another. The average for all the mines was 223 days of 10 hours each. Of course, if the day be counted as 8 or 9 hours the figures are correspondingly increased. The number of hours worked was also reduced by the strike in October. (593.)

Mr. SAWARD believes that the miners in the anthracite field are satisfied at present. They are getting good prices and full work. They can not work 6 days in the week on account of the severity of the work. Two hundred and fifty days per year is as long, on the average, as they ought to work. That number of days has not been reached in the past, but probably will be in the future. (519.)

Mr. GREENE, of the Audit Company, of New York, declares himself in favor of proper remuneration for anthracite miners. He thinks that they should be permitted to organize unions, and that by conciliation between the unions and the operators, with arbitration in case of necessity, the conditions of labor should be fixed. (474.)

6. *Nationality of coal miners.*—Mr. STEARNS, president of Coxe Bros. & Co., says that out of 3,250 employees of Coxe Bros. & Co. only 999 are American, while many of these are of foreign extraction. About 20 years ago all of the miners were Welsh, Irish, and German, with a few Americans and English. There were no Hungarians and Poles. Now most of the younger generation of the Welsh and Irish have left the mines. Their parents desire to give them better opportunities and better education. Austrians, Hungarians, Poles, and Italians have come in and taken their place.

Mr. Stearns says, further, that the proportion of foreign miners in the mines of Coxe Bros. & Co. is less rather than greater than the proportion in other mines. Coxe Bros. & Co. have retained many of their older miners because they have given them better treatment than is customary in the anthracite business.

The witness declares that it is not true that foreign labor was imported by Coxe Bros. & Co. or that any of the anthracite companies have directly imported foreign labor. The foreigners who have come from time to time have sent back word to their friends of the great improvement in their conditions here, and their friends and relatives have come to join them in droves. Before the foreigners became scattered generally in the coal fields this practice gave the appearance of importation.

The Poles and Hungarians seem to show little disposition to become American citizens or to remain permanently in this country. At election time both parties try to get them naturalized. During the strike of 1900 large numbers of these foreigners went back to their homes, saying that they would return later on. They make enough at mining to enable them to become independent in their own countries. (595, 596.)

7. *Employment of children in anthracite mines.*—Mr. SAWARD says that the law of Pennsylvania prohibits the employment of children less than 14 years of age in under-ground work. A few over that age are employed as door boys. (516.)

VIII. REGULATION OF RAILROADS—INTERSTATE COMMERCE COMMISSION.

A. Railway legislation generally.—Mr. THOMAS, president of the Erie Railroad, thinks that great caution ought to be exercised in legislation regarding transportation systems. The surplus wealth of the country is very largely invested in transportation, and it can not be unfavorably affected without injuring the whole country. The many owners of securities and the army of railroad employees must be considered. The forces which have made this country able to transport freight cheaper than any other country ought to be left chiefly to work out their own problems without legislation or interference. (560.)

Mr. SCHIFF, banker, does not think our Government is adapted to become the owner of railroad and telegraph lines. He believes the silent laws of nature are better correctives than any written laws can ever become, but it is the right of the Government to regulate those concerns that exist as its servants. He has not given the matter of Government control of railroads sufficient thought to give any definite opinion as to its merits. (777.)

B. Powers of Interstate Commerce Commission—Proposed amendments of law.—1. *General.*—Mr. WILSON, of Cincinnati, declares that there is no remedy for discriminations between places by appeal to the Interstate Commerce Commission. All the commission can do is to develop the facts and announce its opinion, but it has no legal standing. The Western people are so thoroughly discouraged

that they do not care to pursue the legal remedy. The railways pay little attention to the decisions of the Interstate Commerce Commission, less in fact than they do to the decisions of the several State commissions. A smaller volume of business is affected by the purely local State boards, and there is a closer intimacy between the managers of railroads and the State boards than between the railroads and the Interstate Commerce Commission. Moreover, in some of the States the railroad commissions have the definite power to change rates. The self-interest of the railways themselves will in time, perhaps, have some influence on the railways in opening a way into the South from the Western manufacturing centers. (690, 691.)

Mr. BACON, freight manager of the Michigan Alkali Company, believes that the Interstate Commerce Commission should be given added powers such as those provided in the Cullom bill. It should have power to control classifications and rates made by railroads, and by the joint traffic association for the entire country which is proposed by the witness. The fact that the Government gives to the railroads the right to condemn private property, tear down a man's home, and that it grants them public franchises and employs them to carry the public mails, gives to the Government the right to demand supervision over the railroads. (76.)

Mr. JACKSON, a member of the Massachusetts State board of railroad commissioners, says that he does not see any reason why the powers of supervision possessed by the Massachusetts board of railroad commissioners should not be extended to the Interstate Commerce Commission. (See below, p. CLXXIII.) (848.)

Mr. DAVANT, commissioner of the Memphis freight bureau, believes that Congress should clothe the Interstate Commerce Commission with power to fix rates in correction of discriminations between points, the rates fixed to remain in force until overruled by a court. The representatives of the bureau advocate the adoption of the Cullom bill with a few changes. They do not desire, however, to enforce strictly the provision that no more shall be charged for a short haul than for a long one. The bureau also advocates the provision that the Interstate Commerce Commission may examine the books of railroads by means of common inspectors. (6.)

Mr. GREENE thinks that the tendency toward railroad consolidation may make additional control by the Interstate Commerce Commission necessary, though the precise nature of such control he does not discuss. Railroads are willing to submit to reasonable scrutiny by the commission, but do not wish to be dictated to continually. (473.)

Mr. GRIFFITH, representing the Denver Chamber of Commerce, has no definite conviction as to the increase of the powers of the Interstate Commerce Commission. He says that Denver merchants think the commission ought to have more power, and would favor allowing it to approve rates promulgated in the first instance by railroads, but not power to fix the rates themselves at the outset. Conditions vary so materially that members of the commission who are not railroad men would be unable to determine properly what the rates should be. A rate that would be very extravagant in the East would not be extravagant in Colorado. The witness also thinks that it would probably be best for the decisions of the Interstate Commerce Commission not to go into force immediately in case appeal were taken from them by the railroads. (857.)

Mr. WOODLOCK, railroad editor of the Wall Street Journal, does not consider the Interstate Commerce Commission a very powerful body. He believes, however, that it has done a great deal of good in protecting the public against exorbitant rates. It has promoted free discussion and knowledge of the facts. This system of uniform reporting has been advantageous.

It is a fact that the Interstate Commerce Commission is without power to enforce its decisions if an appeal is taken to the courts. Mr. Woodlock believes that such a matter as the reduction of rates could hardly be delegated to any authority short of the Supreme Court. Indeed the witness will be sorry to see the power to fix rates in the first instance given to any public authority. It may be proper to regulate long and short haul rates, and to endeavor to prevent discrimination, but the determination of rates generally is a matter which must be left to the railroad, since no other authority is competent. The only thing that finally must and should determine rates is free trade in railroads, free construction, and competition, which will establish rates reasonable by their very nature.

Mr. Woodlock does not think that the Interstate Commerce Commission should have authority to put its decisions into immediate effect when an appeal is taken to the court.

The hearing of an appeal may last for months, and if the decision is finally in favor of the railroad, it has much less remedy as against the shippers than the shippers would have against the railroad. It is true that it sometimes takes years to get

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decisions through the Supreme Court, but the Supreme Court can not be hurried. (464, 465.)

Professor RIPLEY says that a modification of the law so that the increase of stock by interstate railways would be prohibited without a governmental permit would give the Interstate Commerce Commission a certain control over the roads, inasmuch as the commission would have something which the roads wanted and which the commission alone could give. It might go far, therefore, to supply the present inability of the commission to prescribe what rates are reasonable and what are not. (303.)

2. *Extension of the powers of the Interstate Commerce Commission.*—Mr. LANGLEY, of the Merchants' Association of New York, says that the merchants would welcome some extension of the powers of the Interstate Commerce Commission. There should be power lodged somewhere that could take up questions of rates and determine what is reasonable. It is entirely optional now with the railroads, no matter how meritorious a demand may be, whether they will pay any attention to it. The witness quotes from a statement of his made at the commerce convention in St. Louis some years ago, showing the position taken by that body, as follows, viz:

"(1) That the Interstate Commerce Commission should consist of at least 8 members, among whom shall be lawyers, railroad experts, and representatives of the shipping public; (2) that the commissioners should be appointed to hold office during good behavior, as in the case of the United States Supreme Court; (3) that common carriers should be given the right to enter into agreements, approved by the commission, in respect to interstate commerce only for the purpose of carrying into effect the provisions of the act."

The witness approves of the general provisions of the Cullom bill. Consolidation or the community of interest of railroads will not necessarily relieve the public from the need of protection, though it may lessen the necessity. The community of interest would eliminate competition (which the witness regards as a dangerous thing in transportation matters) by grouping the roads together and practically making one road of all. At present the Interstate Commerce Commission does not seem able to enforce its orders. There is no encouragement for the shipper to file a complaint.

The commission has on its docket numerous cases that have not been reached, some of which have been pending for years. He does not know that the delay is any fault of the law. Many cases arise, no doubt, where questions are very intricate and important, so that a decision may be difficult to reach. The witness submits a statement read by him at the Interstate Commerce Law Convention, held at St. Louis for the purpose of taking action to secure the passage of the Cullom bill at the last session of Congress. Among other things suggested in this paper is that the Interstate Commerce Commission should be removed from all suspicion of political influence, so that in the eyes of the public it may stand upon a plane similar to that occupied by the Supreme Court of the United States, and to bring this about the writer suggests that a life tenure would be proper.

As the railroads become more and more consolidated, the fixing of rates by these large corporations, to be approved by the Interstate Commerce Commission, will be simplified. The Interstate Commerce Commission, in order to pass intelligently upon the subject of rates, must have an intimate knowledge of the rate question. It is impossible for the commission to make rates. If, however, the commission should have a life tenure and should be properly constituted the objections might be obviated. The power to change rates, which many people think the commission ought to have, is practically the power to make rates, and the witness would not want to have the power to make the rates taken entirely away from the railroads. Referring to a remark made by a railroad president that he would rather have a place on the Interstate Commerce Commission, if he was venal and inclined to make money, than to have a free license to loot the United States Treasury, the witness says that the same remark might be made of the Supreme Court. Somebody must be trusted, and there is no reason why a man can not be just as honest on the Interstate Commerce Commission as he can on the Supreme Bench. The witness would make the Interstate Commerce Commission practically a judicial body. He would not question a decision or ruling of the Supreme Court on ordinary matters, but on the question of rates, where the facts are intricate, he would not give it such great weight.

The desire of the witness is to give the commission power to disapprove a rate and prevent it from going into operation. This would practically be equivalent to the power to fix rates. Replying to the question as to whether putting a decision of the Interstate Commerce Commission into immediate effect, notwithstanding it may be appealed from, would induce great confusion, the witness thought it would not necessarily do so, and he does not think it would interfere with the steadiness of rates. (877-882.)

3. *Rate-making power.*—Mr. WILSON, of the Cincinnati Board of Trade, says that he recognizes a distinction between the power to prescribe rates in the first instance and the power to approve those rates when promulgated by the railroads. The proper order of procedure should be that every railroad should promulgate its rates and should have the right to enforce them until they are proven wrong, the burden being upon the party proceeding against them. It is a fair presumption that railway managers intend to make an equitable tariff, but they may err, and should not have the authority to pass final sentence upon their own errors. In the winter of 1900 the railroad companies advanced rates throughout the Southern country from 25 to 50 per cent on about 30 per cent of the commodities that were shipped, thus levying an additional tax upon the people of several millions of dollars. In some instances this worked absolute oppression, prohibition, and destruction of business. The decision as to whether those rates should stand or not rested only with the railroads who made them. There was no other tribunal before which the matter could be brought. If the Interstate Commerce Commission, or some other representative of the Government, had had the right to suspend those rates until they were shown to be justified it would have been very much better. (690, 698.)

Mr. RIPLEY says that the placing in the hands of the Interstate Commerce Commission of the right to approve the rates of the different lines of railroads, without giving roads the right to pool, would not bring the redress that pooling would give, although it would be an advantage. It would not remedy the evil of underclassification unless it included the right of inspection. The right to pass upon rates should be given to the Interstate Commerce Commission, and would contribute toward the betterment of conditions. Whether the practice of rate cutting and personal discrimination, which can not be stopped by the railroads, could be stopped by an administrative body at Washington is a question. (290.)

Mr. TEISBERG, secretary of the State Railroad and Warehouse Commission of Minnesota, thinks that the Interstate Commerce Commission ought to have the power which his own commission has in its State of regulating or reducing rates in certain instances upon complaint. It ought to be able, after proper hearings, to adjust discriminations between localities and, perhaps, between commodities. It ought not to be empowered to make all rates. (372.)

Mr. THOMAS, of the Erie Railroad, is disposed to doubt whether the Interstate Commerce Commission has been of any benefit to the railroads or to the country at large. At the same time the recommendations of the commission have, in most respects, been followed by the railroads. It would not do to say that the commission has accomplished nothing. It affords an opportunity for those who think they have grievances to get an investigation, and if there is a real grievance public opinion usually enforces the decision of the Interstate Commerce Commission.

Mr. Thomas does not think, however, that the commission ought to have the power to make rates or, what he considers practically the same thing, to revise rates. It is not a safe thing to put into the hands of any five men the power of making rates in a country where industries are so diversified and numerous as here, at least unless the members of the body are appointed for life. It is not safe to allow politics to interfere in the matter. There would be no better opportunity for making money corruptly than would come to a member of the Interstate Commerce Commission if he had power to make rates throughout the country. The witness does not believe that Congress ever intended that the commission should have this power. (557, 558.)

Mr. MCGOVERN, chairman of the Southern Classification Committee, thinks carriers ought to be allowed to make their own rates, which of course should be reasonable in themselves. If the shipper does not feel that he has been fairly treated, he ought to appeal to the courts, and the carriers ought to aid or assist through the medium of the State commissioners or the Interstate Commerce Commission by sharing the expenses of the suit. He does not believe the Government ought to fix the rates. "The seller fixes his price. * * * If it is a yard of dry goods, there is no recourse. In the case of a common carrier there is a recourse, because of the peculiar business or functions of the common carrier."

It is well settled that the rate must be just and reasonable, and that the courts have authority to determine whether it is just and reasonable, but the shipper ought not to be put to the sole expense of having it determined whether he is being fairly treated. Every private or corporate citizen ought to aid in maintaining a tribunal which would relieve the shipper of the burden and cost of having that case determined for him. "I can not distinguish between the power to make rates and the power to make property unprofitable;" hence the State ought not to have power to fix rates for the transportation of people or articles. Capital invested in railroad business ought to have the same latitude as capital invested in any other kind of business, except that the carrier ought to be made to fix its rates at fair and reasonable figures, to be determined by the courts if disputed. There is a distinction

between saying that the State can fix the rates and saying that the courts can determine whether the rate is fair and reasonable. (665-668.)

Mr. GRISWOLD, general freight and passenger agent of the Western Maryland Railroad, thinks that to submit the rates of the railroads to the Interstate Commerce Commission for approval would be to submit the work of experts to those who are not experts in that particular line of business. It would be a most gigantic undertaking to supervise and examine the rates made by all the railroads of the country. (620.)

Mr. STRUBBS, of the Southern Pacific Company, thinks that the Interstate Commerce Commission has all the power it needs to enforce the law if it would only exercise it. He holds that it would be dangerous for the commission to oppose the general rate-making power and that its attitude in opposing the legalization of pooling in order to compel the railroads to consent to an increase of this power is to be condemned. (766.)

Mr. MCGOVERN testifies that it would not be possible, in his opinion, for the Interstate Commerce Commission with its present functions to be also a court of final resort on the question of railway rates, nor would it be best for the decisions of the commission to stand on the question of rates until reversed. It is not right to assume that the railroads will do wrong pending the final decision of a case in the courts. (685.)

Mr. WILSON says that the board of trade at Cincinnati recommends the passage of the Cullon bill or some like measure. The most important matter is to amend the law so that the party complaining of a decision of the commission must appeal to the courts. The finding of the commission should be regarded as *prima facie* correct, and its decisions should stand upon the same basis as the decisions of the courts—that is, they should be binding until reviewed by the courts upon an appeal taken by the party against whom it is rendered.

It is now the duty of the Interstate Commerce Commission to apply to the district attorney and request him to bring a suit to enforce its order. This is a "lop-sided way of getting at justice." Formerly, when complaints were made to the Interstate Commerce Commission against the railways no defense was even made to the charges, but since the courts have decided that the railroads must very clearly show the necessity of taking further testimony than that taken before the commission they now make their defense before the commission in the first instance. The evidence taken before the Interstate Commerce Commission is regarded in the courts as *prima facie* evidence of the facts therein stated. (690, 698.)

Mr. HADDOCK, independent anthracite coal operator, says that it has been a matter of profound regret to the independent operators that the interstate-commerce law did not give effective control over rates to the Interstate Commerce Commission. The law merely made the decision of the commission evidence when the matter was taken into the courts and gone all over again. The witness would favor an amendment making the decisions of the Interstate Commerce Commission operative pending appeal. He also favors the Cullon bill generally. (534.)

Mr. WHEELER declares that San Francisco jobbers and shippers generally think that the Interstate Commerce Commission ought to have added powers, and in particular that it should be able to enforce its rulings pending appeal. The burden of appeal should be placed upon railroads, while at present the Interstate Commerce Commission is compelled to go into the courts to enforce its decisions. (745.)

Mr. STRUBBS, of the Southern Pacific Company, thinks that the Interstate Commerce Commission ought to make every endeavor to reach a speedy decision as to cases brought before it. He thinks, however, that in most instances the commission has been prompt enough in making decisions. In some cases it has delayed a considerable length of time, but the questions coming before it are very far-reaching, and a single decision may affect the entire country, so that grave consideration is necessary. (766.)

C. Inspection and regulation of railroad accounts.—Mr. GREENE, of the Audit Company of New York, thinks it proper to require a greater degree of publicity of the affairs of railroads than would be feasible in the case of manufacturing and other corporations which have competitors who might profit by the information thus published. There is no danger that a railroad which shows its accounts will thereby promote the construction of a competing road or otherwise benefit competitors. The witness is disposed to favor more thorough governmental control of the accounts of railroad companies. He thinks, however, that the officers of the Interstate Commerce Commission ought not to be given authority to examine the accounts of railroads in person. There would constantly be a suspicion of political influence. It would be better for the Government to require that the accounts of railroads should be audited and examined from time to time by expert disinterested auditors,

such as, for example, the Audit Company of New York. The names of these auditors should be filed at Washington, and they should perhaps be required to give bond for the correctness of their reports. The responsibility of such auditors and the fear of losing business in case of fraud or error would be the chief safeguard as to the correctness of their work. The nature of the information to be required would be prescribed by the Interstate Commerce Commission. The witness believes that the uniformity of accounts already required by the Interstate Commerce Commission is advantageous.

One reason why, in the opinion of Mr. Greene, such private inspection would be superior to that of Government officials is on account of the difficulty and delicacy of the work. For instance, it is extremely hard to determine in many cases whether a corporation is solvent or not. The examination which the witness suggests would be much more difficult and thorough than that which national-bank examiners give to banks. It is a relatively easy matter to determine whether a bank is solvent. (479-481.)

Mr. Rice, a banker and railroad officer, does not think that the existing laws furnish any adequate safeguard to investors in railroad corporations. At the time when the witness investigated the affairs of the Reading Railroad, after the bankruptcy of 1893, he drafted a bill, which was introduced into Congress, for extending the powers of the Interstate Commerce Commission to prevent frauds on stockholders. The chief object was to provide for the examination of railroad accounts in the same way as those of national banks are examined. The one method of inspection is as easy as the other. All railroad reports go into great detail, and it is perfectly proper that railroads should be examined by the United States officers to see that the reports give correct figures, and especially to see that they are not misleading as to the true conditions. Such an investigation would show whether the various credits and earnings had a substantial basis. The Interstate Commerce Commission is the proper authority to be given control of the accounts. (741.)

Mr. Rice, speaking in part from the experience of the Reading Company, declares that there is danger to the solvency of the railroads from the practice of making loans and advances to leased lines. The Pennsylvania Railroad, itself only 400 miles long, may lease many other roads and obtain an enormous system. It may find that some of the roads thus acquired need money for development, and the money will be advanced to the leased line and will stand on the books of the railroad as an asset or surplus. It may be that the leased line will be unable to return the money on demand, and the lessor will incur the danger of bankruptcy if pressed for payments. The Philadelphia and Reading Railroad prior to its bankruptcy not only had made cash advances to leased roads but the affiliated coal company was largely indebted to it. The coal company was supposed to pay the regular rate of freight. It did not have the required cash to pay because it could not sell coal at sufficient profit. The railroad treated the money due from the coal company as earnings, as an available asset, but when it was found that the coal company did not have the money to pay the default was exposed publicly. It is possible for corporations having other corporations subsidiary to them to make misleading returns regarding assets and returns. (739, 740.)

Professor ADAMS, statistician of the Interstate Commerce Commission, thinks that the Federal Government ought to assume a more complete control of the accounts of railroads. The railways themselves have been brought to see, through the agency of the Interstate Commerce Commission, the desirability of uniformity in accounts of operating expenses. They, as well as the State commissioners, have helped to work out a uniform system of such accounts; but it has been very difficult to go further in the direction of uniformity than the operating accounts. It seems to many that it might be advisable to establish a bureau of statistics and accounts, with somewhat the same relation to the railroads that the office of the Comptroller of the Currency has to the national banks. It seems to Mr. Adams that if the Interstate Commerce Commission and the State commissions are to perform the duties imposed upon them they must have access at first hand to the books of the companies. Each of these commissions is in a sense the director representing the public interest in those corporations. He ought to have a voice in the administration of them. The St. Louis convention of State railroad commissioners approved such a policy, though by a rather close vote. The law gives the Interstate Commerce Commission a right to demand uniform reporting and to ask for special information; but that is quite a different thing from a regularly established system of inspectors, who should see that the books of the railways were kept according to the principles laid down.

The railroads would object to such a law, perhaps, because they would think it an invasion of their rights. They might also feel to some extent that it would lead to the escape of secrets of administration. The railroad men say, also, that the same

rule of accounting does not apply to all conditions, and Mr. Adams supposes "the most common objection would be that they can not trust the public officials when they get hold of them." On the other side, the great advantage of uniformity of accounts is that after a person has gone to the trouble of studying in detail the accounting of one system the accounts of all the roads in the United States are at his disposal and he can understand them. When one saw a total one would know the meaning of it without going through the whole mass of figures; while now, there being no guaranty of uniformity, a man can never tell, even though he is acquainted with a system of accounting, what a given total means. (384, 385.)

Mr. Nicholson testifies that the Interstate Commerce Commission has mapped out the line for the general exhibits of the operation of the railway companies, but below that come the various traffic accounts which lead up to those figures, and there is no uniformity in the methods. The Central Railway Clearing-House has to take care of 12 different systems of accounting and make its record fit the ideas of the individual companies. The Interstate Commerce Commission has done effective work toward securing greater uniformity of accounts than previously existed. The various roads make reports to the commission, which are full and complete and from the schedule prepared by the commission. The system of accounting prescribed by the Interstate Commerce Commission is fully in accord with the forms adopted by the Society of Railway Accountants. There is perfect harmony existing between them. (727, 730.)

Mr. Woonlock does not think that it would be practicable for the Interstate Commerce Commission to inspect and audit the books of railroad companies. This is no longer necessary for the purpose of discovering rate discriminations, since these practically do not exist. (464.)

Mr. Schuff, banker, says that the question of public examination of accounts of public utility corporations is such a large one that he does not wish to express any definite opinion concerning it. Any dishonest action on the part of railway corporations should be made punishable by law. There is ample legislation for this, and all that is necessary is a proper enforcement of the laws. He knows that no dividend has ever been declared by any of the corporations with which he is connected that has not been earned, and he can not point out a board of directors which has declared dividends that have not been earned. There would be some difficulty in making a director personally responsible for any misstatement in respect of the condition of the property he represents, and it could not be done except in the case of gross frauds. It would be very wrong to declare a dividend that has not been actually earned, if a reserve does not exist, and it would be decidedly wrong for a railroad to declare a dividend and almost immediately thereafter go into the hands of a receiver. (773.)

D. State railroad commissions and regulations.—1. *Railroad and warehouse commission of Minnesota.*—Mr. TEISBERG, secretary of the State railroad and warehouse commission of Minnesota, says that the law of 1885, which created the commission, made it an advisory body without power directly to fix rates. It could only recommend to the railroads any changes it thought proper. In 1887, however, a new act was passed, based on the bill to regulate interstate commerce, which was then pending. Much of it is in the same words as the interstate-commerce act adopted in 1887. There are some exceptions. One is that the State act permits the railroads to issue free passes to whomsoever they please within the State. The act empowered the commission to fix or change rates made by the railroads. Under this power they reduced certain switching rates from \$1.50 and \$2 per car to \$1 per car. They also reduced the rate on milk from 3 cents for 10 gallons to 2½ cents for 10 gallons for distances up to 75 miles. The railroads did not obey, and mandamus proceedings were instituted. The State supreme court decided that the intention of the legislature was to make the decision of the commission final and conclusive as to what are equal and reasonable charges, and that this law was constitutional. The United States Supreme Court, on appeal, holding itself bound by the decision of the State court so far as the interpretation of the intent of the legislature was concerned, held that the law as interpreted by the State courts was unconstitutional, because it deprived the company of its right to a judicial investigation by due process of law, and substituted therefor, as an absolute finality, the action of the railroad commission, which, in view of the powers conceded to it by the State court, could not be regarded as clothed with judicial functions or possessing the machinery of a court of justice. The next legislature, which met in 1891, amended the law to meet the objections of the United States Supreme Court. The amended act provided for the making of complaints in regard to the rates by any person or corporation or municipality. The commission had power to investigate, giving the company due notice, and proceeding as far as possible in the manner pursued in such cases in a court. The first

and perhaps the most important case that came before the commission under this amended law was the question of grain rates from the Red River Valley to Minneapolis and Duluth. In 1894 the commission made its order reducing these rates about 124 per cent. The railroad company appealed to the district court, where the case was tried *de novo*. The State undertook to show what would be the cost of reproducing the railroad, and what the earnings of the road for several years had been upon grain traffic, with a view to proving that the rates fixed by the commission would give the road a fair income upon the cost of reproducing the road at that time. The decision of the district court was adverse to the commission. The supreme court of the State reversed the district court, and held that the question whether the rates fixed by the commission were unreasonable and confiscatory was to be determined not with reference to the amount of the fixed charges of the road nor to any other basis of cost than the cost of reproducing the road at the present time. The case was sent back to the district court, but was never heard again there, perhaps because the Great Northern Railway Company had completed a short line from the Red River Valley to Duluth, decreasing the distance, and had thereupon established rates which, in some instances, for the longer distances, were lower than the rates ordered by the commission. The adoption of these rates by the Great Northern of course compelled the Northern Pacific to adopt the same rates on its line through the same territory.

In 1897 the law was again amended so as to permit the railroad commission to proceed to the investigation of rates upon its own motion. Up to that time a complaint had been necessary. Under the new law the commission investigated the reasonableness of the rate on hard coal from Duluth to New Ulm over two lines of railway, and proceeded to fix a joint rate, and when the two roads refused to divide that rate proceeded also to determine the division. In this case the question was as to the power of the commission to make joint rates. This power was sustained by the State courts, and the case is now pending before the United States Supreme Court. A power closely connected with this is that of compelling two roads which cross each other at grade to put in a Y connection for the transfer of traffic from one road to another. This power has been sustained by the United States Supreme Court. (361, 363.)

2. *Massachusetts Board of Railroad Commissioners.*—Mr. JAMES F. JACKSON, a member of the Massachusetts State Board of Railroad Commissioners, says that that commission was founded in 1869. It is made up of 3 members, one of the members being familiar with questions which affect trade and commercial interests, another member being familiar by experience with railroad construction and railroad operation, and the third being a lawyer. (841, 842.)

Mr. Jackson says that this Massachusetts board of railroad commissioners has general supervision over all the railroads and street railways within the State and matters are continually referred to it by the legislature. It has both mandatory and advisory powers. It has absolute control in respect to questions concerning grade crossings of railroads and highways, of railroads and railroads, and of railroads and street railways. It has the power of approval in respect to the safety appliances of railroads, and the road is obliged to accept the judgment of the commission as final. It has the power to fix the price of stock in cases of purchase. If an issue of stock is authorized and the purpose is proper, and the amount is a proper amount, the commission fixes the value at which the stock shall be offered to the original stockholders. The new stock may be paid in at a different rate from that of the original issue. The board also has authority to pass on the propriety of the building of new railroads. As yet it has not that power in respect to the building of street railways, though there is a bill before the legislature which provides for that. The books of all railroad companies are open to the inspection of the board at any time. The board examines the annual reports of the railroads, which reports are made upon a prescribed system, and from time to time the roads are requested to furnish the board with the facts and figures that are set out in their books. It has never been the practice of the board regularly to audit the books.

The board has advisory powers in respect to questions of rates, both passenger and freight rates. It does not fix rates, but merely supervises them. It does not seem desirable that the board should have the power to fix rates. It does, however, exercise a very material influence over rates. The railroads are not bound by law to follow the recommendations of the board in respect to rates, but, as a matter of fact, during the history of the board it has been only in exceptional instances that either the public on one side or the railroad or street railway corporation on the other has disregarded the recommendations of the board. During the last year and a half, during which time Mr. Jackson has been a member of the board, the railroads have conformed in every case to the board's recommendations. Occasionally, when the recommendations of the board have been in support of the railroads, there has been

some criticism on the part of the public, but not very much. In a few instances there has been an appeal to the legislature, and some legislation. It has been generally true that when the appeal has been made to the legislature the legislature has sustained the board. The recommendations of the board are observed probably because of the feeling that the subject-matter has been carefully investigated, and an attempt has been made by 3 persons representing both sides to reach a just conclusion, and because of the feeling that unless the recommendation is such as to warrant an appeal to the legislature it is practically final. The control of the board in financial questions has probably strengthened it in making recommendations in respect to other matters. The board's control is practically limited to incorporated companies. So far as appears, however, there has not been any disposition to evade the control of the board by the formation of unincorporated companies.

The feeling in favor of the board has grown stronger and stronger on the part of the people, and many formerly opposed to the board admit that the security of railway stocks has been affected by it for the benefit of the railways and the benefit of the people.

Last year the board had presented before it over 300 matters, involving hearings almost every day. (842, 848.)

3. *California railroad commission.*—Mr. STUMPS, of the Southern Pacific Company, says that the California railroad commission, under the constitution of that State, is supposed to have power absolutely to fix railroad rates, although the Southern Pacific Company would not be willing to recognize that such a power could be conferred by a State constitution. The commission has from time to time caused considerable reduction in local rates. It undertook to require a general reduction in the rates on grain to the seaboard and the matter was finally compromised in 1899 or 1900 by an agreement on the part of the railroads to reduce rates about 8 per cent. The witness thinks that the commission has been useful. It approves all tariffs. It has not been confiscatory in its actions and for that reason some of the people condemn it. (767.)

4. *Grade crossings.*—Mr. TEISBERG, secretary of the State railroad and warehouse commission of Minnesota, says that his State has not given much attention to the protection of life and limb at railroad crossings. There is a law requiring that where two railroads cross each other trains must come to a full stop unless interlocking signals are provided and approved by the railroad commission. Such signals are now becoming very common in the State. (363.)

Mr. JACKSON, a member of the Massachusetts State board of railroad commissioners, says that in Massachusetts the abolition of grade crossings has been undertaken. Under a statute passed in 1890 the railroad pays 65 per cent of the expense of abolishing grade crossings and the State and the city or town together pay the other 35 per cent. The board has made a special investigation into the question whether the street railways should not bear a part of the expense where they cross railways, and has decided that they should. The legislature is now at work on a bill in response to that decision. (843.)

E. Departments of commerce and transportation.—Mr. BACON, of the Michigan Alkali Company, believes that there should be two new government departments of transportation and commerce, respectively. He thinks that these interests are so great that a single department would not be sufficient to supervise both of them. (77, 80.)

F. Regulation of railroad construction (see also under *Paralleling*, p. xciv).—Mr. WOODLOCK, railroad editor of the Wall Street Journal, asserts that the English law and the Massachusetts law, regarding the establishment of railroads and their capitalization, tend to protect the railroad companies more than the public. They practically prevent the construction of competing roads when there is a sufficient number of roads already to accommodate business. The witness believes that this is a wise policy, but does not think that shippers ordinarily believe so. The Interstate Commerce Commission has always looked solely to the interest of the shipper; it has restricted and restrained the railroads and not protected them at all. (460, 462.)

IX. WATER TRANSPORTATION.

A. General relation to rail transportation (see also as to effect on long and short haul rail rates, pp. cv-cxvi).—1. *Interaction of water and rail transportation*, pp. cv-cxvi).—Mr. ANDERSON, secretary of the Chamber of Commerce of Pittsburgh, says that water routes should not be regarded as rivals of rail routes in an injurious sense. On the contrary, the construction of water routes, by enabling the cheaper commodities to be carried in great quantities at low cost, would create an additional need for railroads to carry the more expensive commodities and to carry

passengers. This has been the experience of the continent of Europe, where the improvement of waterways has been carried far beyond anything that we have dreamed of. The more waterways the more railroads, and the greater their profits. The cheap transportation of ore on the Great Lakes has added immensely to the business of the railroads which transport the products of the ore. But for water transportation the Lake Superior iron ore would have remained in the earth, and the great industries that are founded on it could not have been established. But for those industries the railroads could not have approached their present prosperity. The industrial supremacy which this country is acquiring depends largely upon its cheap coal, and that again depends upon cheap transportation. Improvement of the waterways, which shall permit coal to be delivered at trifling cost to industrial establishments, will vastly increase the business of the railroads as well as the general prosperity. (639, 642, 645, 646.)

2. *Influence of water on rail rates.*—Mr. MARKHAM, after speaking of the influence of the Mississippi (see p. CLXXXVII), adds that the rates on traffic east of the Toronto-Buffalo-Pittsburg line destined to the Southern States are affected by the coastwise ocean carriers.—The Great Lakes, the St. Lawrence River, and the Erie Canal dominate the rail-carriers' rates on traffic between the Eastern and Western States in a similar manner. The rail rates are first adjusted between Chicago and New York in competition with the lakes and canal, and Philadelphia, Baltimore, Newport News, and Norfolk then claim less rates by reason of less distance from the West than New York. Inland towns in States bordering on the lakes take proportionate rates with those from Chicago, according to distance from New York, which virtually means that every point in the lake States enjoys the full benefit of the lake and canal competition on seaboard business.

On transcontinental traffic the Atlantic and Pacific oceans govern the rates. Rates by rail from New York to San Francisco are measured by those made by ocean steamers via the Isthmus to San Francisco, and by competition the western railroads have been compelled to make the same rates to the Pacific from all the inland territory as are made from New York. The rates which the American railroads make from the Pacific coast to the Atlantic seaboard on goods to or from China, India, and Japan are even governed by the ocean rates made via the Indian Ocean and Suez Canal.

"The power of the railroads to enforce any given rates is circumscribed by the water carriers, and the maximum they can charge is prescribed by the rivers, lake and ocean carriers." The competition between railroads themselves, demands of rival towns, and other influences may reduce the rates below the figures made necessary by water competition, but the maximum rates are governed entirely by charges made by the river, lake and ocean carriers. (428-430.)

Mr. GRISWOLD, general freight and passenger agent of the Western Maryland Railroad, says that there are rail-and-lake lines between Baltimore and Chicago and other northwestern points during the lake season. They are more circuitous than the all-rail lines and are allowed by the general agreements of the roads to make somewhat lower rates. (614.)

3. *Magnitude of lake and river traffic.*—Mr. ANDERSON says that the Great Lakes transport over 25,000,000 tons of freight annually, the greater part of which, the Lake Superior ores, are carried at a cost of half a mill a ton a mile. Over 30,000,000 tons a year are shipped on the streams of the Mississippi Valley. Of this amount some 17,000,000 tons originate on the Ohio River. (638, 646.)

B. Atlantic coastwise transportation (see also as to effect on long and short haul rates, pp. CVII ff).—1. *Old Dominion Steamship Company.*—Mr. GUILLAUME, president of the Old Dominion Steamship Company, testifies that that company was organized under the laws of Delaware in 1875, and operates freight and passenger steamers from New York to various points in the South. It has subsidiary lines to many points in the Chesapeake Bay country and to the North Carolina coast. It has both freight and passenger connections with all the great railroad lines out of the Virginia ports, chiefly the Norfolk and Western, the Seaboard Air Line, the Atlantic Coast Line, the Southern, the Chesapeake and Ohio, and the Norfolk and Southern Railway. The great bulk of its business on the main line from New York to Norfolk, Portsmouth, Newport News, and Richmond is freight, but it has an extensive passenger business. The company operates 6 ocean steamers, 12 subsidiary steamers, and between 35 and 40 harbor craft. (442, 443.)

The capital stock of the Old Dominion Steamship Company is \$1,250,000 and it has \$1,000,000 of outstanding 5 per cent bonds. (450.)

2. *Merchants and Miners' Transportation Company.*—Mr. DANIEL H. HAYNE, general solicitor of the Merchants and Miners' Transportation Company, says that that company was incorporated by the general assembly of Maryland on April 24, 1852; that the

first trip made was from Boston to Baltimore, December 28, 1854. In 1867 steamers were run from Boston to Norfolk, thence to Baltimore and return. In January, 1859, a line from Providence to Baltimore was started, but only ran a short time and was revived in 1873. The Baltimore-Savannah line was purchased in 1876, and the Philadelphia-Savannah line was incorporated in October, 1900. The line maintains 15 steamers, with a net tonnage of 23,868 tons and a gross tonnage of 33,553 tons, and touches Boston, Providence, Norfolk, Baltimore, Philadelphia, Newport News, and Savannah. (413.)

3. *Control of steamship lines by railroads.*—Mr. TALCOTT, assistant to the president of the Seaboard Air Line, says that the Old Dominion Steamship Line connects with the Seaboard Air Line, the Atlantic Coast Line, and the Southern Railway Company, and that all three of these companies are interested in the steamship company. The Southern and the Seaboard Air Line have each a line of steamers running from Baltimore to Norfolk. The Ocean Steamship Company, running to Savannah, has always been controlled by the Georgia Central. The Clyde lines, however, are entirely independent. (628.)

Mr. GUILLAUME states that the Ocean Steamship Company of Savannah and the Cronwell and Morgan lines to New Orleans, as well as the Chesapeake Bay lines and most of the Eastern lines from New York, were owned and controlled by railway companies. His understanding is that the Merchants and Miners' Company, the Mallory Company, and the Clyde Line have no railroad ownership, but have a large affiliation with railroads in the sense that a large proportion of their business is in connection with railroads, and they have close working and traffic alliances with the roads. The Old Dominion Line operates as a water line primarily, but has railroad alliances which are necessary to the growth of its business. The chairman of the board of directors of the Norfolk and Western road, the president of the Seaboard Air Line, and the president of the Southern Railway are on its board of directors. The majority of stock of the company is held by these railway interests. This railroad interest has existed for 20 years. (442, 433, 444.)

Mr. WILSON, of the Cincinnati Board of Trade, says that the Ocean Steamship Company is owned by the Central Railroad of Georgia, and that the other coastwise lines, with a few exceptions, are owned largely by the other Southern railroads. This community of interests result in very little competition in fact between the Eastern transportation lines. The members of the Southern Railway and Steamship Association generally claim that the tramp steamers compete very largely with the other transportation companies, but the witness thinks the competition of tramp steamers for regular trade is not severe. It is more for specialties. (689.)

Mr. MCGOVERN, of the Southern Classification Committee, says that the rail lines operating from Norfolk and other ports own a large portion of the stock of some of the coastwise steamship lines. The Ocean Steamship Company to Savannah is controlled by practically the same interests as the Central Georgia Railroad. The Chesapeake Steamship Line from Baltimore is the same as the Southern Railway. The Baltimore Steam Packet Company is controlled by the same interests as the Seaboard Air Line. The Clyde Philadelphia Line, the Old Dominion Line, and the Merchants and Miners' from Boston are trunk lines, and the rail lines leading from Norfolk, from good traffic reasons, would want to have an interest in, and the witness believes they do largely control, those lines through stock ownership. (663, 664.)

4. *Rate making and competition with railroads.*—Mr. GUILLAUME states that his company is not a member of the Associated Railways of Virginia and the Carolinas, but is a member of the Southeastern Freight Association, which is a wider organization. This association is a common bureau, through which the rates of all lines participating in competitive business are arranged. The association does not fix rates arbitrarily, but each company had a right to arrange its own rates, concessions, of course, very often being necessary.

The principle has been adopted of granting a differential to the rail-and-water lines as compared with the all-rail lines. In no case is the differential made wide enough to attract any commodity; it simply gives a fair result to the shipper. The differential between New York and Richmond enjoyed by the Old Dominion Line against the railroad carriers is 5 cents on first-class freight and 1 or 2 cents on sixth-class. There is no such differential between New York and Norfolk.

The origin of the difference between the rates, both by vessel and by rail, from Northern points to Norfolk and to Richmond is the old steamer scale of rates. Steamers in order to reach Richmond touch at Norfolk and then go up the James River 120 miles. Recently the Old Dominion Company has adopted the policy of making the rate the same from New York to both these cities, because of the distributing competition between them. It could be fairly claimed that because Norfolk is nearer the sea than Richmond there should be a difference of rates on the merits of the case.

The system of prorating between different carriers on through shipments is ordinarily based on the distance carried by each link in the line. Where the distance is by water it is on an estimate of two for one; that is, the expense of water carriage for an equal distance is counted about one-half that of the all-rail carriage. The other Atlantic coast lines use that same basis. In some instances, where the water lines are short, the basis becomes unfavorable to those lines, and hence an allowance is made for extraordinary terminal expenses. In prorating from New York to Norfolk or Richmond there is very little difference in respect to local or through freight, the proportion of distance carried generally fixing the percentage. The old principle of rate making for through business was to add together the local rates between the points on the line of through traffic. Now other elements have entered into the question of rate making, and those considerations are not given much prominence. Rates are not made by the cost of doing the business, but by other considerations. (443-447.)

Mr. Guillaudeau states further that there is a genuine competition between the coastwise steamships and the north-and-south railroads reaching the coast points. On business through these ports to the interior the competition is rather between the water lines and their rail connections and the all-rail lines to the ultimate point in the interior. When rates are made, there is an allowance in the nature of a differential to the rail-and-water lines; the theory is that this route has certain disabilities, the most important of which is the breakage of bulk at the point of transfer; secondly, the marine risk and danger of damage; and, third, the infrequency of sailing and the longer intervals between movement. (444.)

Mr. Guillaudeau states also that coastwise lines are out of certain kinds of business, notwithstanding lower rates; that in the great development of the Southern cotton mills the transportation of much of the cotton-mill machinery is now going by the all-rail lines, because of its delicate character, and because there is no break in the transit to inland points. (444.)

Mr. HAYNE says that his experience is not sufficient to give any very just estimate of the extent of competition of the railroads with the coastwise steamers. There is a certain amount of business which goes naturally to the boats, because of the lower rates. The principal competition that the coastwise steamers suffer is with the sailing vessels. The only fair comparison that could be made would be of the fixed rates of the rail lines with the basing rates of the steamship lines, but as a comparatively small portion of the business is handled by the steamship lines on these basing rates the comparison would be misleading. The steamship lines are obliged to handle a great portion of their business on commodity rates made to meet the exigencies of the case.

There are other coast-lines under the control of railroads, but the witness understands there is no discrimination in their favor by the railroads. Sometimes vessels require a certain amount of ballast, and if the vessels were light they would carry freight at a very low rate. There is a water differential in favor of the water line; the water lines are required to carry marine insurance, which the railroads do not. The Merchants and Miners' Company does not carry any coal. It carries some fruit and vegetables and lumber. (418-420.)

Mr. Hayne states that he is not familiar with the revenue features of the coastwise trade, but he believes that it is prosperous; his company has paid dividends regularly. New vessels of his company have been built, both from funds derived from an increase of the stock and from earnings. The volume of trade is increasing. (423.)

Mr. GRISWOLD, general freight and passenger agent of the Western Maryland Railroad, says that rates to Southern points by coast steamers and by rail from the Southern ports to interior points are lower than all-rail rates from Baltimore. These differentials were allowed because it was claimed that shippers by water had to insure their freight, and that the time was slower. Now the water lines bear the insurance, and they make about as good time as the rail lines. Mr. Griswold does not think, therefore, that these differentials ought to be allowed any longer to exist. (621.)

Mr. MCGOVERN, of the Southern Classification Committee, testifies that the steamship rates from New York to the Southern ports are less than the all-rail rates to the same ports. There is a fixed differential in favor of the steamship lines. Steamship companies do not consult anybody about their rates, and they are not subject to the jurisdiction of the Traffic Association. The all-rail lines put in rates as low as they can go, but they can not meet the steamship rate. The differential is fixed by agreement from time to time by the coastwise lines and their competitors of the Traffic Association. The present differential begins at 12 cents on first class. At one time it was only 6 or 8 cents.

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Despite the fact that many of the steamship lines are affiliated in ownership with the railroads, there is the same competition between them and railroads as between the different rail lines. The policy of the large trunk lines of the East reaching into Southern territory is to be neutral. There is a friendly interchange of business at the competitive points. There ought not to be much difference between all-rail from New York to Richmond and all-rail to Norfolk. (663-665.)

Mr. TALCOTT, assistant to the president of the Seaboard Air Line, says that when he had direct knowledge of conditions prior to ten years ago there was competition between the steamship lines and the railroads in the Southern territory, even for business from the West. The joint rates made by the central trunk lines and the coastwise steamships were controlling factors in rail rates for Western business to the South Atlantic ports, and to some extent to inland points. The through rate from Chicago to Savannah and Charleston, for instance, was fixed by rates made by the trunk lines and the coastwise steamships. Augusta was affected because there was a regular line of boats up the Savannah River to it. (627, 628.)

5. *Differentials by water route—Denver.*—Mr. GRIFFITH, representing the Denver Chamber of Commerce, says that the freight rate on goods coming from Eastern points by way of the Gulf of Mexico and the railroad through to Fort Worth is \$2.33 to Denver on first-class commodities, as compared with \$2.72 by all-rail routes. A considerable volume of business comes by this water route. The witness does not know whether the combination of the Union Pacific and Southern Pacific will be likely to result in the doing away with this differential. The combined railroads might find it cheaper to haul the goods by water, and therefore maintain the differential. (850, 855.)

6. *Coastwise classification of freight.*—Mr. HAYNE states that the classification of freight on the coastwise steamers is the same as on railroads, except that there are certain conditions that must be made by the boats which the rail lines do not experience. Large freights are carried direct from the ports at rates that the railroads would probably find unremunerative. Merchants have adopted a plan of centralizing their points of distribution, and very often they ship to local ports and distribute from there. (418-419.)

Mr. GUILLAUME says that the steamship companies engaged in the coastwise trade are getting in line in matters of classification and methods of charging by weight, the same as the railroads. (446.)

7. *Costs of operation—advantages and disadvantages.*—Mr. GUILLAUME states that the costs of operation of water transportation have not decreased in recent years in the same proportion as have the costs of operating railroads. The service on the Old Dominion Line is better than it was twenty years ago, and has improved almost as much as railroad service. The methods are more expensive, and there is greater expense in operating the line than before, but with the extension of business which has followed intelligent methods a lower cost has been obtained. He doubts if a steamer has the latitude to make economies that a railroad has. There are certain costs, like the greater consumption of coal for higher speed, and the greater use of electric lighting, etc., which means an added cost that can not be escaped. (448.)

Mr. Guillaume states that one of the differences between water transportation and through rail transportation is that every pound of freight carried by steamboat must be loaded on and off the vessel. It requires in many instances a superior class of labor to handle the freight. Railroad freight does not have to be handled so thoroughly, and in many cases is not loaded by the railroads at all. On the other hand stands the enormous cost of the railroad plant before it can begin operation, as against the smaller plant cost of the steamship organization. A short water route would not have any particular advantage as to cost over a railroad, the terminal charges being so much greater, and there being only a short distance in which to recoup by the lower cost of moving the ship. Water lines have no real basis of comparison between one another; they can not publish figures as the railroads do, because, if they did so, it would invite undue competition. (446-447.)

Mr. Guillaume says that the labor, cost of handling freight, which is summed up in the trade as longshore labor, amounts to 24.7 per cent of the total operating cost. If the clerks and agents are included, the proportion is 33.6 per cent of the entire operating expense. He does not know whether his labor is in unions or not. There are no rules or restrictions in respect of it so long as the men do their duty. (450.)

Mr. HAYNE states that the advantages of coastwise steamers over sailing vessels are better service, higher-paid employees, and less liability of accident. (420.)

8. *Steamships' passenger traffic.*—Mr. HAYNE states that with all transportation companies the freight business is the most important, but that the passenger business is also remunerative, else the companies would not carry passengers.

Mr. Hayne says that the passengers on the Merchants and Miners' Line have the same accommodations that are to be found in the best hotels; that sometimes, of course, their ships were delayed by reason of quarantine, but the delay was for the general good, and the quarantine officers would make the delay as light as possible. (418, 421.)

9. *Insurance.*—Mr. GUILLAUME states that coastwise trade has an advantage in rates of marine insurance over ships in the foreign trade. Underwriters feel that the coastwise risk is less. Insurance is placed in America in both American and foreign companies, about half and half. The American companies do not like to take big risks, so the steamboat companies fill up with American insurance and then go abroad for the balance. The rates are practically the same, because the steamboat companies refuse to pay differently. Formerly the foreign policy was a little more favorable than the American policy. The vessels are under American inspection and are built according to American rules, and the insurance companies base on that fact. (449-450.)

C. American merchant marine and ship subsidies.—1. *Early prominence.*—Mr. OSBORNE HOWES, secretary of the Board of Fire Underwriters and member of the Boston Chamber of Commerce, testifies that his ancestors for several generations were American seamen. The American merchant marine has been subject to great fluctuations from time to time. In 1790 the merchant tonnage of the United States registered for the foreign trade was 364,000 tons. In 1810 it had grown to 981,000 tons. This growth was chiefly due to the great advantages the American people enjoyed in consequence of the Napoleonic wars, the United States being practically the only neutral nation in the world. After 1810 the American merchant marine suffered a very serious decline; in 1830 the tonnage had fallen to 537,000 tons. In 1847 the tonnage had increased to 1,047,000 tons. From that time to 1861 it went up with great rapidity, and at the breaking out of the civil war it amounted to 2,496,000, or nearly as much as that of England at that time. The great increase beginning in 1847 was partly due to development of trade with California and the great influx of migration which took place at that time. The profits of the voyages were very great. Some ships from Boston to San Francisco obtained freight money enough on that one voyage to pay the entire cost of building. When the vessels would unload at San Francisco, they would proceed to the Pacific islands and do a great deal of trading there, possibly returning to the United States by way of Europe. The officers and sailors were better adapted to the business than those on any of the foreign ships, and could deliver cargoes in better shape, so that for five or six years prior to the breaking out of the civil war an American ship in Asiatic and Australian ports could obtain better charters to carry goods to Europe than the European merchants would give to the vessels of their own country. (702-703.)

2. *Decline of the American merchant marine.*—Mr. Howes says that the decline in the American merchant marine resulted largely from the civil war. Confederate privateers preyed upon the commerce, and insurance rates went up to a very high point. This would have righted itself when the war was over if the price had been such that iron craft could have been built, or if the laws had not prevented the purchase of foreign-built ships by American merchants. Iron construction of merchant vessels had been commenced before the war. Several iron vessels had been constructed in Boston Harbor, and were employed part of the time in the Government service as transports. They were very well built. The tendency at that time among the American shipowners was to favor wooden vessels rather than iron ones. The witness's father ran a line of wooden steamers between Boston and Liverpool, which was called the American Steamship Company. The enterprise failed, owing to the lack of business and the great cost of the vessels. The Pacific Mail Steamship Company some time after the war received a large subsidy for carrying the mails between San Francisco and Hongkong. It employed four vessels and spent some \$5,000,000 in building them. They were poorly adapted to the business and were not successful. The money spent in building them was practically thrown away, so far as the development of American commerce was concerned.

In 1826 92½ per cent of the foreign commerce of the United States was carried in vessels sailing under the American flag, but at that time the total tonnage for foreign voyages was only 696,000 tons. In 1861 the tonnage had increased to nearly 2,500,000 tons, and about 65 per cent of it was carried in American vessels. One reason for the decline in this percentage was that American seamen had found a better business than carrying American commerce only. They had become the common carriers of the world. An American vessel in those days leaving New York or Boston was frequently out for four or five years. They were doing business all over the world and seldom came home except for the purpose of refitting. Wages on the vessels

were relatively much more than they were on foreign ships or than are paid at the present time on American ships.

The difficulty that is experienced at the present time is that the "tools of our trade" can not be obtained at a low price. The American shipbuilder, owing to the high price of the materials entering into the construction of vessels, has not been in a position to compete on equal terms with foreigners, and the annual depreciation in vessel property is very great, representing approximately 10 per cent a year. If the American shipbuilders had been willing to permit the purchase of foreign-built ships by American ship merchants, they would have had just as much to build themselves for the coastwise business and probably a great deal more in the way of repairing than they have had of vessels engaged in the foreign trade. If the law in this regard were repealed a resuscitation of the merchant marine would take place. It is not a question of capital, for there can be plenty of money obtained to purchase foreign-built vessels. (702, 705.)

3. *Ship subsidies.*—Mr. Howes, of the Boston Chamber of Commerce, declares himself opposed to the subsidy bill. The result of subsidies to American steamship lines has not been satisfactory. The Collins Line has been cited to the effect that if the subsidies had been continued the line could have been built up, but unfortunately the line was doomed before the subsidy ended, partly no doubt through no fault of the managers, but largely through circumstances beyond their control. This line as well as the English lines at the time were composed largely of passenger steamers. The passenger lines depend for patronage upon the success and safety with which they carry their passengers. The loss of two steamers by the Collins Line was fatal to its business. Mr. Howes does not think there is any need for subsidy. The construction of American vessels might be undertaken if American shipbuilders could purchase American steel plates and other steel fixings for ships as cheaply as they are sold by the American steel men to the shipbuilders in Scotland and England. He is not aware that in the transportation of freight any foreign Government—with the exception of France and Italy, where it has proven a failure—is aiding its merchant marine by subsidies. Germany never gave a general subsidy, but practically only to the North German Lloyd Line. In France there is a general subsidy, but it has not stimulated its merchant marine. The subsidy paid by France was not a failure because she bought her ships on the Clyde, for she paid a higher rate to those which were built at home. The French are the best people in the world for the construction of vessels. It is not a fact that France held her own when she had a subsidy. Her merchant marine may have increased for a short time, but relatively she is now worse off than she was before. There has been a growth of the merchant marine of all the maritime nations except that of France.

In England, so far as Mr. Howes is aware, there is not a single vessel obtaining a mail subsidy that is not a passenger and a mail carrying steamer. The Peninsular and Oriental Line carries freight as well as passengers, but its main resource is passenger business. The North German Lloyd has entered the passenger business to some extent, running its steamers to the Far East and dividing its money with the Hamburg-American. These lines carry freight, but are more particularly maintained on a mail schedule. The subsidy is paid by Great Britain to the Peninsular and Oriental Line on the ground that they are to make a higher rate of speed than it would be profitable for freight steamers to make. No other lines operating in the same direction care to meet the conditions of speed placed upon this line. The purely freight steamers plying between England and the East are not paid subsidies. Roughly speaking, the tonnage of the Peninsular and Oriental Line is about 500,000 tons; Mr. Howes does not know definitely how many are on the mail schedule. The subsidy paid to that line is not so much for the support of British commerce as it is "for the support of the political supremacy of the British Empire." If the United States were to run a line of steamers from Manila by way of Honolulu and pay a big subvention, the witness would consider it not so much for the purpose of developing American commerce as an endeavor to combine the outlying parts of the United States.

The subsidy bill that was pending in the last Congress, concludes Mr. Howes, was not a wise measure. If the protection granted to the American shipbuilder by that bill were accompanied by a repeal of the law that prohibits the purchase of foreign-built vessels, the bill would not be so objectionable.

Norway has developed her merchant marine very rapidly without any subsidy. The Norwegian steamers carry a very large share of American business. They are employed in business all over the world, and have been very successful, making very large profits. A very large number of the Norwegian steamers are built in English and Scotch shipyards. (705-711.)

Mr. ANDERSON, secretary of the Chamber of Commerce of Pittsburg, is strongly in favor of subsidies for building up our merchant marine. That is the policy which all European nations have followed. The Latin-American countries are "clamoring"

to buy our goods, but can not, because we have no ships to deliver the goods with. As to the length of time for which subsidies would probably be necessary, we might take observations from the older countries. He does not suppose that the subsidies would be permanent. He would put the handling of the subsidies in the hands of a Department of Commerce and Industry, which should, apparently, have some control over the rates of the subsidized lines. (644, 645.)

Mr. BRYANT says that there was a division of sentiment in New Orleans in respect of the ship subsidy bill. A great many people do not believe that the shipping interest there would be benefited by such a measure, but that only a few ships or a few companies would receive any benefit from it. He quotes Mr. Hill, president of the Great Northern Railway, to the same effect. There is a general opposition in New Orleans to Government subsidies in any form. The result of the subsidy to the sugar-growing interests in Louisiana has not met with general satisfaction. The people of New Orleans would like to see American trade carried in American vessels, and if they felt that subsidies would effect this result, they would certainly favor it. He admits, however, that there are a number of persons in New Orleans favorable to the measure, and that some of the commercial exchanges had indorsed it. Mr. Bryant thinks, however, that it would not make freights any cheaper. The shipping interests of New Orleans favor liberal Government appropriations for the improvement of the Mississippi. (399-400.)

Mr. GUILLAUME, of the Old Dominion Line, says that he does not know the conditions surrounding the other coastwise lines, but so far as he individually is concerned he has not made up his mind whether a subsidy would be beneficial. There is no crystallized sentiment on the subject. Coastwise trade could not participate in the benefits of a subsidy directly, and he does not see how it could affect those interests, except that it might add to their burdens of taxation. Additional trade might be secured incidentally. (450.)

Mr. HAYNE, representing the Merchants and Miners' Line, states that the subsidy act, in his opinion, would not be beneficial to the coasting trade. The domestic lines suffer no encroachment from foreign bottoms, since it is illegal for foreign vessels to transport any local business on the coast. (421.)

4. *Free ships.*—Mr. HOWES especially urges that Americans should be permitted to buy vessels abroad for operation under the American flag. He says that the argument for free ships is not an argument for free imports. The free-ship idea has been to confine a foreign-built vessel sailing under the American flag to the foreign trade, while an introduction of free goods in this country means they are to be used in competition in this country. If the policy of not allowing any foreign vessels to come into this country was adopted it would lead to one of the worst commercial wars ever seen, in which the United States would be the sufferer, because we would be asking foreign nations to buy of us and at the same time would be casting obstacles in their way. If the restrictions now existing were taken off, most of the Canadian vessels would be built in Cleveland and Detroit, and not on the Canadian side. If the vessels on the lakes were restricted to voyages between the United States and the foreign countries the lake trade would not amount to anything. Foreign ships purchased in Europe by Americans should be given full American register, but should not be permitted to enter into the coastwise trade. (712.)

5. *Cost of shipbuilding in America.*—Mr. HOWES asserts that the difference in cost between the foreign-built vessel and the American vessel depends largely upon the character of the trade in which she is to be used. The roughly-built freight steamer costs relatively more to build in this country than the highly finished passenger steamer. The reason that Mr. Cramp has been successful in obtaining contracts for the construction of Russian and Japanese battle ships and cruisers is because of the immense amount of skilled American labor that has entered into the construction of these vessels. The relative cost of the raw material has amounted to much less than would be the case with the common freight carrier, where the cost of the raw material is practically everything. Mr. HOWES says that the Messrs. Thompson, shipbuilders on the Clyde, have told him that all the woodwork for their steamers was either made in Cincinnati or by laborers who had been imported from Cincinnati to Glasgow, the American workmen being superior in this kind of work to those of England and Scotland. One reason why American shipbuilders are not able to produce the average freight vessel as cheaply as the foreigners is that they have not been able to get the benefit of the low price on steel which the foreign builders get even from the American manufacturers. It is hard to say whether that condition exists now or not, but it did last year or the year before. It is quite likely at this time that for a roughly constructed freight steamer the labor cost would be greater here than abroad, even if the steel plates could be obtained at the same price that they could be on the Tyne. There is a great advantage in this country in the matter of labor, despite high wages, because of its great

efficiency. The manager of a large shipyard on the Clyde has told the witness that he was able to get only about four days' work a week from his men, on account of drunkenness. This was true through almost all the northern part of England and the southern part of Scotland, the loss to labor and capital being such as to give a tremendous advantage for all American industrial undertakings. (705-708.)

6. *Cost of transporting exports and imports.*—Mr. HOWES testifies that in considering the cost of the import and export trade to this country it is not fair to take both of these matters into consideration, because the cost of transporting the exports is largely paid by the foreigners. It is more equitable from the American standpoint to consider only the cost of handling the imports. He thinks from \$30,000,000 to \$40,000,000 a year would legitimately cover this cost, possibly \$40,000,000. American ships carry about 8 per cent of the traffic. The American tonnage is carrying a great deal more of the import trade, and always has, than of the export trade. Last year the American vessels carried between 13 and 14 per cent of the import trade, and only about 6 per cent of the export trade. The cost of freighting some articles from Europe to this country is probably less than one-tenth of 1 per cent of their cost, and the witness does not believe that the average freight rate is \$15 per ton. (709, 710, 711, 712.)

7. *Mr. Morgan's purchase of steamships.*—Mr. HOWES points out that Mr. J. P. Morgan was able to buy the Leyland Line of steamships without being hampered by laws. That line represents seven stock waterings, and yet Mr. Morgan paid a premium on that. The vessels are under the English flag, which is no particular disadvantage; the question of having them under the American flag is perhaps one of sentiment. He does not believe that any subsidy bill will pass unless Mr. Morgan's lines get some of the benefits. The Leyland Line is reported to have paid 15 to 20 per cent a year, even on its overcapitalization. He regards this purchase of Mr. Morgan's as simply a development of his general system of transportation. (705, 708, 709.)

D. Nicaraguan Canal.—Mr. WHEELER, representing the San Francisco Board of Trade, says that the general feeling of the people in California is in favor of the construction of the Nicaraguan Canal. It is true that the opening of the canal will bring Chicago, St. Louis, and New York into closer competition with San Francisco. The canal will become a gateway to the Orient, while San Francisco is about the only gateway at present. While San Francisco might, for its immediate interest, consider the opening of the canal a disadvantage, the general benefits to the State must be great and would react upon the welfare of the city. The canal will open a highway for the transportation of California's products to the Atlantic seaboard and to Europe. The fruits and other perishable products which must now go by rail can be put into refrigerator vessels and sent by the canal, or the railroads will have to make rates to compete with the canal. The consumption of California products will be increased, new markets will be opened up, and more money will be brought to California producers, and San Francisco, as well as the entire State, will thus be benefited. (751.)

Mr. STUBBS, of the Southern Pacific Company, does not agree with the popular supposition that the construction of the Nicaraguan Canal will vastly increase the trade of San Francisco and the Pacific coast with the Orient. The canal will do San Francisco much damage, tending to bring New York, Minneapolis, and the aggressive Eastern cities nearer by water than they are now to the Hawaiian Islands and the Orient. The railroads are going to carry most of the local business to San Francisco in any case. There are already too many railroads there, and by competition among themselves and with the canal they may be forced to make rates which will put them repeatedly into bankruptcy, but after each bankruptcy they will be better able to beat the canal. The advantage to California in securing more direct transportation to Europe, particularly of its grain, is small compared with the disadvantages, especially as that export trade is constantly diminishing in volume. (768.)

Mr. ANDERSON, secretary of the Chamber of Commerce of Pittsburg, thinks that the Government ought to build and operate an isthmian canal, but he adds that it would be somewhat absurd to spend \$200,000,000 to build a canal and have no ships of our own to go through it. (638, 644.)

Mr. BRYANT states that the commercial men in New Orleans believe that that city would be helped immediately and more largely than any other city in the United States by the opening of the Nicaragua Canal. (397.)

E. Oriental trade.—Mr. WHEELER believes that there is a great future for the United States in oriental trade, and that this will prove of great advantage to California. Until a few years ago only 2 or 3 steamers a month left San Francisco for the Orient, while now there are about 12 monthly. The Chinese are learning to use American flour as a substitute for rice. They are an imitative people, and the habit will increase rapidly. Instead of California shipping wheat to Liverpool, there to be

ground and distributed, it will in the future turn the wheat into flour and ship it to the Orient, and the selling of flour is a more profitable business. Mr. James J. Hill has been building very large vessels in anticipation of this flour trade, and a good deal of it has already been developed.

As yet, in Mr. Wheeler's opinion, business with the Philippine Islands has not been developed greatly except in the shipping of goods for the use of the army. Merchants do not like to sell goods in a country where there is a war. When the war is entirely over the witness thinks that many San Francisco merchants and manufacturers will exploit the Philippine trade. The people are already being educated up to the use of our products by the presence of the army in the islands.

Mr. Wheeler holds, however, that it will be desirable and necessary for our manufacturers and shippers to pay close attention to the tastes of foreign consumers in making and packing goods. With this in view a Pacific Commercial Museum, on the lines of the Philadelphia Commercial Museum, has recently been established. The witness believes that the secret of the decline of the British trade, particularly as compared with the German, is chiefly the fact that the British have insisted upon the buyers taking what they gave them, while the German have asked the buyers what they wanted. (751, 752.)

F. Boston export trade.—Mr. Howes, a member of the Boston Chamber of Commerce, testifies that Boston, next to New York, is the largest commercial port of this country. For the year 1900 its exports were \$123,858,000, and its imports \$68,630,000. Its trade has been growing with the exception of last year, when it fell off, owing chiefly to the war in South Africa. On this account the freight rates practically doubled, thus interfering temporarily with the development of the trade. He thinks the trade for the year 1901 will be considerably over \$200,000,000 in value. (700.)

Transportation facilities at Boston.—Mr. Howes says that one reason why the Boston trade has developed to the extent it has is because of the splendid facilities established there by the railroad and other transportation companies. The railroad companies have built their own wharves, landing sheds, and elevators, and are prepared without intermediate charges to put grain intended for Europe on the vessels. In addition to this, the system of carrying freight in regular steamers, in contradistinction to tramp steamers, was early developed. Boston's trade to Liverpool is greater even than that of New York City. The steamers are of the largest size for freight-carrying purposes, but their limit has been reached now, owing to the depth of the harbor channel. The largest freight-carrying lines are the Leyland, the Dominion, the Cunard, and the Warren. The first three of these carry passengers to some extent, but the last one is a freight line exclusively. (700-701.)

G. Ocean traffic at New Orleans.—(See also *Mississippi River traffic*, p. CLXXXVI.)—Mr. BRYANT states that there are fourteen different lines of steamships that come to New Orleans regularly. Two of them, namely, the Leyland-West India Line and the Elder-Dempster Line, are the two largest lines owned in America. Shipments are also made to Cuba over the Southern Pacific Line. There are no American steamers landing at New Orleans engaged in foreign business. The American lines are engaged in coastwise trade. About 1,400 steamships come to New Orleans in a year. A good many tramp steamers touch at New Orleans, but there is no regularity in respect of their trips.

Mr. Bryant states, further, that the foreign vessels trading with New Orleans are not so fast as the vessels trading at New York. Most of them are freight vessels, which require from 14 to 18 days to cross the ocean, their speed being from 10 to 14 knots. Few vessels there do passenger traffic. The Cromwell Line, between New Orleans and New York, is practically the only line having any passenger traffic out of New Orleans, the Southern Pacific Company's line to New York being a freight line. Foreign vessels touching at New Orleans bring their crews with them, as there is a law in Louisiana which prohibits the employment of crews in her ports. The crews have nothing to do with the loading and unloading of the vessel, that work being done by home labor. (399-400.)

This witness says also that English tonnage at New Orleans is increasing more rapidly than that of any other country. If there were a sufficiency of water at the jetties, much larger vessels would trade there than now. There is only 26 feet of water at the jetties, and many vessels trading at New Orleans could load at 28, 29, and 30 feet, while some vessels are building that could load at 35 feet. Some of the larger vessels have to go out with less than a full cargo. (394.)

Export trade from New Orleans.—Mr. BRYANT states that the facilities for the transfer of grain from barges to ocean-going ships is nearly perfect at New Orleans. The Illinois Central Railroad has a wharf with a very large modern elevator, and is building another at a cost of \$1,000,000. The Texas and Pacific road has a large

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elevator and is building another. The bulk grain business is increasing more rapidly than at any other port in the United States. It is indeed now the second port in import and export values. There is no complaint about the condition of grain coming from barges; there is no damage to grain handled in that climate. Breadstuffs go from New Orleans almost everywhere in the world, especially to Central America, West Indies, and Europe. (393.)

Import trade of New Orleans.—Mr. BRYANT states that the import trade at New Orleans is increasing quite steadily, and consists of sugar largely and some lumber. The return cargo on barges going upriver is largely sugar. There are two large sugar refineries in New Orleans. (389.)

X.—TRANSPORTATION ON THE MISSISSIPPI AND TRIBUTARY RIVERS.

A. Statistics and character of Mississippi River commerce.—

1. *General condition of river traffic.*—Mr. JOHN W. BRYANT, secretary of the Steamboat Captains and Owners' Exchange, New Orleans, states that there is a general impression that the commerce on the Mississippi River has very greatly decreased in recent years, because of the increase in the railroad traffic of places affected by river transportation, but such is not the case. The annual report of the United States Supervising Inspector shows that in 1899 and 1900 there were more steam vessels on the Mississippi and its tributaries than ever before. There is a loss of through traffic, but a great deal of traffic which formerly was through traffic would now be denominated local traffic. Formerly a vessel starting from St. Louis would make New Orleans the point of distribution for all the traffic to the other river ports, whereas now a vessel starting from St. Louis would trade locally with the points between there and New Orleans, and by the time it arrived at New Orleans would only have about one-third of the freight with which it originally started.

The main reason why the traffic on the Mississippi has apparently decreased is because of the illegitimate methods pursued by the railroad companies in respect of transportation to and from the principal river ports. Another reason is that the conditions of navigation greatly interfere with traffic. While the Government is spending a great deal of money in improving the river and its tributaries, the results are not what they ought to be. The Government usually commences its operations too late, waiting until the river gets low, and oftentimes before much work can be done the snag boats have to quit because of low water. Sometimes the snags removed were deposited along the banks of the stream, and the next rise picks them up and carries them back into the channel. (387, 388, 392-394.)

2. *Statistics as to amount of traffic.*—Mr. BRYANT states, further, that it is impossible to furnish full statistics of the commerce of the Mississippi River, because there is no exact record kept. The steamboats have "trip books," in which is entered the up and down freight of each trip, but no other record is kept. Some 12 or 15 years ago the witness prepared a statement of the commerce of the river coming into New Orleans for the 2 years just before the beginning of the construction of the Eads jetties and for the 2 years after their completion, and he found that one-third of the traffic of the river had been diverted through the development of the railroads. In the census of 1890 complete returns of the commerce on the waterways could not be secured. A few years ago railroad interests concerned in the building of a bridge prepared for their own use statistics of the river commerce, which the witness thinks were colored more or less in favor of the railroads, and they put the diversion of business at 34 per cent. In the year 1900 Mr. Bryant prepared a table showing the commerce of the river. This table shows that the Mississippi River from St. Louis to the Gulf, with its larger tributaries, has 6,298 miles of water, 5,695 miles of which are actually navigable. In the census report of 1890 for this system the commerce was shown to amount to 6,401,203 tons. Mr. Bryant's statistics show 7,693,998 tons. One hundred and eighty-nine steamboats passed over the river in that year, making 6,212 trips. Their net tonnage was 62,314, the value of the vessels being \$4,331,000. The tonnage carried amounted to 1,590,004 tons. The barges numbered 1,635, and they made 2,470 trips. Their value was \$2,003,000. The net tonnage of all the vessels was 1,471,128 tons, and their value \$6,334,000. This exhibit does not include the vessels engaged in harbor work, ferries, railroad transfer boats, or Government steamers. The total amount in tons carried on the Mississippi River between Cairo and New Orleans was 4,708,355 tons, with a valuation of \$94,605,782. The coastwise and foreign tonnage from New Orleans to the Gulf via the river amounted to 2,985,643 tons, of a total value of \$144,704,136, making the grand total 7,693,998 tons and a total value of \$239,309,898. The principal commodities carried on the river were 612,242 bales of cotton, 166,049 tons of cotton seed, 153,664 tons of sugar, and

444,539,180 feet of lumber and logs. Sixty-six thousand six hundred and fifteen tons of steel rails, or nearly 3,500 carloads, were carried on barges from Pittsburg to New Orleans. (387-389.)

Mr. M. C. MARKHAM, assistant traffic manager of the Illinois Central Railroad and the Yazoo and Mississippi Valley Railroad, testifies that prior to 1870 the Mississippi River and its tributaries transported the greater part of the freight and passengers of that valley. Since that date a large railroad mileage has been constructed. From 1870 to 1900 the railroad mileage in the Mississippi Valley increased from 27,182 miles to over 110,000 miles. The census reported that in 1889 there were 7,445 vessels plying on the river, with a capacity of 3,393,378 tons, and that 10,858,894 passengers and over 31,000,000 tons of freight were transported. As a consequence of the improved facilities afforded by the railroads the river traffic at the important trade centers situated on the Mississippi River has appreciably declined.

Mr. Markham says, further, that the statistics of the river trade are very meager. He submits tables showing the relative volume of traffic by rail and river at St. Louis and New Orleans, as follows:

Tonnage received and shipped by river at St. Louis for the years named.

	1880.	1890	1900.
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
Received	833,860	530,790	512,000
Forwarded	1,037,625	601,862	245,580

Tons of freight by rail received and forwarded at St. Louis for the years named.

	1880	1890	1900
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
Received	6,096,524	9,969,291	15,375,141
Forwarded	2,755,680	5,270,850	9,180,309

The cotton receipts by river at New Orleans in 1880 were 64 per cent of the entire cotton receipts of that place; in 1890, 20 per cent, and in 1899, only 15 per cent, showing a large decline in the river cotton trade. The rail receipts, on the other hand, were in 1899 over 300 per cent of what they were in 1880.

Cotton receipts at New Orleans.

	1880	1890.	1899
	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>
By river	1,047,522	425,828	343,450
By rail	627,577	1,722,473	1,935,177

Mr. Markham also refers to a statement made by the captain of a steamboat line at New Orleans in September, 1900, to the effect that so much business was diverted from the river to rail that as the boats go out of commission the prospects for profits were so uncertain that there was no inducement to replenish the fleets.

The witness says, however, that there are six steamboat companies with 24 steamers plying between St. Louis and other river ports, besides 64 independent packets and towboats. At Memphis there are two packet companies and a line of steamers running north and south. At Cincinnati there are 29 steamers, with a tonnage of 16,711 tons, engaged in freight and passenger business between that city and other river ports.

The Mississippi and its tributaries are still a potent factor in diminishing railroad rates and revenues. There is a large river transportation of heavy and bulky articles, where time is not essential to the movement of the traffic. (425-428.)

3. *Desirability of better statistics.*—Mr. BRYANT states that the statistics of river traffic are not complete. It would be a good thing for the river interest if the Interstate Commerce Commission would compile such statistics. There is a growing impression

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that the river traffic is decreasing, and that the rivers are not worth improving any more. The statistics secured by the Government engineers are not complete, and they are about the only statistics that are secured. It would be much better for the Government to gather the statistics than for a private individual. (398.)

4. *Navigable season.*—Mr. BRYANT states that the navigable season on the Mississippi is more irregular and shorter than it was 25 or 30 years ago. He believes this condition is brought about principally by the denuding of the forests; the water is brought down more quickly than formerly. Another cause is the levee system in the lower part of the river; before that system was adopted there were many large basins filled by the river's overflow, the water from which, gradually draining back into the river, prolonged the rise. The freshets come mainly from the Ohio River, the Missouri and Upper Mississippi freshets not causing any trouble in the lower river. (393.)

5. *Barge lines on the river.*—Mr. MARKHAM testifies that the barge lines on the Mississippi River, on account of their large tonnage capacity and their cheapness, conduct a large amount of the transportation on the river. The St. Louis and Mississippi Valley Transportation Company early in the eighties organized a consolidation of three barge companies previously in existence.

The capacity of these barges was from 50,000 to 60,000 bushels. A towboat would often start from St. Louis with 4 to 6 barges attached with a cargo of from 200,000 to 300,000 bushels of bulk grain besides other kinds of freight. The consolidated line had a capacity of moving 3,000,000 bushels of grain per month.

These old barge lines, continues Mr. Markham, were abandoned because they did not pay. The original barge line on the Mississippi was started in the interest of the Missouri Pacific, which was a Gould property and had no interests east of the Mississippi River. In November, 1900, a new steel barge line, consisting of a towboat and 2 barges, went into operation between St. Louis and New Orleans. These boats are designed to draw not to exceed 9 feet of water, and are expected to be very successful. A recent trip took 54 days from St. Louis to New Orleans and return. The witness does not know that any of the railroad companies have an interest in this new line, but they are looking with a great deal of interest on it. (426, 432, 441.)

6. *Transportation on the Ohio River.*—Mr. WILSON, of the Cincinnati Board of Trade, declares that Ohio River shipping has lost its existence with the exception of the transportation of very heavy commodities, of which it still carries a greater tonnage than any other river in the country. No railway transportation can ever deprive the Ohio River of its immense coal tonnage. It is increasing constantly, but there is no shipping now of sugar or molasses. (697.)

B. River improvements.—1. *Jetties at mouth of Mississippi.*—Mr. BRYANT states that under the Eads system of jetties the Southwest Pass of the Mississippi was deepened from 9 to 26 feet. Another of the passes will be opened, the jetty system also being employed in that. Eads's proposition was that the jetties would be self-maintaining, the scour of the river being sufficient to keep the channel open, and dredges being used merely as an auxiliary. The present plan, however, is to depend almost entirely upon the dredges, and use the jetties as an auxiliary. The wind blows from all directions and sand is carried by the waves. Jetties are intended to prevent filling from these forces as well as to serve their legitimate purpose. Mr. Eads, when he got to 26 feet, thought a sufficient depth had been reached. Now, with the increase in the size of vessels, 26 feet is not sufficient. New York Harbor has received an appropriation to increase the depth from 35 to 40 feet. At Liverpool about \$9,000,000 is being spent to deepen the harbor. At the time the jetties were constructed the longest vessel that came up to New Orleans was about 350 feet. Now vessels are coming up 500 feet long. New jetties will be constructed and maintained by contract under the supervision and control of the Government engineers. (394-395.)

Mr. MARKHAM says that all that would now seem wanting to fully complete the Mississippi River as a vigorous and active competitor of the railways for all time is a sufficient depth of water at the mouth of the river to float ships of 15,000 or 20,000 tons. Large ships could afford to materially reduce freight rates to foreign countries on the valley products, and the rates on the shipments for domestic use would be largely influenced by the reduced export rates. A yearly expenditure sufficient to insure deep water at the mouth of the Mississippi River would be repaid more than tenfold in the benefit to the producing community of the Mississippi Valley. (430, 431.)

2. *Ohio River navigation.*—Mr. BRYANT stated that navigation on the Ohio River is very often entirely suspended for a season, because of the insufficiency of water. Except where locks and dams are used the river sometimes is not more than a foot and some inches in depth. The bridges across the stream are often the source of

great danger, one bridge in particular being so low that during the last rise of the river steamboats could not pass under it. The money losses from these bridges have been enough to pay for any bridge across it, not counting the loss of life. More tonnage is carried on the Ohio River than on all the other rivers in the Mississippi Valley together. Practically all the coal used in New Orleans and along the Mississippi River comes down from Pittsburg on barges. The upper part of the Ohio River had been so filled up by corporations making more building room that the river has become very narrow and the water gathers and runs out very quickly. Sometimes a big rise at Pittsburg will last hardly long enough to get out two runs of coal, while years ago there would be water for several months. (388, 392, 394.)

Mr. ANDERSON, secretary of the chamber of commerce of Pittsburg, states that a most remarkable improvement of the Ohio River is in progress by means of movable dams. The first of these dams, that at Davis Island, has given Pittsburg a harbor from 10 to 12 miles long and as deep as desired all the year round. When the water is high enough to be fit for boating, the dam is removed. When the rivers fall, the dam is put in to store the water. A lock is used to enable boats to pass the dam when it is in use. The lock at Davis Island is the largest in the world. There are some 12 dams now under contract, and when they are finished the period of navigation on the Ohio River will be increased 2 or 3 months. (643, 647.)

C. Freight rates—Competition with railroads.—1. *Influence of river rates on railroad rates* (see also as to effect on long and short haul rail rates, pp. CVII, ff).—Mr. MARKHAM says as to the influence of the river: "The complexities and necessities which confront the railroads in rate making are such as to make this river influence almost confterminous with the Rocky Mountains on the one side and the Atlantic Ocean on the other. * * * The recognized principle for rate construction * * * has rendered it imperative that certain fixed relations shall be established in railroad rates to common points of destination from various points of origin."

The river, continues the witness, makes the rates from St. Louis to Memphis or New Orleans and the railroads running between those points, to get a share of the traffic, must necessarily offer rates approximating those made by the river craft. While Chicago is not situated on the river, it would be placed at a disadvantage as regards the Memphis or New Orleans trade if it were not put on a relatively fair rate plane with St. Louis to enable Chicago manufacturers and merchants to compete. Again, the merchants and manufacturers in the outlying towns of importance contiguous to Chicago, who are seeking markets, will demand from the railroads which serve them such favorable rates as will enable them to market their products as against Chicago and St. Louis, and it may be to the best interest of the roads to comply. Cities farther removed that would be affected in the sale of their products by the favorable rates given the others would likewise make demands upon the railroads which serve them, and their demands would be granted, and thus "the demand would spread step by step until almost the entire northern country had partaken in a measure of the low rates made necessary in the first instance by the river influence."

Mr. Markham says also that by Mississippi River competition the railroads are prevented from keeping up rail rates to leading Southern trade centers.

Mobile on the Gulf of Mexico, 140 miles from the Mississippi River, is supplied with railroads which have no interest in New Orleans, and its merchants and manufacturers compete with those of New Orleans at common markets. New Orleans, being on the river, is enabled to have low rates, and therefore the Mobile roads are obliged to give the same rates to that city from St. Louis and points north as are given to New Orleans. Other trade centers in Alabama compete in common territory with Mobile and New Orleans; and therefore their rates from the North can not be greater than the Mobile rate plus the low rates up from Mobile by the Alabama River, because they must be put on the same plane as Mobile and New Orleans. Galveston (360 miles west of New Orleans) has no river advantages, but the railroads serving that city deem it proper to put it on a plane whereby the Northern products can be exported therefrom as well as from New Orleans, and this arrangement would affect outlying and intermediate towns between Galveston and the Missouri River.

In this way specific rate differentials are established between trade centers interested in effecting sales of their products in common territory. Industrial enterprises remote from the river thus secure much more favorable rates than the railroads would be justified in making if the river influence did not exist.

In the same way the rates from the East to the West are affected by the river rates. Grain from Kansas City to New York would pay a rate approximating that from Kansas City to St. Louis plus the low barge rate from St. Louis to New Orleans, and whatever rate is made from Kansas City to the Atlantic seaboard must be made also from the other Missouri River towns. (429, 430.)

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Mr. Markham submits the following table as showing the fall of rates by rail in the Mississippi Valley under influence of river traffic:

All-rail rates of freight from St. Louis to Southern cities.

Commodities	1882.	1900.
Flour, per barrel.....	\$0.65	\$0.34
Pork.....	1.15	.82
Sack grain, per 100 pounds.....	.35	.20
Meats.....	.35	.30
Hay.....	.33	.20

2. *River rates and railway rates compared.*—Mr. BRYANT states that the river rates are very much cheaper ordinarily than the railway rates. The rate on bulk grain from St. Louis to New Orleans by rail is 10 cents per hundred; in barges only 3½ cents. A line of whaleback barges has recently been established between St. Louis and New Orleans. They are of a larger draft and are towed tandem, and can be moved with much less expense than the old-style barges. The manager of this new line asserts that if he could be assured of not less than 8 feet of water all the year round from St. Louis to Cairo he could carry bulk grain from St. Louis to New Orleans for 2 cents per bushel.

The rates on the river are generally uniform, but when the river is low they are a little higher, because of the difficulties of navigation. The witness quotes Mr. McRae, member of Congress from Arkansas, who states that when the river is up, cotton can be sent from Camden to New Orleans for \$1.25 per bale; when the river is down and the boats can not run, the rate by rail is \$3.10 per bale. Mr. McRae says further that the rate on flour is 35 cents per barrel by steamboat and 75 cents by rail, and that the rate on boots and shoes by water from Boston to Camden is 79 cents a hundred and by railroad \$2.02 per hundred. (389-390.)

3. *Railway discrimination and river traffic.*—Mr. BRYANT states that the railroads, in defiance of the long and short haul section of the interstate-commerce law, make unremunerative rates from the principal river ports to New Orleans, often carrying the freight at a loss, and recoup their losses from traffic on intermediate points not touched by the river. The railroads have fixed the rate on cotton from Memphis to New Orleans at 85 cents per bale, while from points away from Memphis, they receive from \$1.50 to \$2 per bale. One point 100 miles from New Orleans is compelled to pay \$2 per bale freight, whereas the steamboat rate from a point on the river opposite that point is only 50 cents. The Memphis-New Orleans rate, after deducting 25 cents for insurance, is unremunerative to the steamboat, and no cotton is shipped from Memphis to New Orleans by boat. The same condition exists in respect of Natchez and Vicksburg rates to New Orleans. These discriminations by the railway companies destroy river traffic at competitive points, at the expense of the communities remote from competition. Legislation should correct this evil. (387, 388, 390.)

4. *Space and weight freight rates on river boats.*—Mr. BRYANT states that formerly the freight rates on the river boats were regulated by space or package. A barrel of flour, beans, potatoes, or something of that sort, was carried at a "dry barrel" rate; molasses, vinegar, whisky, oil, etc., at a "wet barrel" rate, and boxed goods at so much a box. Large cases, etc., were carried at so much a foot. Now the railroads have forced the boats to carry everything by weight. (391.)

5. *Combination in river traffic.*—Mr. BRYANT states that there has been no attempt among the river boats to regulate the rates of river traffic, because it is impossible to do so. At New Orleans there were 30 steamboats in the freight carrying business; 1 line has 3 boats, another 6 or 7, another 4, and the other 17 are individually owned. There is no connection of one line with any of the others. Attempts to combine these interests would be fruitless, because somebody on the outside having a boat would have the same opportunity for business. Nobody owns the river, the conditions being different from that of a company owning a railroad track. (391-392.)

D. Miscellaneous.—1. *Cost of transportation by river.*—Mr. ANDERSON, secretary of the chamber of commerce of Pittsburg, says that coal is carried from Pittsburg to New Orleans by water, 2,000 miles, at an operating cost of \$1 a ton, or less than half a mill a ton a mile. Coal has been carried by contract in late years at 50 or 60 cents a ton, and the empties brought back. (642.)

2. *Insurance and risks.*—Mr. BRYANT states that the insurance on boats is very heavy, running from 8 to 18 per cent, because navigation is so dangerous. Snags can

not be kept out, and the number of bridges across the stream is so great, and they have been built with so little regard for navigation, that they are also a source of danger. Hardly any bridge has been proposed but the river men have been forced to fight to have it so constructed as not to interfere with navigation. (392.)

3. *Lumber transportation.*—Mr. MARKHAM states that the decrease in the transportation of lumber at Chicago and St. Louis is attributed partly to the depletion of the forests, but largely by the doing away of the middleman. Twenty years ago Chicago was a very large market for lumber coming down by ship from northern Michigan and Wisconsin. Now some lumber comes in this way, but the railroads have built into the lumber regions of Wisconsin and Michigan, and the cars are loaded there and go through to their destination direct. The lumber industry in the South has also developed. The lumber coming down the Wisconsin rivers instead of going to St. Louis now stops at the Upper Mississippi River towns and is distributed from there. (431-432.)

4. *Boat building on rivers.*—Mr. BRYANT states that boats can be built on the Ohio River for the river trade better than anywhere else. Most of the boats used on the Mississippi and Missouri rivers are built on the Ohio River. The Navy Department is establishing a large dock at New Orleans, and that would lead to the establishment of a shipyard. Small sailing vessels have been built there from time to time for many years, and occasionally a small steamboat has been built. (397.)

5. *Passenger boats.*—Mr. BRYANT states that at present there are not so many of the large, fine passenger boats on the river as formerly ran from St. Louis or Cincinnati to New Orleans. One reason is that the boats have to remain idle so long during low water; another reason is that in the early days the freight from St. Louis was carried to New Orleans, which was the point of distribution for all the river traffic. Now the St. Louis traffic is distributed along the river as the boat goes down. Vicksburg, Memphis, and Natchez, which formerly did not operate boats, at present have one or more lines of their own, but none of these lines carry many passengers, because they could not compete with the railroads for this line of business. (392-393.)

6. *Cotton bales.*—Mr. BRYANT stated that the steamboats would rather handle the flat cotton bale than the round one, because it is more conveniently stored on the boat. The flat bale contains twice as much weight as the round bale. Out of 78,000 bales exported from New Orleans in one day recently only 4,300 were round bales. (390-391.)

XI. THE TAXATION OF RAILROADS. VALUATION IN RELATION TO FREIGHT RATES, ETC.

A. Uniformity of taxation—Adjustment between States.—Professor ADAMS, statistician of the Interstate Commerce Commission, declares that everyone who knows the difficulties of State taxation of railroads must welcome anything that looks toward uniformity. The railways pay all the way from \$30 a mile up to \$900 a mile, and the methods of determining the taxes are different in different States. If the Federal Government should make a proper investigation of the value of railway property, especially of its physical elements, Mr. Adams thinks that the States would accept it and adjust their taxing scheme to it, and probably come to an understanding among themselves as to the proportion of the valuation of the roads which should be assigned to each. (382.)

Professor Adams considers that even if a fair valuation of a whole railroad system were arrived at, the division of the valuation among the several States on the basis of mileage would not be equitable. The pro rata rule, for instance, would benefit Wisconsin unfairly at the expense of Michigan. (383.)

B. Taxation and valuation of railroads in Michigan.—1. *Present system and proposed changes.*—Professor ADAMS, statistician of the Interstate Commerce Commission, says that Michigan has a system of special corporation taxes, by which railroads and other properties of that class are taxed on their gross earnings, the rate varying with the classification of the corporation. The gross earnings of railroads are determined for purposes of taxation by adding to all local earnings within the State a certain proportion of interstate earnings. This method was required by an constitution of the State, but at the last election an amendment was adopted by an overwhelming majority permitting the use of the ad valorem system of taxation. The people had come to feel that the taxes which the corporations paid under the statute were not equal to the rate of taxation under the general property law. A special tax commission was appointed to make an investigation of the value of the railways for the purpose of determining this question. Mr. Adams describes the methods of this investigation in detail. While the result of the investigation does

not show values as high as the advocates of ad valorem taxation had claimed, it does show that the railways are paying relatively less than other property. As to a choice between the two methods of taxation, on capital value and on gross earnings, Mr. Adams says a choice can be made only in view of practical conditions. In view of practical conditions he thinks it would be wise for Michigan to undertake the ad valorem scheme of taxation, "because the people of this country are not yet ready to establish, as it seems to me they might well establish, a distinct scheme of corporation taxation." (374, 383, 384.)

Professor Adams says that the question is not yet settled in Michigan whether railway corporations should be taxed uniformly at the average rate throughout the State, or taxed on their property within each district according to the rate in the district. (384.)

Professor RIPLEY refers to the taxation law which has recently been enacted by the State of Michigan. The law endeavors to distinguish between the tangible, physical property of a road and its nonphysical property. An attempt has been made to see how much it would cost to reproduce every kind of public-service corporation now in the State of Michigan. An estimate is made of how much an entire railroad is worth solely as tangible, physical property; then it is ascertained what the earnings of the road have been on an average for the last ten years, and what is a fair capitalization of those earnings. After this is done an endeavor is made to determine the difference between the tangible, physical property, which is taxed under the general property laws of Michigan, and the larger sum which represents what would be a fair capitalization of the road on the basis of its earnings. The difference is considered to be the value of its franchise, which is subject to special taxation. (305.)

2. *Recent efforts as to valuation of railroads.*—Professor ADAMS describes the method by which a special tax commission in Michigan investigated the value of the railroads of the State. The plan adopted involved, first, an appraisal of the physical properties of the road, and, second, an appraisal of what was termed the nonphysical element. In regard to the physical properties, the cost of reproduction was made the basis of valuation. To determine the cost of reproduction a very thorough survey of the roads was made. The services of men who had acted as engineers and had built considerable amounts of road were secured, and specialists were hired for every portion of the work. For estimating the grading, profiles of all the roads were secured, and the greater part of the roads was traveled over by agents of the commission, so that they could tell from personal observation about what the cost of grading and embanking would be. The number of freight cars of certain classes was furnished by the roads and the railroad commissioners, and then a sufficient number of cars in each class was personally investigated to give a basis for setting a correct price on them. The cost of interlockings, the cost of ballast, the cost of warehouses, the cost of docks, all were personally investigated by representatives of the tax commissioners. For the value of the real estate, the commission relied on the services of expert real estate agents of the localities. In important cases they went so far as to trace the deeds of abutting property to find out what such property was selling for. The railroads were at first not interested in this investigation, but when they found that it was carried on in an honest, open, and scientific manner, without any political bias, they at least gave the agents of the commission the privilege of appearing on their property, and one of the important roads loaned the services of its architect, on condition that he do no work on the property of his own road.

Some of the elements of a railroad are not subject to deterioration; but others, such as ties and rolling stock, are. When the cost of reproducing each item of physical property had been determined, an allowance was made for an accepted percentage of depreciation. The sum of the remainders was the accepted value of the physical property of the road.

For the purposes of the investigation the commission adopted the classification of construction expenses which is prescribed by the Interstate Commerce Commission as the basis of its analysis. This has been worked out in much detail and with great care.

Professor Adams believes this theory of the determination of the cost of reproduction to be entirely sound except in its application to land. In strict theory at least it does not seem proper to apply the principle of reproduction except to properties that can be reproduced, and reproduced in unlimited quantities at uniform cost. The value of land is the opportunity that it gives for the location of an industry. It is quite possible that that value can not be properly arrived at on the theory of cost of reproduction.

Having decided to make a valuation of the physical properties, the commission submitted to Professor Adams the problem of framing a rule for valuing what is commonly called the franchises of these corporations.

Professor Adams submitted to the commission his views on this question in a letter which is in part as follows:

This nonphysical or immaterial element is not a simple commercial element, but includes, among other things, the following:

1. It includes the franchise (a) to be a corporation; (b) to use public property and employ public authority for corporate ends.
2. It includes the possession of traffic not exposed to competition, as, for example, local traffic.
3. It includes the possession of traffic held by established connections, although exposed to competition, as, for example, through traffic that is secured because the line in question is a link in a through route.
4. It includes the benefit of economies made possible by increased density of traffic.
5. It includes a value on account of the organization and vitality of the industries served by the corporation, as well as of the organization and vitality of the industry which renders the service. This value, consequently, is, in part, of the nature of an unearned increment to the corporation.

As corroborating the existence of this element of value in all successful corporate enterprises, reference may be made to the following facts:

1. Corporations almost universally are bonded for an amount in excess of the value of physical properties less the proceeds of the stock issued. If traffic or good will or franchises or organizations can be made security for the borrowing of money, is it not evident that they possess an established commercial value?
2. It is not uncommon for courts, in placing railway properties in the hands of receivers, to defend their action by the assertion that the step is necessary in order to prevent the disintegration of the property. Is it not a legitimate conclusion from this fact that the courts recognize organization as an element of value?
3. The universal recognition of the necessity of supplementing the general property tax by some special method of taxation in the case of railways is an acknowledgment of the fact that the general property tax by ordinary methods of assessment does not attach itself to the full value of corporate property. The general property tax worked well when the major portion of property was material and visible; it failed to work well when, through the development of corporate enterprises and credit relations, immaterial values came to be relatively significant.

The question then arises as to the best method of valuing this intangible property. The method of appraisement on the basis of the market value of stocks and bonds has something in its favor, but is not satisfactory. Of all the roads in Michigan there were only four of whose stocks and bonds there were a sufficient number of quotations to give a reasonable basis of valuation. Another objection to this method for State purposes is that when this valuation is obtained it is the valuation of the system. There still remains the further question, what portion of the valuation of the system to assign to the State. Moreover, in the present case the commission by instituting an appraisal of the physical assets of the corporations had committed itself to a rule inconsistent with the valuation of stocks and bonds. Abandoning this method the value of the intangible property must be determined on the basis of information secured from the accounts of the corporations. There are two accounts which might be used for this purpose, namely, the general balance sheet and the income account. The general balance sheet contains a nominal statement of the cost of the road and equipment, but this statement has often no relation to the actual cost or the actual value. Any fair appraisement of railway property must be reduced to a basis of earning power, and this is to be ascertained from the income account of the roads. Another reason for the acceptance of this basis is that the rules of book-keeping, so far as this account is concerned, are fairly uniform for all railways. The rules of the Interstate Commerce Commission, so far as this particular account is concerned, have been approved by the convention of State railroad commissioners and willingly accepted by the association of railroad auditors. Professor Adams believes also that, so far as operating expenses are concerned, the roads follow as strictly as possible the rules laid down. Having accepted the general principle of valuation on the basis of earning power, Professor Adams lays down his rule for determining earning power, as follows:

The rule submitted for the appraisal of the immaterial values of railway properties, or what I prefer to term the capitalization of corporate organization and business opportunity, is simple, as follows:

1. Begin with gross earnings from operation, deduct therefrom (the aggregate of operating expenses,¹ and the remainder may be termed the "income from operation." To this should be added "income of corporate investments," giving a sum which may be termed "total income," and which represents the amount at the disposal of the corporation for the support of its capital and for the determination of its annual surplus.

2. Deduct from the above amount—that is to say, "total income," as an annuity properly chargeable to capital—a certain per cent of the appraised value of the physical properties.

3. From this amount should be deducted rents paid for the lease of property operated and permanent improvements² charged directly to income. The remainder would represent the surplus from the gross earnings from the year's operations, and for the purpose of this investigation may be accepted as an annuity which, capitalized at a certain rate of interest, gives the true value of immaterial properties.

To obviate the criticism that both gross and net earnings vary from year to year, it is suggested that in place of a single year's income account the average income account of a period of ten years be accepted as the basis of computation. The reason for accepting a period of ten years is that under

¹ The Michigan system of railway accounts prescribed by the railroad commissioner includes taxes in "operating expenses," and for the purpose of this analysis such inclusion may be accepted.

² Some improvements are charged to "operating expenses," but for the purpose of this analysis such a rule bears no significance.

existing commercial conditions it is likely that the corporation whose property is appraised would, during that period, pass through years of both prosperity and adversity.

It will be observed that the above rule fails to appraise the speculative element in railway property. While this element doubtless affects the price of corporate stocks and corporate bonds, it is not entirely clear that it should influence appraisals for the purpose of taxation. Should, however, the commission desire to compute the present worth of property, as resting upon expectations in the future as well as upon earnings in the past, the pertinency of the above rule would not thereby be impaired. This is true, because the speculative value of properties must, from the nature of the case, be a modification of their value computed upon the basis of their earning capacity.

An additional advantage of this method of valuation, in Professor Adams's opinion, is that it leaves so little to judgment. There is only one question of judgment: the selection of the proper rate per cent for capital. In considering this question it was assumed that an investment which paid a sure 4 per cent, free of taxation, would at the present time command par. Four per cent, free of taxes, on the value of the physical property, was therefore set apart as an annuity due to the invested capital. The tax on the physical property, separately deducted, was fixed at 1 per cent, on the following ground: The average rate of taxation in Michigan is about 14.75. The average appraisal of property is about 65 per cent of its value. The average tax, therefore, is about 1 per cent of the actual value of the property.

The question arises why it would not be as well to capitalize net income to begin with and not undertake the appraisal of physical property. The chief reason lies in the matter of rates per cent. That method would make it impossible to allow an income on the physical property at one rate and to capitalize the remainder of the net earnings at another rate. Such a distinction ought to be made. The income based on the physical property is free from all risk of legislative interference. Our courts have held that no legislature or commission can reduce rates to a point which will not pay. In some cases the interest on the bonds has been made the basis, but the idea is expressed more carefully in the recent Minnesota case as a certain rate per cent on the value of the physical property. There is then a judicial bulwark against the reduction of the rate of interest below 4 or 5 per cent on the cost of reproducing the property. But when a road shows a value in addition to this physical valuation, legislatures are at liberty to depress rates so as to deprive corporations of a part of that value. There is then some risk attending this part of the income. Because of the risk, buyers of it ought to be allowed a higher rate per cent than investors who have no risk. Therefore, while the commission fixed the annuity on the capital invested in the physical plant at 4 per cent, it capitalized the surplus earnings on the basis of a net income of 6 per cent, after deducting 1 per cent for taxes.

A somewhat intricate question arises in the case where no income applicable to interest on capital is left after paying the operating expenses. It seems to Professor Adams that it would be strictly just in such cases to reduce the value below the cost of reproduction. The earning power ought still to be made the basis of valuation. This, however, is not the way other property is treated. If a man puts up a house in a place where no one wants to rent, the local appraiser may lighten his taxes somewhat, but he will not lighten them a great deal.

In three cases the usual rate of capitalization of the surplus income was departed from. In one case a road had only been running about a year and a half and had not come to a point where deterioration added much to its operating expenses. In two or three years its operating expenses would be going up. Its surplus income was therefore capitalized at 10 per cent. In another case a road had run into a lumber region and had been very prosperous. But now the lumber was all gone and the income of the road would be diminished. To estimate the earning power of the road on the basis of its actual earnings during the last ten years would be to estimate it too high. On the other hand, the Port Street Depot Company, which owns the union depot in Detroit, has a contractual income which is as certain as the rising of the sun. To that company a capitalization based on a low annual rate was applied, because its income is sure. (374-381.)

C. Taxation of railroads in Minnesota.—Mr. TEISBERG, secretary of the State railroad and warehouse commission of Minnesota, says that railroads in his State pay a percentage upon their gross earnings in lieu of all other taxes, both State and local. The whole amount goes into the State treasury. There has been some agitation of the question of dividing some part of it among the counties, but it has not been done. A new road pays 1 per cent on its gross earnings for the first 3 years; for the next 7 years it pays 2 per cent; after 10 years it pays 3 per cent. The question is now agitated in the State of raising the tax to 4 or $4\frac{1}{2}$ per cent. The Chicago Great Western holds an old charter which provides for a gross-earnings tax of only 2 per cent. The State is bound by this as far as that road is concerned. Gross earnings for purposes of taxation are, in the first place, all earnings on local

business within the State, and, second, a proportion of earnings on interstate business based on the mileage of the road. Mr. Teisberg presents a table showing the amount of taxes paid by the railroads in Minnesota for each year from 1890 to 1899. The amount increased from \$743,075 in 1890 to \$1,036,262 in 1892. Then it fell off to \$923,864 in 1893 and to \$850,109 in 1894. From that time it has steadily increased to \$1,444,504 in 1899. (366, 367.)

D. Valuation of railroad property by National Government.—

Professor ADAMS gives the following reasons for thinking that Congress should undertake the valuation of railroad property: "First, because it would greatly assist in the development of a uniform system of State taxation of interstate property; second, that it is essential for the intelligent application of the theory of reasonable freight and passenger rates; third, it would enable the roads to supply what now they can not supply from their accounts, and in that way an annual statement of their property under the prescribed classification." (384.)

Professor Adams says that if the Federal Government once made a thorough investigation of the value of all the roads in the United States, a continuous account of their value might readily be kept by the Interstate Commerce Commission if Congress would give the commission power to require the reports. The form of annual reports that the railroads make to the Interstate Commerce Commission now contains a page for this information; but in a reorganization the new company that takes the property does not care anything about the book accounts of the previous corporation, does not know anything about them, and does not take them over and report on them to the commission. Yet the machinery of the Interstate Commerce Commission is probably sufficient to secure a continuous knowledge of the changes of the value of the roads, with one exception—it has no authority over contractors. If a law were passed by Congress, or by the States, compelling people who build roads under contract to file reports showing the cost, there would be no difficulty in keeping the accounts up to date. (382.)

Relation to freight rates.—Professor ADAMS thinks that a valuation of all the roads of the country, similar to that which has recently been made in Michigan, might, with great advantage, be undertaken by the Federal Government as a basis for the fixing of reasonable railroad rates. In a recent State case in Minnesota the principle has been laid down that a scheme of rates which permits a payment of 5 per cent on the cost of reproducing the road is reasonable. In many cases the reasonableness of a rate is finally determined by the ability of a corporation to pay the interest on its bonds. But the bonds do not represent the real cost or the real value of the road. If for the amount of the bonds the true value of the physical property of the road could be substituted, we should have something that courts and commissions could work upon. (381.)

XII. GOVERNMENT OWNERSHIP OF PUBLIC UTILITIES, ESPECIALLY RAILROADS.

A. General argument for government ownership.—1. *Principles of comparison of public and private operation.*—Prof. FRANK PARSONS, president of the National Public Ownership League, declares that the fundamental test of any institution, method, or service must be its effect upon the public good, its relation to morals, manhood, government, industry, civilization, and progress—not the financial results, but the results on manhood. Material wealth is not an end in itself, but only one of the raw materials of civilization. Public utilities exist not for the building up of material wealth but for human development. (123.)

Professor Parsons makes an analytic summary of his arguments on the railroad question, contrasting the difficulties of private railways with the advantages of public railways in twenty-five separate paragraphs under each heading. This summary may be conveniently referred to and is not here repeated. (170-172.)

2. *The aim of public and private service compared.*—Professor PARSONS asserts that the chief difference between public and private monopolies is that private monopolies aim at dividends for stockholders, while public monopoly aims at giving a service for the entire community, irrespective of any profit that may be made from the operation. The aim of the private monopoly is to secure wealth in the hands of the few for the present time only, while the aim of the public monopoly is the public good, not only for the present but for future generations; the acquisition of material wealth being a subordinate consideration. (124.)

Professor Parsons refers to a speech by Bismarck in the Prussian Parliament in 1876, and also to the argument of the Prussian cabinet at about the same time in support of his proposition that the aim of public ownership in that country, as in

others, is the bettering of the masses of the people for all time, and that the financial interests of transportation companies should be but a secondary consideration. Bismarck said in relation to state railways:

"They serve chiefly the public interests of traffic, of commerce, of the circulation and transport of commodities and passengers; besides, as a secondary consideration, they aid the public treasury, and in all events promote only public interests. It is the misfortune of private railways that a privilege granted by the state, and a privilege that could not be made use of without the help of the state—we may say a monopoly granted by the government—should be legally exploited in behalf of private interests and private pockets."

The argument of the Prussian cabinet, which was sent to the Reichstag in 1879, with a bill providing for the absorption of the private railways by the state, was to the same effect. Similar arguments have been advanced in Switzerland, Hungary, New South Wales, and in New Zealand in reference to the taking over by these countries of the railways from private ownership to the state. (124, 125.)

3. *Growth of public ownership.*—Professor PARSONS declares that there has been continual growth of the idea of public ownership of railroads all over the world. Public and private systems have been tried at the same time in Belgium, Prussia, Austria-Hungary, Australia, and New Zealand, and in every one of them the private system had given way to the public system almost entirely. The South African Republics and Orange Free State have started railroads; and in Cape Colony 2,000 out of 2,350 miles and in Natal all the railways are operated by the State. The same is true of the telegraph and telephone to a very large extent. Even in England the Government is the owner of the telegraph, and the French Government has gone from private to public operation of the telephone, as have also the Australian colonies. The waterworks and electric-light plants in our own country are coming under public management very rapidly, over half of the waterworks plants in the United States now being public plants. Out of 50 of the larger cities in the United States 21 originally built and now own their own waterworks system, while 20 of the others have changed from private to public ownership. Fifty years ago the idea of public ownership of waterworks was as vigorously opposed and the same arguments used against it as are now used in reference to street railways and railroads. The witness believes that the next half century will see as great a change of sentiment and practice in the field of transportation. He refers also to the growth of municipal ownership of street railways in England, and states that while in 1882 there was but one municipality operating its street railway system now there are thirty, including Liverpool, Glasgow, and other large cities, and that as fast as the concessions to private companies expired the municipalities are making arrangements to take over the lines and operate them. There is a movement of thought toward public ownership of municipal monopolies which promises great things for the future.

Professor Parsons introduced a circular giving the names of the members of the National League for Promoting Public Ownership of Monopolies, which shows that it is composed of some of the leading men of the country.

The witness refers also to the fact that originally the fire-department service, the school system, the public roads, and even the administration of justice were in private hands, while now they are all public. If the principle of public ownership and operation of public utilities is a right principle, it should be carried wherever the reasons for it apply. (167-170.)

4. *Scope of public ownership and rapidity of movement toward it.*—Professor PARSONS holds that in the taking over of the monopolies by the public, progress should be made as fast as experience and the sentiment of the people and the evils of the monopolies justify. Public ownership is desirable as to public utilities or monopolies of essential services, such as transportation, transmission of intelligence, and lighting and waterworks plants. Beyond that he believes the principle of cooperation of private capital would solve the practical difficulties in most cases. A natural monopoly, such as anthracite coal, should be made public ultimately.

Professor Parsons, however, does not believe democracy in government practical, except in a high state of civilization, and for the same reason he does not believe democracy in industry practical until a slightly higher civilization has been reached than exists to-day. (165-167.)

Professor Parsons does not wish to be understood as saying that the United States is ready for public ownership of railroads, but he believes there is a strong sentiment growing in favor of it. The utilities should not all be taken over at once, even if public ownership were adopted; at present the only public utilities which might well be taken over by the General Government are the telegraph and telephone, while some municipal utilities should now be taken over by the municipalities themselves. (153.)

"The line of least resistance in industrial progress is to work for public ownership and the cooperative organization of municipal monopolies, such as electric light and street railways," and he does not think it advisable that national railways should be attempted until the growth of public sentiment is much stronger in favor of it than it is now. So far as the telegraph and telephone service is concerned, he believes it is the manifest duty of Congress to at once take the first steps toward making them public. (193.)

5. *Method of securing Government ownership.*—Professor PARSONS states that there are several ways by which the public might take possession of the public utility monopolies without a dollar of taxation. Thus the Government may, in giving a franchise, put into it a clause that at the end of a specified period it shall become public property, free of debt, as was done in France and some other European countries. Another way is for the Government to issue bonds to buy up utilities and pay them off out of the earnings of the system, as was done by the railroads in Belgium, Germany, and Austria-Hungary. Another plan is for a group of citizens to advance the capital and make the plant a public one, but worked under a lease, so that the operation is governed by the private parties and the city or nation together until the capital is paid for out of the earnings, at which time the system becomes completely public.

With reference to the telegraph, the witness believes a good method would be to offer to purchase some of the principal lines if the companies were willing to sell at a reasonable valuation, but that if they were not, then the Government might build some important lines under its constitutional power to build post-roads, and by lowering rates somewhat force the companies to reasonable terms. The same method might be adopted with reference to the railroad system, but it would be more difficult, on account of the great cost of new lines and the established character of the present system. He believes the most practical plan would be to buy one or two great systems and make reasonable rates and simple tariffs and then gradually to absorb the other systems, on the same plan that Prussia and New Zealand pursued. There should first be a thorough investigation of all the facts connected with the receipts and operating expenses of the companies, so that there should be no exorbitant price paid for the properties. The witness recognizes that the securities of corporations are in the nature of a contract between the company and the holder of the security, which should not be violated by the Government, and he is therefore in favor of being very liberal on this score. Even if there were watered stocks, and even if there were, strictly speaking, no innocent purchasers of securities, when a change is made for the public benefit the burden of the change should fall on the whole people, who are to reap the benefit, and not on any particular class. The Government itself was culpable in permitting so much water to creep into the capitalization of the public corporations. He does not think the Government should ever pay more than the market value of the stock of any of the public corporations when it takes them over. (191-193.)

Professor RIPLEY says that if, under Government ownership, the service could be maintained as our post-office service is, as the Government service in Germany is, and all done under the control of the United States, certain of the abuses of the present time might be eliminated. If, however, the Government is to have control of the railroads, it ought to take over all of the roads at once, so that there shall be no competition between Government roads and private roads. In Belgium they tried Government ownership alongside of private ownership, and the result was that the Government had to come down to the level of cut rates and personal discrimination and similar abuses in order to live. The amount of capital necessary to take over all the roads is so great that the possibility of such a thing is removed for some years. In Germany under Government ownership the service is good, but it is not at the level of American efficiency by any means. That is due to the absence of competition. (294.)

Valuation of railroads.—Professor ADAMS, statistician of the Interstate Commerce Commission, thinks that if railroads should ever be taken over by the Government the method of valuation which has recently been followed in Michigan would be substantially correct as a basis of payment to the owners. He adds that when Prussia bought her roads they were valued on the basis of a careful estimate of their earning capacity. The French roads are to become the property of the state at the expiration of their charters on payment for the rolling stock, and without payment for the right of way or the connections, but if the Government wishes to take them over before the expiration of the charters it can do so by paying an annuity for the unexpired term equal to the average net earnings of the 7 preceding years. (386.)

B. Advantages of Government ownership and evils of private ownership. (See also detailed charges by Professor Parsons as to overcapitalization of railroads and discriminations practiced by them, pages LVIX, c.)—1. *Definition*

and discussion of monopoly.—Professor PARSONS defines monopoly as any advantage which tends to shut out competition, whether it be a franchise, railroad rebate, or other privilege. Every railroad in the country is a monopoly in that it has its advantages in regard to local traffic and tends to shut out competition in regard to that traffic. Many other industries are also monopolies, though they may not be wholly free from competition. While public ownership would be one of the greatest monopolies that could be imagined, still it is a public monopoly, in which there is no evil. The fault is not with monopoly, but with private ownership of it. We should not even confine public ownership merely to monopolies. Instance the case of public schools, libraries, fire departments, etc., which are operated by the public and are not monopolies. (165.)

2. *Private monopoly a sovereign power—Political corruption.*—Professor PARSONS asserts that the principle of the private monopoly is antagonistic to democracy in that it means a concentration of power and wealth in the hands of the few, and is also an exercise of a sovereign power by private individuals for private interests. The charges of monopolies engaged in essential service, such as transportation, are in the nature of taxation, which is certainly a sovereign power. They are, moreover, taxation without representation and for a private purpose. The control of commerce in foreign goods is also a sovereign power, and this the transportation companies are able to exercise even to the extent of nullifying the tariff law by making excessively low import rates. Private monopolies are enabled to make or mar the fortunes of individuals of a whole State or section of a State, which is a power that should not be exercised even by the sovereign itself. These monopolies are even able to exert a large control over the Government. It is a familiar fact that the great railroads, particularly of New York, Pennsylvania, and Illinois, are able to control the legislatures of those States in railroad matters, and even the courts themselves. Even in Massachusetts, where a better state of affairs exists, it is practically impossible to do anything effective in legislation affecting the railroads, or street railroads, or the gas and electric light interests. The law establishing the State board of gas and electric light commissioners was drawn by the attorney of the gas monopoly in the interest of the gas company, and when a commission was sent by the legislature all over the country to study the subject of gas and electric light the attorney of these interests accompanied it, and, it is often charged, wrote its report, which was naturally against public ownership of these utilities.

Professor Parsons says further that Governor Pingree, of Michigan, had stated that the street railways owned the Detroit council, and were continually bribing them and had tried to bribe him. The same condition of affairs exists in almost every State. The witness asserts, however, that the people are perhaps as much to blame for this condition of affairs as the railroad companies, and are possibly estopped from raising any serious objection so long as the laws remain as they are, because they have assented to the growth of the system. (159, 160.)

3. *Effect of public ownership on diffusion of wealth and on democracy.*—Professor PARSONS believes that the tendency of public ownership is toward democracy in political life and against what he terms the aristocracy of wealth. It would abolish arbitrary industrial power in the hands of the few, which is surely as dangerous as arbitrary political power. There is also an educational reason favoring public ownership in that it would develop the mind and character of those engaged in the operation of public utilities. The underlying cause of the great unrest of the present time is that while we have experienced an enormous progress in the accumulation and diffusion of intelligence and of political power, there is an ever-intensifying congestion of wealth in the industrial field, and these things are incompatible. "Democracy of intelligence can not continue side by side with aristocracy and concentration of power in industry." The great fortunes of the country are clustering about the industrial monopolies, because they are produced by and fostered by these monopolies, which are getting more than a fair remuneration of profit.

Professor Parsons maintains that public ownership of public utilities results in a greater diffusion of wealth, while the policy of the private railway systems is to build up great fortunes for a limited number of individuals, and to build up great cities at the expense of other individuals and other communities. The policy of the countries owning and operating their own public utilities is opposed to this and tends to a greater diffusion of wealth; as expressed by the officials of New Zealand, the intent is "to have no millionaires or paupers." (156-159.)

4. *Civilization—The test of movement.*—Professor PARSONS argues that the test of the degree of civilization of any country is found in the activities of the people of that country and the interchange of ideas and commercial interests. In the countries where there is public ownership of public utilities there is a greater degree of this diffusion of knowledge and a greater degree of activity among the people generally

than elsewhere. In all the countries which have gone from private to public ownership of public utilities there has been a great increase in the business. (156.)

Professor Parsons believes that the public-ownership system favors the development of character and intelligence among the people by eliminating the conflict between man and man by developing sympathy and giving labor fuller opportunities, and that every test of civilization points to a system of public operation of public utilities as the ideal one. (167.)

5. *Consideration of general welfare under public ownership.*—Professor PARSONS holds that public ownership would eliminate discriminations, rebates, special concessions, and matters of that sort entirely. The antagonism of interest between the owners of the system and the public would also be eliminated, thereby lowering the rates very materially, although low rates are not the only desideratum to be sought. The removal of antagonism and the harmony brought about by public ownership would redound very greatly to the public welfare.

In Germany the railways were coordinated with the telegraph, telephone, and post-office, and every other public service. The railway tariff is made to enforce the national tariff instead of nullifying it, as is often the case in the United States; instance the case of the Texas and Pacific Railway Company some years ago carrying freight from Liverpool or London, through New Orleans, to the Pacific coast at a rate of \$1.07, whereas the New Orleans products of the same grade were compelled to pay a rate of from \$2.88 to \$3.70 to San Francisco.

The witness refers also specifically to the various ways in which in Germany the people, especially shippers and those directly interested, are put in touch with the control of the railways and other public services, so that their interest is thereby increased in the successful operation and development of them, and so that these services are made to meet the public needs. (150-153.)

6. *Consideration of local interests.*—Professor PARSONS asserts that the railroads have been forced by competition to put down the through rates between large cities, while they have left the local rates practically as they were 20 years ago. The result has been to build up the cities at the expense of the country. One of the greatest dangers in the country to-day is the rapid growth and immense massing of industrial power in the cities. In the countries operating their own railways, an exactly opposite policy has been pursued, with the result that there has been less congestion of business in the cities and a greater development of the country districts.

In New Zealand and Germany the railways are operated so as to benefit the laboring man and to improve the educational service, as well as for the development of agriculture. In New Zealand they carry the laborers at cost, or even a little below that, and make rates to enable the city workmen to live in the country instead of in crowded tenement districts. In New Zealand the workmen are carried at 50 cents a week in and out of the big cities, and in Germany in and out of Berlin at 17 cents a week, a workingman being enabled to live 5 or 10 miles out of Berlin and go to and fro as many times as he chooses for an entire year for \$4.50. In New Zealand cheap excursions are made for school children, the rate being ordinarily 4 miles for a cent, and the school children of the primary grades being carried to and from school free of charge, as is also the case in some of the Australian states. It is admitted that on traffic of this kind the railroads are losing money, but the educational value to the state is far greater than the cost to the treasury. Agricultural products, where railroads are owned and operated by the government, are carried at very low rates, sometimes free, and in case of emergency farm stock is also carried free, with the avowed purpose of developing the agricultural interests of the country. (136, 137.)

7. *Effect of public ownership on labor.*—Labor also would be benefited by public ownership, says Professor PARSONS. The witness would not abolish the brotherhoods connected with the railways, but he would apply civil-service methods to railway employees. He instances New Zealand as a case in point where public ownership is in vogue, and states that the construction of railways is so arranged there as to relieve depression instead of creating it. Railway management there aims also to aid farmers in obtaining the labor they need in harvest time, work on the railroads and other public works being reduced in the summer season, when farm labor is needed, and increased in the winter, when labor needs employment. The management also lets out contracts for construction directly to cooperative groups of workers, with the result that the average wages made by the men are nearly double what they were able to make under the old system of private contract, because the men put more energy into the work, while the result has been a saving to the state at the same time, as well as the development of sympathy and cooperative effort, which is one of the most important tests of civilization. Since the establishment of the present system, nine years ago, there has been no unemployed-labor agitation in New Zealand. (150-152.)

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8. *Safety*.—Professor PARSONS claims that there would be greater safety in the operation of railways under public management than under private management, and instances many cases where private corporations have neglected or refused to provide safety appliances until they were compelled to do so by law. Under public ownership the Government would be interested in having all safety appliances in the first instance, or as soon thereafter as possible. The witness presents the following table of statistics, showing that in the cases where public ownership is in force the number of railway accidents is less in proportion than in the cases where private ownership is in force. (153, 154.)

	Passengers.		Employees.	
	Killed, 1 in—	Injured, 1 in—	Killed, 1 in—	Injured, 1 in—
United States	2,267,000	170,141	447	28
Germany	10,700,000	1,700,000	966	365
Austria-Hungary	8,781,000	652,000	1,560	200
Belgium	10,000,000	614,000	1,360	616
Great Britain	9,000,000	800,000	1,070	43
Switzerland	8,826,000	710,000	1,015	347
France:				
Public roads	12,000,000	4,000,000	1,175	390
Private roads	5,000,000	1,000,000	1,000	320

C. *Rates and costs of operation*.—1. *Principles of rate making under public and private ownership*.—Professor PARSONS introduces two diagrams to illustrate the movements of rates, efficiency of service, receipts, etc., in connection with publicly and privately owned and operated railways, and contends that it can be demonstrated that the results of actual experience coincide with the curves of the diagrams, showing that private ownership seeks the high-rate level, the level which will increase the service used to the point yielding maximum profit, while public ownership seeks the low-rate level with a view to yielding maximum service for actual cost. Private managers regulate the business simply to make the greatest profits with the least service, whereas the tendency of the public service is to look to the greatest development of traffic so long as it remains within reasonable cost or even if it might operate at a loss. (137-143.)

2. *Illustrations of the general tendency of public ownership to lower rates*.—Professor PARSONS states that the Hungarian Government in 1889, when it took over to itself the operation and management of the railways, reduced the fares 40 to 80 per cent. Austria and Prussia also made great reductions in railway charges. New Zealand and Australia, under government management, adopted the settled policy of reducing railway rates as fast as possible. In New Zealand in 1899 there was a reduction of 20 per cent made on farm products and 40 per cent on butter and cheese, and also a general lowering of passenger fares. Belgium also has a very low tariff of rates under public management. When England made the telegraph public in 1870 rates were lowered 30 to 50 per cent at once, and still further reductions were afterwards made, much greater than any made in this country under private ownership. When France took over the telephone in 1899 rates were reduced from \$116 to \$78 a year in Paris, and from \$78 to \$39 elsewhere, except in Lyons.

He further illustrates this general tendency by comparing charges made for crossing the Brooklyn bridge, which is owned by the cities of New York and Brooklyn, with the St. Louis bridge, which is owned by the Gould interests, and shows that the charges on the Brooklyn bridge are less than one-fourth what they are on the St. Louis bridge. Foot passengers and street-car passengers are charged 5 cents for crossing the St. Louis bridge, but are carried free in New York. The witness also shows that Glasgow has made great reductions in rates under public management of street railways. (145, 146, 173.)

Professor Parsons concludes that under government ownership rates are lower than under private ownership of the railways and the telegraph. (173.)

3. *Railway rates under government and private ownership*.—Professor PARSONS presents the following table as showing the average ton-mile and passenger-mile rates in the United States, Germany, Austria-Hungary, Belgium, Switzerland, France, and Great Britain. This table also shows the average distance of haul per ton and the average haul per passenger.

Average ton-mile and passenger-mile rates.

[Germany, Austria-Hungary, and Belgium have state systems; the rest have private systems.]

	Rate per ton- mile.	Average haul per ton.	Rate per passen- ger-mile.	Average haul per passen- ger.
	<i>Cents.</i>	<i>Miles.</i>	<i>Cents.</i>	<i>Miles.</i>
United States	0.75	130	2	25
Germany	1.40	60	1.1	20
Austria-Hungary	1.44	57	1	23
Belgium	1.80	40	.88	12
Switzerland	2.80	85	1.55	12
France	1.48	88	1.21	20
Great Britain	2.10	.....	2	10

The passenger rates are shown to be materially lower in foreign countries. While it appears that the rate per ton-mile in the United States is lower than in the countries having public ownership of railways, the average haul per ton is much greater. Terminal charges may be assumed to equal 40 cents per ton, which in Belgium would equal 1 cent per ton per mile on the average haul, while in the United States the longer haul would make these charges equal only about three-tenths of a cent per ton-mile, leaving the respective charges for actual transportation about one-third cent in Belgium and nearly one-half cent in the United States. The witness therefore holds that, taking into consideration also the question of wages, which are higher in the United States than in the European countries, and other influences, the rates in the United States are even higher than in the European countries having public ownership. There are, however, so many differences in conditions to be taken into account in different countries, such as wages, efficiency of labor, influence of grades, capitalization, cost of fuel, density of business and other factors, especially differences in the general level of industrial ability, that no one can reach an accurate comparison between government roads in the European countries and private roads in the United States. The only way to make the comparison between public and private ownership is to consider the roads in the countries where public ownership and management are now in force with what they were when they were under private management. Such consideration would show beyond any question whatever that public management is much cheaper, pays better wages, gives more efficient service, and in every respect is superior to private management.

In all the countries in which private ownership has been superseded by public management the rates were greatly reduced immediately. There is an object on the part of the government in always reducing the rates to the lowest possible point consistent with the due operation of the road, while in countries having private management the companies reduce rates only when forced to do so by competition. In the United States the local noncompetitive rates, in many instances, are as high as they were 20 and 40 years ago, and in some instances higher, whereas no such thing can be found in any of the countries under public ownership. (137-143.)

In New Zealand and Australia, continues Professor Parsons, public and private ownership have been tried side by side, and the overwhelming consensus of opinion there is that public railways serve the public interest best. Switzerland, after a careful study of both systems, has recently come to the same conclusion, and her people have voted 2 to 1 to transfer the railways to public ownership and operation. These are more potent reasons for making the change, and are a better argument than any comparison of average rates can be. (137-141.)

4. *Economies of public ownership.*—Professor PARSONS declares that in addition to the fact that public ownership aims at service rather than profit, and therefore to a lower rate level, it also permits economies which private ownership could not secure. Reasons for the superior economy of public ownership are as follows:

- (1) The public plant has no lobby expenses or corruption funds to raise.
- (2) It has no rebates or commissions or other secret concessions to favored customers to provide for.
- (3) It has no dividends to pay on watered stock.
- (4) It has no large salaries or monopolistic profits to provide for.
- (5) Litigation expenses are less.
- (6) There is a saving on interest charges because of the superiority of the government credit, and also on insurance.
- (7) Public ownership gains through superior coordination of industry.

(8) The civic interest of the people is much increased and business is thus facilitated because people patronize their own institutions much more than they would a private institution.

(9) Strikes and lockouts are avoided.

(10) The expenses and cost of regulative commissions and investigations into the secrets of private monopoly are avoided.

(11) Public morals are improved and labor agitations diminished.

(12) The antagonism between the owners of vast industries and the public is eliminated. (147-149.)

Professor PARSONS asserts that the wastefulness of management of the various railway companies of the country would be eliminated if the Government should take the companies and operate them, because the duplication of the management would be eliminated thereby. In connection with the other economies which would be effected, as shown by a table presented by the witness, he claims that under coordinated public ownership, in round numbers, \$662,000,000 a year would be saved. Traffic would be greatly increased by low rates, and it is probable that rates and fares could be reduced considerably more than half under public ownership if the capital of the roads was paid up. (147-149.)

Coordination.—Professor PARSONS states that in most of the countries where there is public ownership of railways the service is coordinated with the telegraph, telephone, and other public services in such a way that one aids the other very materially. Thus, in European countries, one can telephone a telegram to the telegraph office very often without any extra charge. The effect of this policy is to do away with the antagonism of interest which exists in countries where the public utilities are owned and operated by private companies, and the power of the private companies to make or unmake a city, or an individual, or an industry, is thus destroyed. (156.)

5. *Relative efficiency of service.*—Professor PARSONS says that while the railway service in the United States is perhaps better than that of any other country in the world, still that fact is not of itself evidence of the superiority of private management. In the United States workmen generally are far superior to foreign laborers, and the systems of doing business generally in the United States is superior to systems of doing private business in any European country.

The service in Great Britain, under private ownership, is inferior to that in the continental countries where public ownership is in force. (139, 140.)

Professor PARSONS states further that a review of the public ownership in practice in all the public utilities embraced in the system in different countries shows that public ownership is more efficient than private in those countries where both have been given a fair test. He gives Germany as an instance. He asserts that where there is an apparent lack of economy and efficiency in foreign countries, as compared with the United States, it is due to differences which show themselves between private business in these two countries also, as well as to the improvement of the conditions of labor under public ownership.

6. *Should public utilities be self-supporting?*—Professor PARSONS does not think that it is a universally sound economic principle that every public utility should be self-supporting. Morals, intelligence, and civilization are just as vitally related to economics as are dollars and cents. The development of education is just as much a part of the business of any public utility as the making of a profit, and the serving of the public good is the only admissible purpose of all public utilities. He illustrates this argument by saying that it is right that the elevator in a public building should be run free and the charge put upon the person who owns the building. It might turn out in the same way with railways—that it would be best for the interests of the public generally to make them absolutely free. While in most cases, as far as the mass of the business is concerned, the public railways in foreign countries are managed so as to make a little profit, there is no necessary economic principle that would require them to continue on that basis. In this connection the witness refers to a summary by Professor Seligman, of Columbia University, on the matter of public utilities:

In all the media of transportation and communication there seems to be a definite law of evolution. Everywhere at first they are in private hands and used for purposes of extortion or of profit, like the highways in mediæval Europe or the early bridges and canals. In the second stage they are "affected with a public interest," and are turned over to trustees, who are permitted to charge fixed tolls, but are required to keep the service up to a certain standard. This was the era of the canal and turnpike trusts or companies. In the third stage the government takes over the service, but manages it for profit, as is still the case to-day in some countries with the post and the railway system. In the fourth stage the government charges tolls or fees only to cover expenses, as until recently in the case of canals and bridges, and as is the theory of the postal system and of the municipal water supply with us at the present time. In the fifth stage the government reduces charges until finally there is no charge at all and the expenses are defrayed by a general tax on the community. This is the stage now reached in the common roads and most of the canals and bridges, and which has been proposed by officials of several American cities for other services, like the water supply.

Professor Parsons holds that the extent to which public ownership of public utilities and cooperative effort have replaced private action in any community is one of the surest tests of the degree of its civilization. The final stage in the case of a great universal utility, such as transportation, is free service; but of course that stage is not likely to come or be approached very soon, because the country is not ready for it. The change is not nearly so unjust as it might seem at first sight, because the property of the large taxpayers has been chiefly produced by nontaxpayers and taken from them by an unjust system of wealth distribution, wherefore the railroad tax would, in very large part, be merely a step toward a fairer adjustment of wealth and burdens.

Professor Parsons says, however, that if utilities should be taken over at present he would favor making them self-supporting, at least at first. He would provide the money for operating street railways out of the earnings of the roads, and would leave them on the tax list, just as they are now. He would do the same in respect of telephones and telegraphs, the only difference being that the rates would be lower under public ownership than they are to-day; that the lowering of the rates would increase the business of the utility, which was one of the principal advantages of the public system; that some services which do not seem at present to be universal are so merely because under private ownership rates are so high that they are practically prohibitive to the great masses of the people. (143-144-166.)

D. Effect of public ownership on politics.—1. *Public ownership an aid to good government.*—Professor PARSONS declares that public ownership of railroads would tend to eliminate personal discriminations in rates; would increase the wages of the employees and shorten their hours of labor, and would remove one of the principal causes of the present difficulties with legislative bodies. He believes, however, that public sentiment in this country is not quite far enough advanced to make public operation most successful, but that it is continually growing. Democratic government is not inconsistent with good management of these enterprises. In Australia, New Zealand, and Germany the system has worked excellently in respect of the railways, telegraph, and telephone systems, as well as in England in regard to the telegraph; England is quite as democratic, on the whole, as America; New Zealand fully as democratic; and this country, though democratic, will be able to solve the problem in time. Professor Parsons holds further that the transfer of the great interests to public ownership is one of the strongest influences to secure thorough civil-service regulations and would create a higher interest of the people in the Government itself. He calls attention to the cities of Glasgow and Birmingham, in which the increase of public ownership of the national monopolies has resulted in the purification of the cities because the public interests have become so great that the people have become fully aroused to the necessity of having an honest administration of affairs.

Professor Parsons declares that the public ownership of the government itself is essential to real public ownership of other public utilities. In this country, especially in some of the cities, the government is in the control of the monopolists, and it would not be safe under such circumstances to have the government own the public utilities. A distinction is to be drawn between public ownership and government ownership. Russia belongs to the latter class. The public there has nothing to say as respects the administration of government. If the government is a private monopoly everything in the hands of the government is a private monopoly.

Complete public ownership of the government involves civil-service reform and a system of direct nominations and direct legislation, so that the people can at all times control their representatives and their administrative officers. This is a fundamental element in the theory of public ownership and the key to the whole situation. (160, 161, 162.)

2. *Effect of increase of office class.*—Professor PARSONS refers to the generally admitted difficulty in the matter of public ownership of public utilities creating an office class and of increasing the public patronage and the power of the party in power. He thinks, however, that there is nothing alarming in that feature of it. Under proper civil-service regulations the public servants would be freer than they are to-day as the servants of the private monopolies. In New Zealand the employees of the public utilities feel absolutely free, not merely to vote as they believe, but to criticise the government whenever they see fit. Every railway officer and employee there has a vote in electing the appeal board or arbitration court that settles all questions between employees and the government. This he terms "a bit of real industrial democracy." An employee who is discharged can appeal to this judicial tribunal to decide upon the justness of his dismissal or upon any other question affecting his status as an employee. Thus the employees have far more liberty, both industrially and politically, than the government employees or the employees of any private

corporation in this country. The same thing is true to a very great degree in England in respect to the employees of the post-office and telegraph, as well as in Germany. It would be more difficult of course to establish the same system in this country because of the size of the country and, because we are not educated up to that point where there is a public sentiment in favor of it, but these difficulties could in time be overcome and should be overcome gradually, not by taking all the public utilities over at the same time, but by taking one at a time and organizing that thoroughly on the basis of the present employees and officers. Thus the only difference under public ownership would be, so far as the operation is concerned, that it would be operated for the benefit of the people instead of for the benefit of a few stockholders. After one system was thoroughly established another could be taken over and treated in the same manner.

Despite the fact that there are in the neighborhood of 800,000 railway employees in this country, Professor Parsons does not believe that there would be political danger if they were made government employees, or that they would be a political power in the government. They are, after all, only a small fraction of the voting population of the country.

In the administration of government railway affairs, continues the witness, there should be local directories and local advisory boards representing the various interests of the country substantially in the same way as is now the case in the countries where public ownership obtains. This would avoid the danger of undue officialism.

Professor Parsons believes in the pensioning of employees who have served faithfully for a long period of time, and holds that the expense of so doing, or any apparent favoritism, is not any objection at all to his theory. One of the strongest arguments in favor of public ownership, indeed, is that it tends to the elevation of labor, better wages, shorter hours, sick relief, old age pensions, etc. Those features are not objected to as regards the fire departments or the police departments of the cities. (162-165.)

E. Objections to Government ownership.—1. *Generally.*—Professor PARSONS refers to the principal objections urged against public ownership. The one is the matter of patronage. While there might be a tendency to the abuse of patronage under the public ownership system, the system itself creates a powerful force opposed to that abuse by increasing the importance to the community of having good government. The financial interest of the wealthy would be turned in favor of having the Government honestly and fairly administered, while now the tendency is often otherwise. Political abuses from private ownership are extremely serious. (172.)

Mr. WOODLOCK, railroad editor of the Wall Street Journal, does not think that Government ownership of railroads would be good for the Government or good for the people. He sees no more reason for it than for Government ownership of the steel business or of the newspaper business. (463.)

Mr. GREENE, of the Audit Company of New York, does not think that Government ownership of railroads would be advisable under any circumstances. There would be too much politics in the management. (489.)

Hon. CHARLES FRANCIS ADAMS, of Boston, says that he has no faith whatever in Government ownership of industrial enterprises. If left alone, individual ownership will beat the Government every time. The best railroads in Europe are the English railroads, and those are left to private enterprise, and are handled accordingly. (829.)

2. *Objections of the Italian commission.*—Professor PARSONS states that the report of the Italian commission of 1880 is often referred to as proving the case for private ownership of the railways. He analyzes that report, however, and asserts that its conclusions are practically worthless for the United States. The reasons of the commission were partly invalid on their face, and partly inapplicable to this country. The commission lacked almost the whole of the important facts and experiences—those of Prussia, Austria, New Zealand, and Australia—that have since demonstrated the superiority of the public railways. Moreover, it was appointed on purpose to make the decision it did make, the appointing power desiring such a decision.

The commission based its conclusions upon three propositions: (1) That the credit and finances of the Italian Government were too weak to undertake the operation of railroads; (2) the unsuccessful results of a brief experience of 3 years with direct operation in northern Italy, these results being due partly to the fact that the lines had come to the Government in a dilapidated condition and had been operated by Austrians who were displaced and their places filled by inexperienced men; (3) that state operation is more expensive than private operation.

Any argument that might be sought to be drawn from any one of these propositions has no application to the United States. The argument as to economy of operation was not based on a careful analysis of detailed facts. The railway pro-

motors of Italy wanted the lease of the roads and the Government desired it also in order to get funds for other purposes, especially for the building up of the army and navy.

F. Government ownership of roadbeds only.—Replying to a question as to whether he thought it possible for the public to own the roadbeds, and corporations or individuals to do the transportation business in competition over those roads, Professor PARSONS says that he does not favor it because that system does not eliminate the element of antagonism of interest which lies at the bottom of the problem. Competition between those operating trains means the building up of great cities and of private individuals, and the system of discriminations which he believes are insuperable objections to it. Moreover, two companies could not operate trains at the same time on any line of railway, so that there would still be monopoly except at larger cities. (165.)

G. Regulation of private monopoly.—Professor PARSONS says that regulation is not sufficient to solve the problem of the public utility monopolies, for the reason that it can not overcome the antagonism of interest between owners and the public nor the congestion of wealth and power. With public ownership the managers would be impelled to administer the system with the same earnestness and honesty as they would their private affairs. (181-182.)

XIII. THE TELEGRAPH BUSINESS.

A. General description and statistics.—1. *Western Union Telegraph Company.*—Mr. CLARK, vice-president of the Western Union Telegraph Company, submits extracts from the annual report of that company showing the mileage and other conditions of business. In 1866 the company had 37,380 miles of poles and 75,686 miles of wire. In 1900 it had 192,705 miles of poles and 933,153 miles of wire. In 1900 it had 22,900 offices. (241.)

2. *Number of messages.*—The number of messages sent by the Western Union Telegraph Company, as stated in its annual report, increased from 5,879 in 1867 to 17,153 in 1876. By 1885 the number had reached 42,096 and by 1890, 55,878. The number of messages sent in 1893 was greater than in any later year, reaching 66,591,858. (241.)

Mr. Clark says that the number of messages transmitted during the year 1900 by the Western Union Company was 63,167,783, which does not include those going over the leased wires to the press and other interests. He figures the latter classes as amounting to 7,500,000, making a grand total of over 70,000,000 messages. (216.)

3. *Postal Telegraph Company.*—ALBERT B. CHANDLER, president of the Postal Telegraph Company, gives a brief history of the organization and development of the company. The Postal Telegraph Company is a reorganization of the original Postal Telegraph Company, and has been 15 years under its present organization and management. It has acquired quite a number of smaller telegraph companies, but its property is chiefly of its own construction. The Postal Telegraph Company and the Commercial Cable Company have been substantially one property since January, 1897, the cable company being in control of the Postal Telegraph Company. (193, 194.)

Mr. Chandler states that at the close of last year the mileage of the Postal Telegraph-Cable Company, not including the Atlantic cables, was 26,042 miles, the wire mileage 169,236 miles, the number of offices 20,781, and the number of messages transmitted 16,528,444. (194.)

4. *Telegraph franchises.*—Mr. CHANDLER states that it is now universally true that in going through any city or town the telegraph company has to acquire a franchise. He claims that under the post-road act of Congress of 1886, and the amendments thereto, a municipality can not prevent the erection of poles and wires in the cities, but can only regulate the construction. Practically, however, the difficulty in obtaining permission for construction of lines is as great as that of obtaining an entire franchise.

Mr. Chandler says that the method of acquiring franchises varies about as much as the number of places. His preference is to pay a reasonable concession to the city government. It is common for the company to make its wants known and to explain the purposes and the extent of its use of the public highways, and make it understood that it is trying to do good and not harm, and is willing to pay what is reasonable for the privileges asked for. It rarely happens now that competing companies offer opposition to the securing of franchises. (196.)

5. *Relations of the telegraph companies to telephone and railroad companies.*—Mr. CLARK states that there are no relations between the Western Union Telegraph Company and the Bell Telephone Company, excepting that the telephone company collects and delivers messages for the telegraph company and is paid for it. There was at

one time some sort of a contract between the two companies, but it expired with the expiration of the Bell patent. The relation of the telegraph company to the railroad companies in a general way is that the telegraph company has constructed lines along the railroads and given the railway companies the use of their wires, and in return the railroad companies employ operators to do their own telegraphing and incidentally the commercial business for the telegraph company at the smaller stations. There is substantial uniformity in those contracts throughout the country. He does not feel at liberty, however, to submit any of those contracts to the commission.

The contract with the Bell Telephone Company grew out of a long fight between the two companies on the patent question, and it was compromised by the telephone company paying a part of its royalties to the telegraph company for the term of its contract, and the telephone company took over the plant that the Western Union had built. The contract expired in 1896, with the expiration of the Bell telephone patent. (217, 219.)

6. *Ocean cables.*—Mr. CLARK states that the Atlantic cables are from 1,800 to 2,500 miles long. The capacity of a cable is not to exceed 17 words a minute. They have only one conductor, and must be made very strong because of the great depth at which they are laid. It is possible to duplex the cable, and there is a fortune in it for any man who can "quad" it.

Mr. Clark states that the cost of laying an ocean cable is much greater than that of constructing a telegraph line on land. The general cost of the cable line is about \$1,000 per mile, and it has only one conductor. Moreover, the cost of maintenance of the cable line is much greater than that of the telegraph line. In the case of a broken cable in deep water it becomes necessary to fit out an expedition on a large ship, which might be out sometimes as much as 3 months in the Atlantic service. (232.)

B. Capitalization and profits of telegraph companies.—1. *Charges of overcapitalization of Western Union Company.*—Professor PARSONS states that of the \$95,000,000 of stock of the Western Union Telegraph Company a very large part is water; \$60,000,000 of the stock represents less than \$10,000,000 of actual value, and \$35,000,000 represents largely stock dividends which can not be analyzed. The highest estimate any legislative committee that has investigated the matter has ever placed upon the amount of money paid in by the stockholders is \$16,000,000. The plant has been built up out of earnings very largely. The railroad commissioners of North Carolina in 1897 had made an extensive examination and came to the conclusion that about \$5,000,000 was the actual value of the Western Union Telegraph Company over and above its bonds. From the best information obtainable, says the witness, it appears that the plant could be duplicated for from \$20,000,000 to \$30,000,000 at the outside.

Professor Parsons says further that when recently the attempt was made in Ohio to increase the taxation of the Western Union lines the assessment was fixed, on the basis of two-thirds of the value, at \$2,000,000 for the 8,272 miles of line in the State. The company claimed that the property should be assessed at not more than \$647,000, and that the total cost, including all wires on a line, and including also the cost of stations and equipment, was on the average \$103 per mile of poles. On this basis the total 190,000 or 200,000 miles of poles owned by the company would be worth about \$20,000,000. (185, 186.)

Mr. ROBERTS quotes from the Washington Evening Star of 1893 to the effect that the paid-in capital of the Western Union Telegraph Company does not amount to over \$10,000,000, while its stock amounts to over \$80,000,000. All above the \$10,000,000 is pure water. The Star also stated that if the time should come when the Government would buy out the Western Union it would be necessary to squeeze this water out of the stock, or else the Government should build its own lines and operate them and let the inflated concern take care of itself. The witness quotes also from the report of the executive committee of the National Board of Trade of November 15, 1882, which gave a history of the great growth of the capitalization of the Western Union Company. That report stated that in 1858 the Western Union had a capital of \$385,700; that 8 years later the stock had increased to \$22,000,000, of which \$3,322,000 was issued in the purchase of competing lines and \$18,000,000 was issued in stock dividends; that afterwards, when the United States Telegraph Company was purchased by the Western Union, over \$7,000,000 of stock was issued, which was alleged to be 5 times the value of the property taken in; and that in the purchases of the other telegraph companies, occurring subsequently, practically the same proportion of stock was issued in respect to real value as in the cases mentioned. The witness states that it is the universal opinion of those who have given the subject consideration that "on one side are the people and on the other the Western Union Telegraph monopoly." (267, 271, 272.)

2. *Denial of overcapitalization of Western Union Company.*—Mr. CLARK denies the charge that the Western Union Telegraph Company is overcapitalized. The rates

charged would compare favorably with the rates charged by any system of telegraphs that could be put upon the same basis without governmental aid, and there are no overcharges. Comparing Great Britain with the United States, the total cost of the lines in Great Britain up to March 31, 1900, was \$68,603,662, or an average capital account of \$1,530.80 per mile of poles and \$215.90 per mile of wire. The total capitalization of the Western Union Telegraph Company, including the stock, the collateral trust bonds, and all other bonds and liabilities, amounts to \$131,364,665. On this basis the capitalization per mile of poles in the United States is \$703.80. Deducting the Atlantic cables from the wire mileage, the capitalization per mile of wire is \$141.70. Thus the capitalization per mile of poles in Great Britain is more than twice as much as that of the Western Union Company and the capitalization per mile of wire one-half as much more.

Figuring the capitalization from another standpoint, and deducting \$11,000,000 of assets from outside companies that are not telegraph companies and whose systems are not in any way comprised in its mileage, the capitalization of the Western Union is \$120,364,665, or \$645 per mile of poles and \$129.80 per mile of wire. (212, 213.)

Professor PARSONS criticises the statement that the capitalization of the Western Union Telegraph Company is \$645 per mile of line and \$130 per mile of wire, while the British capitalization was estimated at \$1,530 per mile of line and \$216 per mile of wire. He says Mr. Clark's estimate of the British capitalization is made up by adding to the outstanding capital debt the whole cost of extensions and improvements from the beginning, and making no allowance for depreciation. Besides this, it is well known that England paid the company at least four times and probably five or six times the actual value of the lines. It would be better to take for comparison the telegraph capitalization in some country that had not made such an exorbitant purchase. Better still would it be to compare the \$645 a mile with the cost of construction in this country or with the Western Union claim in recent litigation in Ohio, that its whole property in that State did not cost over \$103 per mile of line. Even this contrast probably does not show the real inflation in Western Union capital, for Vice-President Clark took the whole mileage of poles and wire reported by the company, which there is the very best reason to believe is the sum of all the lines bought and built from the start, many of them now in the junk heap. Vice-President Clark says that the "capital of the Western Union Company has resulted from the amalgamation of a large number of telegraph companies from the beginning," and everybody knows that when companies amalgamate the resulting capital is a good deal more than the sum of the former separate capitals. What is the relation between capitalization and the real value of the plant is the important question. (889.)

Mr. CLARK states that the Western Union Telegraph Company guarantees the stocks of other companies which it has taken into its system, amounting to quite a large sum, for which no Western Union stock has been issued. The stocks of the companies for which Western Union stock has been issued have been canceled. There are about 11,000 stockholders of the Western Union Company, only about 50 of whom hold large blocks of stocks. The regular dividend is 5 per cent, and has been so for a number of years. (226.)

Mr. Clark states further that the capitalization of the Western Union Telegraph Company has not been increased with the increase of the service and with the amount of money expended in the betterment of the system. Referring to the absorption by the Western Union of the Atlantic and Pacific and the American Union Telegraph Companies in 1879, he says that he is unable to tell whether the capital stock of the Western Union was increased at that time or not, but whether it was or not (referring to an opinion of the United States court of appeals) there was no more increase in the capitalization than the values of the property absorbed would warrant. The capitalization per mile of wire has steadily gone down because the property has been reconstructed without adding additional capital to it, the amount for reconstruction being taken out of the earnings of the company. (221.)

3. *Cost of reproduction.*—Mr. CLARK, referring to the arguments that the cost of reproducing the property should be the proper test of its value, maintains that this is not the correct test. Moreover, the claim that the lines can be reproduced for \$120 to \$130 per mile is preposterous. This would not be true even if there were but 2 wires to the line, and while only about 30 per cent of the lines of the Western Union Telegraph Company have only 2 wires, on many of the lines of the system there are as many as 200 wires, which make it very much more expensive. The cost of expensive terminals in the various cities (many of which run up into the millions of dollars) must necessarily be taken into consideration in determining the value of the property. It cost the company \$100,000 per mile to construct the underground and pneumatic system for 3 miles from the uptown to the down town offices in New York City. The witness further maintains that another factor in the value of the

property is the fact that it has been built up by the brains of many managers and has a certain value which might be termed its good will. The property as it is to-day represents in a large part many renewals and reconstructions; this outlay would amount to from \$50,000,000 to \$60,000,000 expended since 1866. (215.)

Mr. Clark states that he can not make an estimate of the average cost of constructing a mile of poles with 1 wire, because there are so many varying conditions in the country as to render an estimate unreliable. He also states that he can not estimate the cost per mile of wire and the cost of terminals, for the same reason. (221, 222.)

Mr. CHANDLER states that the cost of building a telegraph line varies. He has known a good single-wire telegraph line to be built for \$150 per mile, and he has known single lines of telegraph in cities to cost \$10,000 under ground. (204.)

4. *Capitalization of Postal Telegraph Company.*—Mr. CHANDLER states that the capital stock of the Postal Telegraph Company was, at the time of the acquisition of the property by the Commercial Cable Company, exchanged for bonds of the Cable Company. The whole capital of the Postal Company—\$20,000,000—is in bonds issued by the Cable Company in exchange for \$20,000,000 of stock of the Postal Company and for property since acquired. The Postal Company has no shares of the stock outstanding on its land-line properties. The Postal Company has no sinking fund and no cumulative feature in its interest-bearing bonds. The \$20,000,000 of bonds cover not only the tangible property of the company, but its franchises, patents, and a variety of requisites for carrying on the telegraph business. (194.)

Mr. CLARK states that the Postal Telegraph and Cable Company has \$18,000,000 of 4 per cent bonds, and that that does not cover all that the lines have cost, which is about \$20,500,000. On the mileage given by that company in the United States it is capitalized at \$782 per mile of poles and \$121 per mile of wire. This company was the result of a number of reorganizations of other companies and has been built up on practically a cash basis. (212-213.)

5. *Profits of the Western Union telegraph system.*—Mr. RANDALL traces the growth of the Western Union telegraph system, beginning in 1858, when its capital stock was only \$385,780, and states that during the next 8 years its stock dividends amounted to nearly \$18,000,000; that the largest dividend declared by the company up to 1874 was 414 per cent. The company has realized \$100,000,000 in 25 years in dividends. An investment of \$1,000 in Western Union stock in 1858 would have received up to 1890 stock dividends of more than \$50,000 and cash dividends equal to \$100,000, or 300 per cent of cash dividends per year. (243-244.)

Professor PARSONS states that Postmaster-General Wanamaker's investigations showed that early investments in Western Union stock have received an average of 300 per cent cash dividends per year from 1858 up to 1890 and 150 per cent per year in stock dividends besides. Cash dividends for the period from 1858 to 1866 were 100 per cent a year and the total dividends 700 per cent a year. (190.)

Mr. CLARK states that the annual gross earnings of the Western Union Telegraph Company amount to nearly \$25,000,000, while the gross expenses are about \$18,500,000, which leaves a balance of something over \$6,000,000 for dividends on the stock, for interest on the bonds, and for sinking-fund purposes, with a small surplus. The expenses for a year are made up of operating and general expenses, amounting to over \$13,000,000; rental of leased lines, over \$1,500,000; maintenance and reconstruction, nearly \$3,000,000; taxes, a little over \$500,000; equipment, a little over \$300,000. The operating and general expenses for salaries amount to \$9,000,000, or practically 50 per cent of the whole expenses, which does not include the salaries for regular linemen, special line gangs, and general labor expenses. (216.)

6. *Profits of Postal Telegraph Company.*—Mr. CHANDLER states that the Postal Telegraph Company earned and paid 4 per cent dividends previous to the sale of its property and has just about earned the interest that has been paid by the Cable Company on the bonds since the acquisition of its property by that company. (194.)

Mr. Chandler states that all the earnings of the Postal Telegraph Company above dividends of 4 per cent paid on its \$20,000,000 of bonds have been invested in extension and new construction, but that it is impracticable to ascertain accurately the amount of surplus earnings that have gone into the property. (194, 202.)

Mr. Chandler states that the Commercial Cable lines have up to this time had an advantage over the land lines in earning capacity. (202.)

C. Telegraph rates.—1. *Telegraph rates in United States.*—Mr. RANDALL states that the rates for telegrams in this country are so varied that it is difficult to tell what they are from one place to another without going to a telegraph office and making inquiry. He submits a table showing the rates from New York to all the principal cities in the country, ranging from 25 cents for 10 words and 2 cents for each additional word to \$1 and 7 cents. This table is as follows:

Alabama, 50 and 3.
 Arizona, \$1 and 7.
 Arkansas, 50 and 3 and 60 and 4.
 California, \$1 and 7.
 Colorado, 75 and 5.
 Connecticut, 25 and 2.
 Delaware, 25 and 2.
 District of Columbia, 25 and 2.
 Florida, 60 and 4.
 Georgia, 50 and 3.
 Idaho, \$1 and 7.
 Illinois, 50 and 3.
 Chicago, 40 and 3.
 Indiana, 50 and 3 and 40 and 3.
 Indian Territory, 75 and 5.
 Iowa, 60 and 4 and 50 and 3.
 Kansas, 60 and 4 and 50 and 3.
 Kentucky, 50 and 3 and 40 and 3.
 Louisiana, 60 and 4.
 Maine, 25 and 2.
 Manitoba, 75 and 5.
 Maryland, 25 and 2, 30 and 2, and 40 and 3.
 Massachusetts, 25 and 2.
 Minnesota, 60 and 4 and 50 and 3.
 Mississippi, 60 and 3.
 Missouri, 60 and 4 and 50 and 3.

Montana, 75 and 5.
 Nebraska, 60 and 4 and 50 and 3.
 Nevada, \$1 and 7.
 New Brunswick, 50 and 3.
 New Hampshire, 20 and 1 and 25 and 2.
 New Mexico, 75 and 5.
 New York, 20 and 1 and 25 and 2.
 North Carolina, 50 and 3.
 North Dakota, 75 and 5.
 Ontario, 40 and 3.
 Oregon, \$1 and 7.
 Pennsylvania, 25 and 2 and 20 and 1.
 Quebec, 40 and 3.
 Rhode Island, 25 and 2.
 South Carolina, 50 and 3.
 South Dakota, 75 and 5.
 Tennessee, 50 and 3 and 40 and 3.
 Texas, 75 and 5 and 50 and 3.
 Utah, 75 and 5.
 Vermont, 25 and 2.
 Virginia, 40 and 3, 30 and 3, and 25 and 2.
 Washington, \$1 and 7.
 West Virginia, 40 and 3 and 35 and 2.
 Wisconsin, 50 and 3.
 Wyoming, 75 and 5.

Mr. Randall says that there are special rates less than the commercial rates given in the table, but that there does not seem to be any universality even in respect of these special rates. He believes in uniformity of rate; he does not think distance should be considered in telegraphy any more than in the carrying of the mails. The company has the line erected and the operators employed, and it really does not cost any more to send a telegram from Maine to California than from Washington to Alexandria. Nineteen twentieths of the telegraph business of the company is done within a radius of 1,000 miles of New York, and rates on that business would pay for any deficiency in the revenues for longer distances. (251, 257, 258.)

Mr. CLARK describes the various kinds of rates in force in the telegraph system of the country. The commercial rates are made up in different ways. For instance, in some States the rate for a 10-word message is 25 cents for the whole State and there are also such special rates from State to State and between large centers. The rates for local purposes all through the country, if not thus specially determined, are made up by a system of squares, a square being 50 miles each way, and the rate being 25 cents from any square to any two circles of contiguous squares. The highest rate charged for the country is \$1, which is from the Atlantic to the Pacific coast. There is also a system of night rates east of the Rocky Mountains, by which messages can be transmitted during the night and delivered next morning at about half the day rate, there being no rate less than 20 cents. (209, 210.)

Mr. CHANDLER states that the rates of the Postal Telegraph Company for messages of 10 words, exclusive of date, address, and signature, range from 20 cents, applying locally in a few cities, to \$1, applying between the extremes of the Atlantic and Pacific coasts, and that the average amount received per message during the year 1900 was 34.2 cents. He states further that the small customer is as cheaply served as the large customer, a circumstance which is due to the fact that in the transmission of telegrams every message takes exactly as much time of the operating service and as much use of the lines as every other message of equal length.

Rates are fixed on a system similar to the zone system. The whole country is divided into squares, and the rate is made from one square to another. (194, 195.)

2. *Comparison of European and American telegraph rates.*—Professor PARSONS states that the average telegraph receipts in this country are about 31 cents for ordinary messages, while in European countries the rate is very much less. He submits the following table showing the comparative rates for the principal European countries to be less than one-half what the rates are in this country:

Country.	Ordinary rate per word.	Ordinary minimum charge per message.	Average receipt per message.
	Cents.	Cents.	Cents.
Great Britain.....	1	12	15½
France.....	1	10	15½
Germany.....	1	12	.....
Belgium.....	1	10	8½
Switzerland.....	1	12	.....
Austria.....	1	11	.....
United States.....	2 to 7	25	31

Mr. Parsons asserts that the difference in rates between the United States and European countries can not be accounted for wholly upon the greater distances in the United States, as is claimed by the Western Union Company, because, if the total cost for maintenance and reconstruction of the Western Union were taken as a basis for calculation, the increased cost per message would not exceed 3 cents. (186, 187.)

Mr. RANDALL declares that the rates for telegraph service in this country are excessive and very much higher than the rates for similar service in the European countries where the telegraph is under government control. Sixty-one per cent of the telegraph lines of the world are under government ownership. In the European countries no more charge is made for 100 miles than for 1 mile, the same principle being applied to the telegraph there as to our postal system. In most of these countries the postal service and telegraph are combined, and in nearly all of them the combined service makes a profit. He instances Italy in 1890 as having a net profit of \$306,837 from the combined service. He quotes from Postmaster-General Wanamaker:

"I believe that a telegraph company could make a great deal of money on a uniform 25-cent 20-word message to all parts of the country. The increase of business on lower rates would be so large that the profits of the telegraph company, in my judgment, would not be diminished." (244.)

Mr. ROBERTS states that the rates for telegraph service in this country are greatly in excess of the rates in European countries, where the lines are operated by the government, and that the service here is inferior. The Western Union Company, in making comparisons with European countries, has always contended that one of the reasons why rates were higher here than there was because of the greater distances. The Western Union, in making this argument, always attempts to minimize European distances and magnify distances in the United States, and he submits some figures taken from the Western Union statistics in support of his statement. (271.)

Mr. CLARK states that the average rate received for telegrams of all lengths by the Western Union Company is 30.8 cents and the operating expense about 25.1 cents. These figures are obtained by dividing the total receipts and expenses by the number of telegrams. In Great Britain the average cost per message is 15 cents. If the rates of Great Britain were raised to practically what they are in the United States, the service would perhaps be self-supporting. He states, however, that the messages passing over international lines in Europe are charged for at a higher rate than for similar messages in the United States. (224-226.)

Mr. Clark states that the telegraph rates in the European countries are based on the entire count of the message, including address and signature. The rate in Great Britain is 12 cents as a minimum, which covers 12 words, and 1 cent for each additional word. In France the charge is 10 cents for 10 words or less, in Norway 13 cents, and in Germany 12 cents for 10-word messages. In Belgium 15 words or less may be sent for 10 cents. The additional rates in each of these countries are about 1 cent per word. Messages to all distances are apparently at the same rates.

Mr. Clark asserts further that the distances in European countries are very short compared with those in the United States. The circuits in which the 25-cent rate would apply in the United States are much larger than the usual circuits in Great Britain, with which he makes particular comparisons. About 65 per cent of all of the messages in Great Britain are sent into and out of London. Distance is a very important item in any consideration of the question as to whether the rates in England can be properly compared with the rates in the United States, the conditions being so different.

Finally Mr. Clark emphasizes the fact that in the United States there is no charge made for the address and signature of the message, while in the European countries, with which comparisons have been made, these matters are counted as part of the message. While the rates of the European countries would appear on their face to be much below the rates in the United States, it would be found upon examination that a message in the United States costing 25 cents would average 21 words long, and at the rate of 1 cent a word, which is common in the European countries, this would cost 21 cents per 10-word message. (208, 209.)

Referring to the rates in the European countries, Mr. CHANDLER says:

"In European countries the distances are very short in comparison with ours, and, besides, in European countries every word is charged for. Here the rate is upon the message itself. The date, address, and signature are not paid for. * * * I have repeatedly been informed, both by telegraph officers abroad and persons using the telegraph there, that, taking into account the fact that all words are charged for by foreign governments and that the distances within the limits of European countries are less than in the United States, rates there are nowhere lower than here, and in case of messages going from one country to another they are much higher." (194, 195, 202, 203.)

Professor PARSONS replies that Mr. Clark's comparisons are vitiated by his assumption that 11 words is the average of the address and signature, thus making 21 words the ordinary message as the basis of comparison. President Green, of the Western Union Telegraph Company, some years ago placed the average number of words in the address and signature at 7 per message. Even if the average message were 21 words here the comparison would not be fair, for it is perfectly certain that the average message for England is about 15 words only. The minimum rates at which messages can be sent, and the actual average charge, are vital matters for making comparisons. In Great Britain a message from any point to any other point in that country may be sent for 12 cents. From any point in the States of Massachusetts, New York, Connecticut, or New Jersey to another point in the same State is 25 cents. The average charge for all messages in Great Britain is about 15 cents, as against 31 cents in the United States. Mr. Clark admitted, says Mr. Parsons, that 3 cents a message added in Great Britain would pay for all extensions and cover the interest charges on a debt overloaded by the purchase of lines at about four times their value. By Western Union data less than 3 cents of the 31 charged in the United States are due to distance, and the evidence shows that telegraph expenses are not run up by paying high wages. (887.)

3. *International rates.*—Mr. CLARK states that, as to the through business on the Continent of Europe, one can register a code address just as is done in respect of cable messages and pay \$5 per year for that registration, but that that system is not used by the general public because it is too expensive. It is safe to assume that practically all the general business passing between London and any of the large cities on the Continent would be on the same count as business in the United States, the tendency being to make it more, because the names of streets are much more involved there than here. The rate for all international business in Europe is made on a word-count and not on a count of 10 words or less. The rate between London and Paris is 5 cents per word, or \$1.05 on the message of the average sent in this country at the 10-word rate; whereas from New York to any part of New England, Pennsylvania, or New Jersey (which is practically the same distance), the rate would be but 25 cents. "From London to Marseilles, 827 miles, the rate is 5 cents a word; that would be the same as Paris—\$1.05—while our rate from New York to Chicago, about the same distance, is 40 cents. From London to St. Petersburg the distance is 1,774 miles, and the price is 11½ cents a word, or \$2.41 for 21 words, while our rate from New York to Galveston, 1,789 miles, is 75 cents. From London to Berlin is 746 miles, and the telegraph toll 6 cents a word, or \$1.25 for 21 words, while our rate from New York to Cincinnati, the same distance, is 40 cents. From London to Rome is 1,192 miles, and the rate is 6½ cents per word, or \$1.37 for 21 words, as compared with our charge of 60 cents from New York to New Orleans, 1,344 miles." (200.)

Mr. Clark states that the cable rate from New York to Europe is 25 cents per word, and that for a less distance it might be less, because less money is invested in the line for a shorter distance. The comparisons as to the rates from New York to various points in this country with the rates from London to various European countries are fair, although as a part of the distance from London to the continental cities is by cable, because the cable distance from England to the Continent is very short. The rates from one continental place in Europe to another are practically the same as from England to any of the continental countries, the rate from Paris to Berlin being 4 cents per word. (218.)

Professor PARSONS replies that Mr. Clark's comparisons of American rates from New York with European rates from London is unfair, (1) because the American rates are internal, while the European are international, each country adding its own tariff; (2) the American rates are land rates, while the European rates include the cable from England to the Continent, which, as Mr. Clark admits, is infinitely more costly than the land service. (887.)

Professor PARSONS criticises the statements made at various earlier times by the Western Union Telegraph Company in respect of the distances between various European places and between places in the United States, saying that for the purposes of making out their cases the Western Union has magnified the American distances and minimized the European distances, and in a table submitted to a Congressional committee in 1870 had not correctly stated the distance, but had put the distances from one-third to one-half less than the actual distances.¹ The rates compared by the Western Union, moreover, were for internal traffic in the United States and for international traffic in Europe, international traffic being, because of different controlling

¹ The distances stated by Mr. Clark in his testimony—126—before the Industrial Commission are nearly the same as those stated by Mr. Parsons as being correct.

authorities, much more expensive than internal. For internal traffic in the United States, the rates were found by the committee of 1870 to be from three to four times as high as for internal traffic under European systems operated by the government. (187-188.)

4. *Density of population and amount of service in United States and foreign countries.*—Mr. THOMAS F. CLARK, vice-president of the Western Union Telegraph Company, states that, in his opinion, the comparisons that have been made by other witnesses in regard to the telegraph in Great Britain, Ireland, Switzerland, and Belgium are unfair. The area of all these countries, their population, the density of population, and all things of that nature should be taken into consideration. It would be found therefrom that the service in the United States reaches more people, comparatively speaking, and was better than in the other countries mentioned. He gives statistics in support of this general proposition, showing that there are about 39,000 places reached by the telegraph companies and their connections in the United States, while there are but 76,000 post-offices; that in Great Britain there are about 40,000 post-offices and 10,816 telegraph offices. About 50 per cent of the places where there are post-offices in the United States are reached by the telegraph, while in Great Britain, with all its density of population (which he gives as 333 to the square mile, while it is only 24 to the square mile in the United States), only about 25 per cent of the places reached by the post-office are reached by the telegraph. (206-208.)

Mr. Clark submits also a table showing for each of the European countries and for the United States the number of people, the miles of telegraph lines and telegraph wires, the number of offices, the messages sent, the receipts, the number of people to the square mile, and the number of people to 1 mile of wire, and other facts. He asserts that these figures show that the United States has fewer people to the square mile than any of these other countries, and that nevertheless there are more miles of wire proportionately to the population than in any other country. There are here only 76 people for every mile of wire, while Great Britain, with a very dense population and a large proportion of mileage of wire to territory, has no less than 130 people to every mile of wire. In Germany there are 188 people per mile of wire, while in Russia there are no less than 699 inhabitants per mile. The witness holds that these figures show the superior adequacy of American telegraph facilities, in proportion to the needs of the country. (233, 234.)

Professor PARSONS replies that 1 mile of wire to 76 people in the United States against 1 mile to 130 people in Great Britain proves nothing except the relative sparsity of population in the United States. The wire mileage tabulated by the Western Union includes all the worthless lines that were bought up solely to get rid of rival companies. Mr. Clark's comparison as to the number of post-offices and places reached by the telegraph companies is invalid: (1) Because by his own exhibit there are only 29,000 places reached by telegraph and telephone. (2) Because the number given for the British telegraph offices is the figure for more than 2 years prior to the date of the figures for the United States. (3) Because the British post-offices are overestimated. The 1898 report gives the number of post-offices in Great Britain as 21,197 and the telegraph offices as 10,483. (4) Because telephone connections are included in the American figures and not in the English. (5) Because about three-fourths of the Western Union offices are railway offices, while less than one-fourth of the British offices are railway offices. (6) Because in Great Britain every post-office and postal box is a place of deposit for telegrams. Moreover, the figures, even if correct, would only show that Great Britain had a much greater relative development of post-offices than the United States. The implication that the telegraph development in Great Britain is relatively less than the United States is wholly unwarranted, even on Mr. Clark's figures, since 10,816 offices is a more extensive service in Great Britain than 39,000 in the United States with 30 times the area. (886, 887.)

Professor PARSONS admits that probably there is greater efficiency of service in this country in the telegraph system in some respects than in Europe, but says that can be attributed to general superiority of America in any business affairs. (188.)

5. *Reduction in rates in United States.*—Mr. CLARK says that the Western Union company has resulted from the amalgamation of a large number of telegraph companies. In the early days a number of small companies were exploited in all directions, and made their own tariffs, so that if one wished to send a message from a remote place to another remote place it would be necessary to send it over a number of different lines and pay what is known as the transit rate for each line, there being no unification of service. This system became so burdensome that consolidation became necessary.

As the result of the consolidation, rates have been greatly reduced. The rates of the East are lower than those of the Middle and Western States, and they in turn are lower than the rates in the South. The reduction of rates for the country in

and about New York has been about 20 per cent since 1866, while for the western and southern places the reductions were much greater.

The rate from New York to Buffalo, which was 75 cents, finally became 25 cents, which is the rate to all other places in New York State; from New York to Cleveland, \$1.45 in 1866, is now 40 cents, which is the rate to all other places in Ohio; to Chicago, \$2.05 in 1866, now 40 cents; other places in Illinois, 50 cents; Omaha, formerly \$4.45, now 50 cents; Denver, \$7, now 75 cents; Salt Lake City, \$7.25, now 75 cents; San Francisco, \$7.40, now \$1; Portland, Oreg., Seattle, Wash., and Victoria, British Columbia, which were from \$10.20 to \$11.55, now \$1; Washington, formerly 75 cents, now 25 cents; Richmond, \$1.25, now 35 cents; Atlanta, \$2.35, now 50 cents; New Orleans, \$3.25, now 60 cents; Galveston, Tex., \$5.50, now 75 cents.

Mr. Clark states that so far as practicable the divisions by squares have been abandoned and the rates fixed by States.

The result of this consolidation has been very beneficial to the business interests of the country and to all other interests in effecting great economy of service and great saving in time. The rates to-day aim to follow the development of the business all the time, and with an earnest desire on the part of the company to keep them as low as possible, at the same time giving the company a reasonable return on the investment. (214-215.)

A table submitted by Mr. Clark, from the report of the Western Union Telegraph Company, shows the average tolls received per message by that company each year since 1868. These figures are obtained by dividing the total receipts of the company from ordinary messages by the total number of ordinary messages, so that the average includes messages of all lengths sent for all distances. The average toll received in 1868 was \$1.047 per message. By 1875 the average had fallen to 54 cents, and by 1880 to 38.4 cents. The average receipts in 1885 were 32.1 cents and in 1890, 32.4 cents. Since 1895, when the average receipts were 30.7 cents, there has been practically no change in the average from year to year. The statistics showing the average cost of sending messages, which are obtained by dividing expenses chargeable to messages, not including interest on investment, by the total number of messages, show a reduction in the average cost from 63.4 cents in 1868 to 25 cents in 1878. The average for 1900 is almost precisely the same—25.1 cents. The average for the latter year is somewhat greater than for the years from 1885 to 1895, during several of which the average cost is stated at between 22 and 23 cents per message. (241.)

Mr. CHANDLER says that the tendency is to cheaper rates, and states that since 1880 the rate between the Atlantic and Pacific coasts has been reduced from \$1.50 to \$1, and that the rates between many other points have, since 1880, been reduced from 75 cents and \$1 to 50 cents and 60 cents, respectively; that many 50 and 60 cent rates of 15 or 20 years ago have been reduced to 40 and 50 cents, and many rates of 40, 35, and 30 cents have been reduced to 30 and 25 cents, while the limits within which the lower rates apply have from time to time been extended. The reduction in rates has been brought about largely by the disposition to secure greater uniformity and to extend the limits within which specific rates prevail. (194, 195, 202, 203.)

6. *Proper telegraph rates.*—Professor PANSOXS states that Postmaster-General Wanamaker informed him that his investigation led him to believe that a uniform 10-cent rate in this country under Government ownership, in connection with the postal system, would be remunerative. There was a line of telegraph between Milwaukee and Chicago installed some years ago, on which a 10-cent rate was made, and the company paid back from 30 to 40 per cent of the receipts to patrons of the road after paying 7 per cent interest on the capital; subsequently it reduced the rate to 5 cents and still paid back from 25 to 40 per cent of the total receipts to the patrons of the company, and at the same time had doubled its stock, making it half water, thus showing some of the immense profits to be made in the telegraph service from low rates. (189-190.)

Mr. CLARK thinks that the effect of a general reduction in rates throughout the United States would mean a loss to the telegraph company because the physical capacity of the wires has practically been reached. The company has considered these questions and has not thought it wise to adopt any reduction; it has been tried by other companies, such as the Baltimore and Ohio, and always with failure. While it is true a reduction of postage rates greatly increased the number of letters sent and also increased the revenues of the postal service, that principle would not apply to the telegraph because the Government uses the facilities of other people for the postal service and has no large investment. For instance if the mail matter increases considerably all the Government has to do is to put another car on the railway, while in the case of the telegraph a new line has to be constructed with an increase of the business. While the rates of postage in the United States are higher than they are in Great Britain, yet the British post-office makes a profit while the United States post-office is operated at a loss. He attributes this to the greater distances that mail has to be carried in this country than in England. If the telegraph service were carried

into every nook and corner of the country, as the advocates of Government ownership desire, the result would be a deficiency very much greater than the deficiency in Great Britain. He admits, however, that the decrease in rates would perhaps result in an increase of the number of messages sent. (227-228.)

Mr. Clark refers to numerous attempts that have been made in this country to reduce telegraphic rates, all of which, he says, have been unsuccessful. The present rates are justified by the business of the company. (215.)

Baltimore and Ohio Telegraph.—Professor PARSONS criticises the statement of Mr. Clark, that the Baltimore and Ohio telegraph, which maintained a 10 cent rate on 19 long routes and other low rates, averaging 16½ cents a message on the whole system, became bankrupt in consequence of its low tariff. The manager of the Baltimore and Ohio telegraph system testified at a hearing before a Congressional committee that the system made a profit in spite of its low rates, and that the Western Union succeeded in buying up the Baltimore and Ohio lines merely because other departments of the railroad company were unprofitable, and the sale of the telegraph was the most available source of realizing funds. (888.)

7. *Relations between telegraph companies and effect on rates.*—Mr. CHANDLER states that there is an understanding between the Postal Telegraph Company and the Western Union Company in respect to certain methods of competition, giving of rebates, etc., but that there is no understanding in reference to any division of business, and neither company, as a rule, accepts messages which must be transmitted over the lines of the other company. Since this understanding has been had, there has not been any increase in rates to the public, except that certain particularly low rates—10, 15, and 20 cent rates—that had been established by the various smaller competing companies and which meant a loss were done away at the outset. At the same time, he says, a much larger number of rates, particularly rates between distant points, was reduced. Previous to this understanding the most insistent customer got the largest rebate, and, in Mr. Chandler's judgment, the understanding has resulted in benefit to the public in that now every man engaged in the business knows that he has just the same rates as his competitor and that no one has any advantage over another. No complaints because of the refusal to give rebates have been had since customers have understood that there is no exception to the rule. (195, 198.)

Mr. Chandler states further that the business of his company is not competitive at all points with the Western Union Company, that the Postal Company has offices at a great many places where the Western Union has none, and the Western Union has offices at a great many more places where the Postal Company has none. At the majority of the Postal Company's stations, however, there is competition. The number of messages transmitted by the Postal Company in 1900 was about one-fifth of the whole number in the country.

In Mr. Chandler's opinion, the understanding in reference to rates, etc., between the Postal Company and the Western Union Company has not destroyed competition, though it has restricted it. Unrestricted competition would mean destruction. The existence of competing lines, however, the witness holds to be of advantage and to result in the doing of business on better terms.

Business could be done much better under one management, he thinks, but the difficulty has been hitherto, that "when the whole telegraph business has for a time been done under one management new competition has sprung up of a wasteful sort and legislation has been instituted against telegraph companies. Public clamor has been raised against monopolies, and it has not so far been practicable to maintain a single service for any considerable time." (195, 201, 203.)

Mr. CLARK states that there is no community ownership between the Western Union and the Postal companies. The Postal follows the rates of the Western Union. They have no interchange of messages. (228-229.)

8. *Cost of using the telephone in connection with the telegraph.*—Mr. CLARK states that sometimes, in the case of independent telephone companies which run their lines into a remote place, there is an increased cost to the public, but that for collecting and distributing through the telephone companies generally there is no increased cost. (227.)

D. Government ownership in Great Britain.—1. *General working.*—Professor PARSONS says that England made a mistake when it bought out the telegraph companies by buying them all at once instead of one at a time, as Prussia had done with the railroad service. It also paid about four times as much as the lines were worth. Notwithstanding these disadvantages the rates were immediately lowered and the service increased and bettered in every way. Telegraph offices have been opened in the post-offices, and messages can be deposited in post-office boxes. The hours of labor have been shortened from 56 to 48 and 42, and wages increased. The public operation of the telegraph has brought about a harmony of interest. Press

rates have been reduced to the lowest figure in the world to-day. The number of messages doubled in 2 years after the Government took possession and has subsequently very largely increased. Social intercourse has been promoted. The percentage of social messages, not only in England, but in Belgium and Switzerland as well, runs up sometimes as high as 63 per cent of the total, whereas the Western Union has stated that 46 per cent of the telegraph business of the United States was speculative. Where the rates are low and the facilities ample the masses of the people use the telegraph to a very great extent. The advantages in England are low rates, good service, rapid growth of the system, progressive improvement of labor, harmonious, uninterrupted operation, large popular use of the telegraph, a management whose sole aim was to serve the people, moderate salaries for leading officials, no big fortunes from telegraph manipulation, and universal satisfaction with the situation. The opposite of all this is true in the United States. The United States need not make the mistakes England made in some of its management of the telegraph system. (182-185.)

2. *Deficit in English telegraph.*—Mr. CLARK says that the financial conditions of the telegraph system in Europe are very much obscured in all the countries with the exception of Great Britain, which has had the manhood to come out and say that the telegraph there is operated at a loss. There has been a deficit of nearly \$40,000,000 in the operation of the telegraph system of Great Britain since it was taken over by the Government in 1870; the witness submits an itemized statement to verify those figures. The losses on the telegraph in Great Britain are provided for by the annual grant made by Parliament to the department. The grant covers all the cost of extensions, as well as of operation, and no capital charge is made especially for the telegraph department, the whole amount including the interest on the original stock going in as a part of the expenses of the post-office. (211-213.)

Mr. Clark says further that the deficit in the operation of the English telegraph since 1870 is brought about largely by extending the system without commercial considerations to remote and insignificant places, and that if the same policy were pursued in this country, which is twenty-five times as large, and not nearly so thickly populated, the same result would follow in an intensified degree. (215-216.)

Mr. Clark states that it would be a very difficult thing to raise the rates in England so as to make the telegraph service self-supporting, for the reason that the policy of the British Government is to serve the interest of the comparatively limited number of people who use the telegraph, at the expense of all. (220.)

Professor PARSONS states that while there is a deficit in the operation of the English telegraph system, a deficit has not occurred in any of the other European countries. He states that in England the returns for the telegraph system are so mixed up with those from the post-office service that it is not possible to tell whether the telegraph is responsible for the deficit. The post-office and telegraph systems together do make a profit in Belgium, France, and Germany, and the British post-office is operated at a profit of \$16,000,000. Moreover, other reasons for the deficit in the English telegraph system are: That England paid four times the fair value of the lines; that she has been burdened by the competition of the telephone; and especially that she did not aim at a profit at all, but at the development of the country. Telegraph experts in England have stated that if the expenses were properly divided between the mail system proper and the telegraph, there would be no deficit of the telegraph; that the postal authorities were anxious to make a strong showing for the mail department, and that a 2 per cent variation in the division of expenses between the mail department and the telegraph, or a slight increase in the press rates, which are 9 cents per 100 words, would make up the deficit. Moreover, the railroads in England are permitted to use the telegraph free, which is a mistake. (188-189.)

Professor PARSONS says that the English telegraph system is not run as a means of raising revenues for the public treasury, but as a means of disseminating information throughout the whole country and giving increased facilities of communication to all classes, as well as a means of increasing the trade and commerce of the Kingdom. (126.)

Professor PARSONS criticises, in a supplementary affidavit, Mr. Clark's statement that the deficit in the operation of the English telegraph amounts to \$37,000,000, and says the estimates of deficiency are made by including the cost of new construction, extensions, etc., whereas these should belong to the capital account. The difference caused by the wrong use of construction cost might turn a small deficit into a big one, or might change a profit into a deficit. For example, Mr. Clark's statement shows a deficit of £29,909 for 1880, whereas there was a profit of £7,187 above all cost of operation and maintenance and interest on the debt. In 1881, 1882, 1883, and 1884 there was also a profit if the amounts paid out for new construction, etc., are put

into capital account. The British Government believes that the country gets more than a full return for the deficit in the development of business, etc., through low telegraph rates. If the telegraph had remained in private hands the service would have cost the people many millions more than the total Government cost, deficit and all. Moreover a deficit is not necessarily a bad thing, it depends on what there is to show for it, and there are plenty of countries that do not have any deficit in the operation of the telegraph. (888.)

E. General discussion of Government ownership.—1. *Right under Constitution.*—Professor PARSONS states that he believes that, under the Constitution of the United States, it is the duty of the Federal Government to establish a postal telegraph system. He quotes from a report of the House Committee on Post-Offices and Post-Roads of the Twenty-eighth Congress, wherein it was asserted that the telegraph came under the same category as the post-office as a governmental function. The Government is bound to supply the people with means of communication. The postal service was placed under the control of the National Government, and with the increase of inventions and other means of communication, they likewise should be administered by the General Government. (182.)

Mr. ROBERTS, a member of the International Typographical Union Telegraph Committee, does not think it necessary to argue the question of the right of the Government to own and operate the telegraph. The operation of the Post-Office Department is the best evidence that the Government has the right; if it has the right to transmit letters it certainly has the right to handle telegrams. In 1866 the Western Union Telegraph Company practically conceded this right to the Government, merely asking that Congress should permit it to operate the system for the term of at least 5 years, in order that the capital invested in the plant might not be destroyed. (266.)

Mr. HITCHCOCK says that it is the duty of the Government under the Constitution to utilize the best available means for the transmission of correspondence, and it is therefore unconstitutional for the telegraph to be operated as a private monopoly. Of 75 countries the telegraph is owned and operated by the Governments in all except Bolivia, Cuba, Cyprus, Hawaii, Honduras, and the United States. This witness favors especially the introduction, by the Government, of the methods of machine telegraphy, his account of which is summarized below. (890.)

2. *General argument for Government ownership.*—Mr. RANDALL says that his general reason for advocating governmental ownership of the telegraph is his opposition to a monopoly of any sort, but that there are more particular reasons why the telegraph should be under the control of the Government. Thus the press rates are extortionate. Large dividends are paid on watered stock, two-thirds of the entire stock of the Western Union being water. The telegraph is a very important agency in the communication of intelligence, and has been so concentrated in the hands of a few persons as to become a monopoly, with power to levy such exactions as it may choose. The first telegraph in America (from Washington to Baltimore), was built with an appropriation from Congress and was operated by the Post-Office Department for 3 years, and the control by the Government now would be simply a return to original conditions. (242.)

Mr. ROBERTS says that while practically all the business organizations and the great thinkers and statesmen of the country favors governmental ownership and operation of the telegraph, nobody with the exception of the Western Union Company seems to oppose it. It is, in fact, a contest of the people against the Western Union. The witness quotes Postmaster-General Wanamaker to the same effect. He refers to the greed of the Western Union Telegraph Company in requiring the public to pay the late stamp tax on messages, when the evident intent of Congress was that the company itself should pay it. (272, 273, 274.)

Professor PARSONS states that when the English Government began to consider the absorption of the telegraph the companies used every effort to prevent the reform, and made all sorts of objections, every one of which has been answered by the results of the public system. There is really no force in the current objections to Government ownership aside from the patronage question, and that difficulty can be solved. (179-180.)

Mr. ROBERTS states that there would be great similarity between an extension of the telegraph service under governmental ownership and present rural free delivery in the Post-Office Department. Only a few years ago, when the establishment of rural free delivery was suggested, it was denounced by some as impracticable, and substantially the same arguments were made against it as are made by the Western Union Telegraph Company against the extension of the telegraph service to remote places where the service would not be self-sustaining. But the rural free delivery has been greatly increased; it is found very beneficial to rural communities, and it would hardly be suggested that it should be abolished. (272.)

Mr. HITCHCOCK says that a select committee of Congress in 1870 estimated that the annual saving by Government ownership of the telegraph would be at least \$1,500,000. Inasmuch as the receipts of the telegraph company are now four times what they were in 1870 the saving under Government operation would be very much greater now, even if there were no improvements made in operation. By cutting off dividends upon watered stocks alone the saving by Government management would probably be not less than \$4,000,000 per annum. (892.)

Mr. CHANDLER, of the Postal Telegraph Company, knows of no reason why the Government might not conduct the telegraph business as well as it can be done by corporations. Whether this would be the case, however, he thinks is another question. He says, however, that judging from the excellence of the mail service, and from the fact that the Government could conduct the business more cheaply in some respects than corporations can, and because of the absence of the incentive to earn dividends it might be that the Government could carry on the telegraph business to the satisfaction of the public. It would be practicable, he thinks, to introduce the telegraph into many country post-offices and have both the mail service and the telegraph service operated by the same force, with a considerable saving in expenses. Mr. Chandler has not sufficient knowledge to make a definite statement as to results of governmental ownership in Europe, but believes that the management of the telegraph by the Government of Great Britain is generally acceptable to the public but not profitable to the Government. (200.)

Mr. Chandler thinks that the regulation by Congress of the telegraph business under competitive conditions would be an exceedingly difficult matter. (202.)

3. *Argument against Government ownership.*—Mr. CLARK states that there would be no advantage in the governmental ownership of the telegraph even by combining postal and telegraph business in the small offices, because the employees of the Government would necessarily have to be operators as well, and it would be difficult to secure telegraph operators to run the other business of the Government. The argument in favor of governmental ownership is chiefly based on the experience of a few foreign countries where conditions are much different from those in the United States. (229.)

Mr. Clark supposes that the Government, by employing the same class of ability that the companies have, and by maintaining a permanent civil service, could operate the telegraph substantially as well as a private company could. But there is very much popular antagonism to the civil service examination arrangement. If the telegraph were put into the hands of the Government there would be clamoring from all over the country for telegraph service, whether there was any need for it or not, and it would be made the basis of log-rolling schemes by members of Congress just as is the case now in the river and harbor appropriations.

He does not think the fact that there is no great deficit in the Post-Office Department is an argument in favor of the Government operating the telegraph, because the conditions are so different from those of the telegraph. The post-office employs a vehicle provided by the capital of corporations or others for the distribution of the mails, while in the telegraph a great deal of capital must be invested in lines.

The Western Union endeavors to keep pace with the demands of the business of the country. After the discovery of oil at Beaumont, Tex., there was an immediate rush of people, but the telegraph company already had quadruplex instruments on the ground and was able to handle the business. The policy of extending the telegraph to unprofitable places in Great Britain has caused the deficiency. While it would be a public convenience to those places, the question is as to who should bear the expense. The witness does not believe the whole people should. He believes the Government could not make a juster or fairer division of rates than now exists, that it would not do the business on business principles, but would be influenced by local and political considerations. (229-232.)

Mr. ROBERTS criticises the argument that governmental operation of the telegraph would be unwise because of the increase in the number of governmental employees. There is nothing to fear on this ground. The 130,000 people employed in the post-office service throughout the country do not endanger the public welfare, and the number of employees in the telegraph service could be added to the Government rolls without any danger whatever. (270.)

Professor PARSONS, in his affidavit, criticises the statement of Mr. Clark that the evidence given in favor of public ownership of the telegraph was chiefly based on the conditions in Great Britain, Switzerland, and Belgium. Mr. Parsons says that the evidence was chiefly based on the broad principle that the fundamental test of any telephone is its effect on character, justice, government, civilization, the human effect being far more important than any material consideration, and upon other like broad facts. He recapitulates the arguments set forth in his original testimony.

The philosophy of public ownership and cooperative industry rests primarily on considerations entirely above the material plane and wholly out of the range of statistics of dollars and wires and offices, etc. (886.)

Mr. HITCHCOCK answered the general objections to governmental ownership of the telegraph by saying that political influences should not control the selection or discharge of employees. The operation of the telegraph is a technical service, and civil-service rules should be rigidly applied, promotions being based upon efficiency and skill. Life positions and a pension system should be the reward of faithful service. (890.)

4. *Advocates of Government ownership of the telegraph.*—Mr. ROBERTS states that the governmental ownership of the telegraph has been advocated by some of the ablest thinkers and statesmen of the country for many years (many of whom he names); by legislatures, city councils, boards of trade, chambers of commerce, and labor organizations, representing many millions of citizens; by many of the most important and influential newspapers of the country (some of which the witness names). Since 1866 committees of the Senate and House have favorably reported bills looking toward Government ownership on sixteen different occasions. Only twice in that time has any adverse report been made. One of these was a short report which did not consider the question at all. A great many of the Postmasters-General have advocated the governmental ownership and operation of the telegraph in connection with the postal system, beginning with a Postmaster-General under the Administration of President Polk in 1846. The same thing was advocated by Henry Clay in 1844. The witness gives quotations from many of these persons, all of whom favored the governmental ownership and operation of the telegraph, either on constitutional grounds or on grounds of public policy. (266-268.)

Mr. HITCHCOCK says that more than 75 bills have been before Congress advocating the postal telegraph, and 16 investigating committees have reported in its favor. The Farmers' Alliance, the National Grange, the Knights of Labor, the Railway Union, the American Federation of Labor, the International Typographical Union, the People's Party, the Prohibitionists, and many boards of trade and commercial bodies have advocated the system, and more than 2,000,000 votes have been cast for it. Mr. Wanamaker, in 1890, declared that the only visible opponent was the Western Union Telegraph Company. (890.)

Mr. A. L. RANDALL, chairman International Typographical Union committee on Government control and ownership of the telegraph, states that in 1893 the International Typographical Union of North America, at its forty-first annual session, held in Chicago, first advocated governmental ownership and control of the telegraph in resolutions offered by himself; and that a committee was appointed at this meeting to organize the country, and in a short time petitions and resolutions bearing the signatures of 300,000 people came up to Congress and were referred to the House Post-Office and Post-Roads Committee, which in 1894 accorded a hearing, at which the American Federation of Labor and other interests were represented. With only a few exceptions members of that committee and other members of Congress admitted that it was not only the right, but the duty, of the Government to furnish the speediest and most efficient postal service possible, and that the telegraph is a necessary adjunct to the postal service. In 1896 the Senate Post-Office Committee granted another hearing, at which Mr. P. B. Delany, a famous electrical expert and inventor, among others, made arguments in favor of the measure. Mr. Delany had personally investigated the working of the telegraph systems of nearly all the countries of Europe, and was particularly well qualified to speak on the subject. A great many mass meetings have been held throughout the country agitating the question, and the business community is regarding governmental ownership with great favor.

Mr. Randall says further that almost every Postmaster-General since 1846 has been in favor of the Government owning the telegraph; the witness cites especially the reports of Postmaster-General Wanamaker, of 1892; Postmaster-General Maynard, of 1880, and Postmaster-General Gresham, of 1883. Mr. Wanamaker's report, among other things, contained the following:

"I am fully convinced that the Government will never properly do the postal work committed to it until it uses electricity in some form, and therefore I advocate the utilization of both the telegraph and telephone at its earliest practicable day."

Postmaster-General Gresham said:

"The same principle which will justify and demand the transference of the mail on many chief routes from the horse-drawn coach on common highways to steam-impelled vehicles on land and water is equally potent to warrant the calling of the electro-magnetic telegraph in aid of the post-office in discharge of its great functions of rapidly transmitting correspondence and intelligence."

This measure, says the witness, has been indorsed by every commercial body in

the United States; the National Board of Trade at almost all of its sessions for the last 12 years has resolved in favor of it. He cites a report made by the Hon. Henry W. Blair, of New Hampshire, in 1894, in which he elaborately discussed the question, and favored in unequivocal terms the taking over of the telegraph and telephone service in aid of the postal service. (241-245.)

5. *Attitude of labor organizations.*—Mr. ROBERTS states that the International Typographical Union numbers 35,000 members, and is one of the most conservative and influential labor organizations in existence. In 1893 that organization, at its annual meeting, put itself on record in favor of the governmental ownership and operation of the telegraph system, and since that time it has effected a great deal by way of creating a sentiment throughout the country in favor of this proposition. There is a permanent committee of the union for this purpose. The American Federation of Labor, at the head of which is Samuel Gompers, is also in favor of governmental ownership and operation of the telegraph, and is doing all it can in that direction. A great many petitions have come up to Congress from all over the country advocating governmental ownership. (268, 273, 274.)

6. *Method of introducing Government ownership.*—Mr. CHANDLER thinks that in case the Government should ever take over the properties of the telegraph companies it should, in justice, appraise, at a fair value, the property of the telegraph companies which exists in the form of contracts, franchises, and privileges, etc., as well as the tangible property of the companies. Property of that kind, he says, enters very largely into the telegraph, has cost money, and is indispensable to the conduct of the business. In case of the acquirement of telegraph properties by the Government, he thinks that great care would have to be exercised and time taken for the change. (200, 201.)

Mr. Hitchcock believes that the purchase of the properties of the existing telegraph companies by the Government would be inexpedient, because the Government would be called on to pay many times the actual value of the plant. The simplest course for the Government to pursue would be to enter into an agreement with the owners of some improved system, such as the Denany system, for the latter to construct the first line and operate it for 6 months or a year for their own profit at 10 and 15 cent rates for 50 and 100 word messages. If at the end of that time the plant is working satisfactorily the Government should then be obligated to take over the line, paying an advance of 10 per cent on the cost of construction. He does not believe that the competition thus engendered would result in ruin to the Western Union Company, because there would be time for a natural readjustment to meet the changed conditions. The company might lose all the general telegraph business and the press business, but there is enough of other business remaining to enable it to continue at a profit. (895.)

F. Relations to newspapers, exchanges, and Government.—1.

Newspaper and other special rates.—Mr. CLARK states that the press rates are made on a basis entirely their own, because of the larger volume of business, most of it being done during the night. The business of the press associations is largely done over leased wires, the associations paying a certain rental therefor, the company itself not having any further connection with that business. The press rates on matters handled by the company are made on a basis of circuits, by which a large number of papers can be served at the same time, thereby promoting economy as much as possible, with due regard to the return to the telegraph company. The special rates to newspapers for a single transmission to one paper are based on what are called "the additional-word rate" of the day message; i. e., one-third of the additional rate for the daytime and one-sixth at night, so that where the regular rate is 25 cents and 2 cents for additional words the press rate for the daytime would be two-thirds of a cent and at night one-third of a cent.

Mr. Clark further states that commercial reports are distributed to exchanges and the various subscribers throughout the country at a rate made on a basis somewhat similar to the press rates for individual subscribers. Those rates are lower than a general rate, but how much the witness can not say. (209, 210.)

Mr. CHANDLER states that there is a special press rate for news messages different from the commercial rate; that there are several classes of newspaper service and the rates are uniform for each class. The rate differs according to the circumstances of the case, the distance, and the number of newspapers served. In many cases a great many papers are served by one sending, and distribution is made to 20 or 30 different places. The lowest rate applies to dispatches filed by press associations, to be delivered at 5 or more places on one sending. On such the rate to each paper is in some cases as low as one-fifth of a cent a word. Rates on newspaper specials vary from one-fourth of a cent per word, on matter transmitted at night, between comparatively near points, and one-half of a cent per word for the same message transmitted during

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the day, to 1½ cents per word for night and 3¼ cents per word for day service between distant points. (197.)

2. *Government rates.*—Mr. CLARK refers also to the Government rates, and introduces a copy of a contract between the company and the Government. Under the law of 1866 the Postmaster-General was authorized to establish a rate from year to year for Government business. Those rates are shown to be considerably lower than the ordinary commercial rates. They are made not upon any particular commercial basis nor with the hope or expectation that they would yield the company anything like an adequate financial return, and in fact the company loses money on its Government contracts. (211.)

Mr. Clark states, further, that Government business has priority over the lines of the Western Union, that being a part of the agreement with the Government. The Western Union does other business for the Government than that specified in the contract. It has been transmitting free over the cable of the International Ocean Telegraph Company all the business with Cuba ever since the beginning of the Spanish war. The Western Union Company having had that contract with the Spanish Government, is carrying it out with the United States very much to its detriment financially, inasmuch as in 1 year it has done more business for the United States Government than it did for Spain in the 30 years preceding. The Western Union is pursuing this policy not for the purpose of keeping the Postal Telegraph Company out of Cuba, as has been charged, but merely to protect its own property rights. (228-229.)

3. *Alleged news monopoly.*—Mr. ROBERTS says that the Associated Press has a complete monopoly of the news service of the country. By its arrangement with the Western Union Telegraph Company it is enabled to prevent the starting of any new papers, or it may cut off the service from any paper now in existence. The effect of this is to decrease the business of printing, which is very detrimental to the typographical union which the witness represents. Governmental ownership and operation would break up this monopoly and give the printing craft much more labor. No newspaper can secure service to-day that is not a member of the Associated Press combine. For instance, in a city containing 75,000 inhabitants an attempt was recently made to start a new daily paper, but it was found that this could not be done without paying \$35,000 for an Associated Press franchise, and the paper was not established. The witness instances also the case of the Washington Times, which is not able to get an Associated Press franchise because the Washington Post and the Washington Star will not consent to it. (266, 268, 269, 273.)

Mr. RANDALL states that the printers of the country are in favor of the governmental ownership of the telegraph, because they believe it would break the monopoly of the news, and would enable a great many newspapers to start up that could not do so now on account of the relations between the Western Union Telegraph Company and the press associations, thus increasing the work of printers. The witness gives instances of newspapers which attempted to start up, but were prevented from doing so because they could not get a news service from the telegraph company or telegraphic rates such as it furnished the Associated Press. He also quotes from the report of Hon. Henry W. Blair to the effect that in New Hampshire an attempt had been made to start a newspaper, but that it failed because the paper could not get an equitable rate from the telegraph company. (245, 246, 250, 252, 255, 256.)

Mr. Randall refers to the great telegraph strike of 1883, and says that the newspapers then asserted their independence, and insisted on governmental ownership and operation of the telegraph. He has a large book containing extracts from newspapers of that period in favor of governmental ownership. As soon as the strike was over the newspapers were forced by the Western Union Telegraph Company to refrain from further agitation of governmental ownership on penalty of being cut off from any news service whatever. (251.)

Mr. CLARK states that there is no such thing as a news monopoly so far as the telegraph company is concerned, and that if any such monopoly has existed it is the fault of the press associations. Every newspaper is free to get any quantity of service it wishes on the same basis as any other paper. A circuit provides that there shall be a terminal place, and not less than 4 drops to begin with. The rate is for the first 300 miles. A rate of one-sixteenth of a cent for each 100 miles is added, and a rate of one-eighth of a cent for each connection made. These rates are open to all associations alike, and there is no discrimination on the part of the telegraph company. There is no arrangement whatever by which newspaper associations or newspapers have any special privilege in the use of the wires in cases of emergency when there are but few wires in operation. (219.)

Mr. RANDALL criticises severely the testimony of Mr. Clark that there is no news monopoly in this country, and introduces a copy of a contract between the

Western Union Telegraph Company and the Associated Press to refute this statement. The contract is as follows:

"And said Associated Press agrees that during the continuance of this agreement they and their agents, and all parties furnished by them with news for publication, and the agents of such parties, shall employ the said telegraph company exclusively to transmit to and from all places reached by its lines all telegraphic messages relating to the news or newspaper business; and that they will not in any way encourage or support any opposition or competing telegraph company."

He also introduces a private circular to the members of the Western Associated Press, signed by M. Halstead, of the executive committee of that association, as follows:

"Your attention is invited to the clause in our contract with the telegraph company which forbids us to encourage or support any opposition or competing telegraph company. That clause was to the telegraph company a valuable consideration for the favorable terms upon which they contracted with us."

The witness further quotes from Senate Document 65, of the first session of the Fifty-sixth Congress, in which the direct charge is made that the Western Union would not permit any press criticism of its methods or of the methods of the Associated Press in reference to news, and threatened to, and often did, cut off newspapers from the service if they had the hardihood to make any such criticisms. He states that the Western Union serves a paper in the Associated Press Association for a mere fraction of the price that must be paid for the same service by a paper not in the association. The understanding between the telegraph company and the press association secures the latter low rates and the power of excluding new papers from the field, and also enables the Associated Press to color its dispatches to suit its purposes. On this point the Washburn committee report states that "the associations themselves, and consequently the newspapers, are completely in the power of the telegraph companies, which can at any moment raise the rates for news telegrams to a par with those charged for private messages, and thus prevent their transmission almost altogether."

He also quotes from a statement made to the Blair committee by Mr. D. H. Craig, the originator of the Associated Press, in which he stated: "The Western Union and the press association work together to ruin a paper that buys news from any competing telegraph line." He also quotes from statements made by Mr. Gardiner Hubbard and Mr. F. B. Thurber, who represented the National Board of Trade before committees of Congress, to the same effect, that there was a combination between the Associated Press and the Western Union Telegraph Company to have a monopoly of the news.

The witness declares that if a man with a large amount of money wants to start a newspaper in any large city—say, for instance, Washington—it would be impossible to obtain an Associated Press franchise without the consent of the newspapers of that city who already have that franchise. The Washington Times is unable to get an Associated Press franchise because of opposition of the Post and Star. He relates an instance of a newspaper correspondent who gave part of his business to the Postal Telegraph Company, because it was more convenient for him to do so; but the Western Union, finding it out, complained to the home office, and the correspondent got notice from his paper to discontinue using the Postal Telegraph service.

Mr. Randall holds that governmental ownership of the telegraph would do away with all the evils mentioned, and by reducing the rates would enable any newspaper to secure a rate on the same terms as are given the Associated Press. He contends that the gathering of news at a central point and there editing it and sending it out over the country generally would be a very useful thing to newspapers if the rates were uniform and low, as they would be under governmental ownership, and if the editor in chief were impartial. He suggests that any paper that might choose to pay therefor might have the privilege of having a "supplemental editor" in connection with the editor in chief to look after the news that was especially applicable to the section represented by his newspaper. He believes that these features would greatly facilitate the dissemination of news and the growth of intelligence, and would break up the trust or monopoly in the news service. (245-248, 252, 255-259.)

Mr. Hircocock quotes from Mr. S. H. Bell, representing the Typographical Union before the Senate Committee on Post-Offices and Post-Roads, to the effect that the news of this country is controlled by two great press associations, and no new paper can secure a telegraphic service except on such terms as may be prescribed by the paper or papers which already occupy the field. In England all papers are on an equal footing. Under governmental operation a similar condition would soon prevail here. (891.)

G. Alleged discrimination in use of wires.—Mr. RANDALL states that a telegraph operator told him that the Western Union Company favors the speculative class of business in forwarding messages and refuses to do justice to the social and commercial business; that brokers' messages have special rights over everything else; that many brokerage companies hire wires for use during a few hours in the middle of the day, with the result that from 9 a. m. to 3 p. m. the other business of the country is allowed to accumulate, because the Western Union Company is not able to take care of it with the few wires left. The witness gives instances of telegrams having been sent from one city to another and not delivered until after the sender had traveled to the second city. (244, 257.)

Professor PARSONS states that the telegraph service of the country is not equal to that in the countries where the telegraph is owned and operated by the Government. One fault of the system is that it discriminates in transmission in favor of speculative telegrams as against social messages or even Government business. The witness gives instances of great delays in the sending and delivery of messages. Postmaster-General Wanamaker accused the Western Union of having suppressed 16 inventions for the improvement of the system, instead of giving the country the benefit of them. The tendency of the company is to adopt only those inventions which increase the profits, and to try to repress an invention, no matter how meritorious, if it does not conduce to that end. (190-191.)

Mr. CHANDLER states that there is no rule of precedence in respect to telegraphic dispatches. Government business is entitled to go first, but there is no other regulation or order of business, except such as might be instituted by a chief operator in case of emergency. Railroad business is given no precedence over other business, except in cases of emergency. There are, however, usually on railway routes certain wires assigned to railway purposes, for the exclusive use of the railway companies, and over those wires the company gives preference to messages referring to movements of trains. Ordinary messages might be delayed at times through accident or oversight. (199.)

Brokerage dispatches.—Mr. CHANDLER says that there is no arrangement by which brokerage dispatches are given precedence over other messages, but that a very large proportion of stock exchange and brokerage business is done over wires that are leased for that purpose. Sometimes several brokers lease a wire, and in that case each has his own operator and connection and takes care of the operating service altogether. (199, 200.)

Mr. CLARK states that there is no discrimination permitted by the Western Union Company under any circumstances in favor of the business of brokers and large speculative firms, as has been often charged. He can not state how large a proportion of the business of the company is brokerage and how much commercial work, because a large number of the brokers have private wires and a great many messages which ordinarily might seem private commercial messages might be in fact brokerage messages. He is very positive that the business which comes to the company regularly is transmitted without discrimination, in the order in which it is received, and that it is delivered in the same way. (209, 210.)

H. Alleged influence of the telegraph company in politics.—*Franking privilege.*—Professor PARSONS states that the Western Union Telegraph Company goes into politics very largely. According to the statement of the president of the company, the franks issued to Government officials constitute nearly one-third of the total complimentary business. These franks are issued to the officials of the National Government and of the various State and municipal governments for the purpose of influencing them in favor of the company. The company has confessed to having received large benefits from the distribution of these franks. Perhaps one reason why Congress has not been more alive to this question is that the members do not want to get rid of a system under which they can do their telegraphing free. (191.)

Mr. CLARK states that the practice of giving complimentary franks to different classes of people is a matter of personal courtesy only, and that he does not know that it has any immoral effect. They are not given as a quid pro quo, because the companies do not expect and do not receive anything in return therefrom, even if the franks are given to members of the State legislatures or to members of Congress, as is often the case. If the frank system were abolished it would not make any difference in the rates, because that business amounts to only a fraction of 1 per cent of the business of the company. (223.)

Professor PARSONS criticises this statement, and he offsets that of the late President Green of the Western Union, in his report some years ago, that the judicious use of complimentary franks among Government officials has been the means of saving the company many times the money value of the free service performed. The franks

are still given to the same class of beneficiaries and the purpose and results are probably the same. (888.)

Mr. CHANDLER states that the franking privilege prevails to a considerable extent in the Postal Telegraph Company. Originally franks were only given under strict rules involving reciprocal service. They are now given to quite a good many public men, among them members of State legislatures, aldermen, mayors, judges, and members of Congress. In the main the franking privilege is extended upon application. Newspaper correspondents and newspaper proprietors, to a considerable extent, have the franking privilege. In these cases it is given as a matter of accommodation and as a privilege which has grown up from long years of practice. To a limited extent franks are given to people doing private business, but purely as a matter of reciprocity. The franks given to newspaper men do not enable them to transmit news to their papers.

A substantially accurate account of the value of franked messages is kept.

In Mr. Chandler's judgment the franking privilege is not a sufficient factor to have any effect upon rates in general, and its abolishment would not result in cheaper rates. As a matter of individual judgment, he would be glad to see the whole franking privilege, in respect to telegrams, done away with. (195, 196, 197, 198.)

Mr. ROBERTS criticises the statement of Mr. Clark that the issue of telegraph franks to governmental officers is purely a matter of personal courtesy. Mr. Roberts does not believe this is the case, but thinks that they are issued for favors received or expected. He quotes from the statement of the president of the Western Union Company, made some years ago, in which he said that the franks issued to Government officials constitute nearly a third of the total complimentary business; that in all of the States where the company's lines extend their property is more or less subject to the action of the national, State, and municipal authorities, and that the judicious use of complimentary franks to them has been a means of saving to the company many times the money value of the free service performed. (270.)

Mr. RANDALL, read from Senate Document 65, first session Fifty-sixth Congress, to the effect that the issuing of telegraph franks to members of legislative, judicial, and municipal bodies is a very great evil, and tends to misgovernment and political corruption. He criticises the statement of Mr. Clark that the issuing of these franks is merely a matter of personal courtesy, and declares that they are cut off as soon as a statesman is out of a job. (259.)

I. Improvements in telegraph devices.—1. *Policy of the Western Union in respect of new inventions.*—Mr. RANDALL disputes the statement that the Western Union is progressive and adopts new inventions in telegraphy whenever they prove useful. He affirms that the contrary of this is the fact, and that there are plenty of improvements in telegraphy which the Western Union will not use, because it believes they would not redound to its financial interest. Whenever a new invention is found to be beneficial it is bought up by the Western Union and laid away. The Western Union will not lease a wire to private individuals to make experiments with new inventions. The witness introduces in evidence two letters written by a person interested in what was known as the "Anderson machine telegraph" to substantiate his assertions. These letters and the testimony of Mr. Randall tend to show that the representative of the Anderson machine patent was willing to permit the Government to make experiments with his patent until the Western Union people made some negotiations with him, when he at once appeared to lose interest in the matter. It is the belief of Mr. Randall that the Western Union had bought the patent. (249, 250, 251, 253, 254.)

Mr. ROBERTS states that while the Western Union Company always tries to get hold of the new inventions, it does not use them for the benefit of the public, but keeps them locked up in the office in New York unless they would contribute to the profits of the company. (270.)

Mr. CLARK denies the charge that the Western Union Company is keeping some of the latest and best inventions out of operation, and states that the policy of the company is to develop every invention that it can find. He instances the history of the quadruplex and other systems. There is a system in force which can be used for short distances by which messages are sent and received in the ordinary written characters, and signatures and outlined pictures can be sent by the telautograph. (229.)

Professor PARSONS criticises this statement of Mr. Clark and quotes from Postmaster-General Wanamaker's argument on the postal telegraph in 1890 to the effect that the Western Union does suppress inventions, and that it has no use for devices which cheapen and quicken the telegraph service and warrant a claim for reduction of rates. (888.)

Mr. ROMYN HITCHCOCK, a civil engineer of New York City, says that many improvements have been made in the telegraph, but the Western Union Company has opposed all changes with the logical result that the United States has the poorest, most antiquated, and expensive telegraph service in the world. It is conducted on the basis of small business at high prices, whereas the teachings of experience demonstrate that a larger development with cheaper rates would be more profitable. A dependence upon the purchasing power of wealth is relied on to buy up inventions and suppress them. It has been a battle of money against the prevailing spirit and the irresistible tendency of the age, but the opposition will be overcome eventually. (891.)

2. *Attitude of Postal Company.*—Mr. CHANDLER states that the Postal Company has endeavored to use new and useful devices to the fullest extent; that at all times it is glad to avail itself of anything that is a real improvement in the conduct of its business. A great many so-called improvements, however, when brought into actual practice in comparison with appliances already existing, have been found wanting. (200.)

3. *Anderson machine telegraph.*—Mr. RANDALL describes a system of telegraphy invented by a gentleman named Anderson, and known as the Anderson Machine Telegraph, whereby, he asserts, it has been found from careful experiments that on a circuit of 500 miles it is possible to transmit 2,000 words a minute; on a circuit of 1,000 miles, 1,000 words a minute, and greater distances in like proportion. He states that the experiments made under this system between New York and Chicago and between New York and Washington were eminently successful, but that nothing came out of it, because, he believes, the Western Union has bought up the patent and will not use it. The advantages to the newspapers from the use of a system of this sort, Mr. Randall states, would be incalculable, in that it would work a great saving of time and expense in the transmission of news matter. He submits a description of the Anderson Machine Telegraph, taken from Senate Document 65, first session Fifty-sixth Congress, together with the opinion of numerous experts relative thereto, not only in respect of a great saving in time and the great increase in amount of business that could be done by it, but also in respect of the lessened cost of doing business by this system.

The following extracts from statements of witnesses before that committee describe the system, with estimates of cost of operation:

The method of operation is simple. The message is perforated on a strip of paper, which is put into the transmitter and passes under metal points. At each perforation these points pass through the paper and close the circuit for a length of time corresponding to the length of the perforation. At the receiving end the closing of the circuit makes a prussian-blue stain on a moving ribbon or sheet chemically prepared for the purpose.

The perforating machine is as simple and efficient as an ordinary typewriter, and can be operated with the same ease and speed (1,800 to 2,000 words per hour).

The page and line recorder prints the message on a letter sheet about 10 words to the line, and is a great improvement over the paper ribbons for recording long messages, letters, or news reports. So says Mr. Athearn, and Mr. Bates says, "The page and line recorder marks a long step forward, and its use removes one of the chief obstacles heretofore barring the way to full success in autotelegraphic transmission."

The business men's composing machine enables any person after a little practice to perforate a message for telegraphing as quickly as it could be written with a pen or typewriter (a perfect copy of the message for the office file being simultaneously printed in roman characters). The use of this composer would considerably lessen the cost of telegraphing and would shorten the time required to get a message under way, the message being ready for the automatic transmitter the moment it is written and stamped, thus avoiding even an instant's delay.

Passing from the construction account (which estimates a cost of \$600,000 for a line from Chicago to New York) with the impression that it is too high, we come to the cost of operation. Calculating at the minimum average of 800 words per minute, or 1,600 for the two wires, Mr. Delany's data place the cost per message of 70 words from New York to Chicago at 41 cents, including interest on his construction account and every expense but postage, which ought not to be over 1 cent. If the sender does his own perforating, and the message is sent to the addressee in Morse characters, the cost of transmission would be a trifle over 14 cents per message of 70 words, or 24 cents a hundred, not including postage. This is not probably below the truth, for the tendency of the witness was to make his estimates of operation high as well as his estimates of construction—a tendency plainly manifest in his giving the perforators a speed of about 15 words a minute, which is far within their practical capacity. (249-252, 255, 262-265.)

4. *The Delany high-speed automatic telegraph system.*—Mr. HITCHCOCK advocates the establishment of Government ownership, making use of the improvements in telegraphy made by Mr. Patrick B. Delany, an ex-vice-president of the American Institute of Electrical Engineers, and the inventor of numerous telegraph devices. One of his inventions, whereby one wire is made to carry 6 messages simultaneously, one way or in opposite directions, has been in use by the British post-office for 15 years, and his system of cable transmission holds the record for high speed over Atlantic cables. His high-speed automatic system of transmission has attained the limit of the working speed of a telegraph wire. The inventor received a medal

for the invention in 1895, but it is much improved now. The messages are first punched on tapes, which are then run rapidly through the transmitting apparatus.

"The tapes are now punched by the ordinary operating of a Morse key, and the signals are recorded in Morse characters. The electro-static conditions of a telegraph line have hitherto imposed limitations upon rapid signaling by the ordinary methods. By a recent improvement Mr. Delany has succeeded in utilizing the static charge in the production of signals on the receiving tape."

The points of superiority in the Delany system over the Wheatstone invention, which is its nearest competitor, are (1) more certain legibility of signals; (2) simpler mechanism; (3) improved methods for handling a large volume of business. It will work without repeaters from New York to San Francisco. The receiving instrument is controlled by the operator at the sending instrument. The transmitter increases the efficiency of ocean cables. By this system it is possible to send over a single wire 1,000 words a minute for a distance of 1,000 miles, as against 60 words a minute by the quadruplex system now in force, which requires 8 operators, 4 sending and 4 receiving, and as against 200 words by the Wheatstone automatic system duplexed. The great item of cost in telegraphy is the construction and maintenance of a large number of wires, and great economy would thus result from the use of the Delany invention. A simplex Morse operator sending at the rate of 15 words a minute may monopolize a line which cost \$20,000.

The witness says that if 10 hours of constant operation for business and social messages are taken, and 20 per cent of the time allowed for manipulating the apparatus, the practical working result of the Delany instrument would be 800 words a minute. If 15 cents were charged for 50 words, the witness estimates the profit of a line between New York and Chicago, fully equipped, with an assumed cost of \$1,000,000, at \$540,000, with only one-fourth of the working capacity of the line utilized. Mr. Hitchcock says that the routine of business under proposed governmental operation of the telegraph would be substantially as follows, viz:

A central transmitting and receiving office would be established with a number of branches. Small local offices where letter telegrams could be received would be connected with the central office by ordinary wires, and at each of those local offices an operator could manipulate a Morse key upon a tape-punching apparatus at the central office. The tapes at the central office would be immediately run through the line transmitters at a speed of from 500 to 1,000 words a minute. A single instrument on one wire can do all the business that can be provided by 50 men constantly working Morse keys. When a wire is working to anything like its carrying capacity it will be earning so much money that under Government control there will be either a large profit at the 15-cent rate, or that rate might be reduced perhaps to 5 cents for 50 words. At the destination of the message it is recorded in Morse characters on a tape and ordinarily will be written out on a typewriter, inclosed in an envelope, stamped and addressed, and deposited in the post-office. Absolute secrecy for all correspondence can be had whenever desired.

Mr. Hitchcock says that the universal use of the telegraph under such improved methods, whether attained through Government ownership or by a private corporation, would reduce charges at least 90 per cent. While personally favoring Government ownership, he thinks it is possible to make the telegraph a public utility in private hands by the use of the Delany system. The 10-word message could be substituted by letter telegrams—that is, letters carried by wire instead of by train.

Cheap letter telegrams are sure to increase the bulk of the telegraph business, and if the telegraph remains in the control of private parties it would interfere seriously with the postal service. The delivery of these letter telegrams should be made through the Post-Office Department by carriers, or if the letter telegrams require immediate delivery, special messengers should be employed and a special charge made. The less urgent business should not be taxed to pay for the special service rendered to a comparatively few correspondents. Ordinary letter telegrams handed in at New York, for instance, would be posted in Chicago 20 minutes later, and would reach their destination soon enough through the carrier service of the Post-Office Department. (891-895.)

5. *Underground wires.*—MR. CHANDLER thinks there has been some change of sentiment on the part of the telegraph companies, and that in the main they are rather desirous of putting their wires under ground in the thickly settled portions of cities and towns. He says that it is done to a very large extent now, and has many advantages to the telegraph companies, as well as to the public. (204.)

J. Conditions of labor.—1. *Number of employees.*—MR. CLARK states that there are about 35,000 people in the United States handling Western Union telegraph business. Many of these are only constructively in the employ of the company,

being the agents of railroad companies and handling commercial messages at the small stations where the telegraph business is not sufficient to justify the employment of an independent operator. While they are paid directly by the railroad companies, they must be taken into consideration as employees of the telegraph company, because of the contracts that the telegraph company has with the various railroad companies. (217.)

Mr. CHANDLER states that nearly 9,000 people are employed by the Postal Telegraph Company; that in the principal cities 30 per cent of the employees are women, and in the country 25 per cent are women. (200, 206.)

2. *Wages of telegraph employees.*—Professor PARSONS states that statistics show that the average wages of telegraph operators in Europe are greater than in the United States. In Great Britain the average wages are \$400; in Germany, \$446, and in other European countries, \$320, while, according to the statement made by the president of the Western Union Company to a committee of Congress, the average salary of the telegraph employees in this country is only \$200. Statements made by the Western Union people to the contrary, also their statements that the work done by employees is greater here than in Europe, are not borne out by statistics. (188.)

Professor Parsons states that the Western Union Telegraph Company pursues a systematic policy of reducing the wages of its employees. It employs boys whenever possible, and pays them a much smaller salary than it would pay a man. An investigation made by Congress showed that there was a 40 per cent reduction from 1870 to 1883. The great strike of 1883 throughout the telegraph system was largely due to the low wages and long hours, the operators having asked for an increase of pay of 15 per cent and for an eight-hour day, with no salary lower than \$50, which the company refused to grant. After the strike the company was able to get one-third more work out of the men for the same pay. The hours of the operators are long, the work trying, and they are unable to continue many years under the strain. The Western Union Telegraph Company is also opposed to labor unions, and blacklists its employees on many occasions. (190.)

Mr. ROBERTS says that the Western Union Telegraph Company contributes largely to the support of a school in New York "that grinds out every year a large number of boys and girls as telegraphers," the result of which is to increase the supply of telegraph labor and thus reduce wages. The company has thousands of boys, ranging from 12 to 16 years of age, working long hours at the paltry salary of \$3 to \$4 per week, while the United States Government pays its letter carriers, engaged in a similar occupation of carrying messages, from \$60 to \$100 per month. It is admitted by the Western Union people that, while wages have been increased in nearly every industry in recent years, the wages of its employees have remained practically what they were in 1883, while the low wages at that time were the cause of that great strike. (269, 270, 271.)

Mr. CLARK states that the wages paid to the operators in different parts of the country vary according to the experience and ability of the operator, ranging from \$100 per month down. There was no reduction of wages during the depression from 1893 to 1897, nor has there been any general increase since, the regular scale remaining practically the same, except that since 1883 the operators have been paid for overtime, and for over 9 hours for the 6 days in the week, and for Sunday work. Operators very often begin in the large offices as check boys and check girls, and in the small offices they are generally friends of the operators and grow up with the business in the office. Very often graduates from the commercial schools are taken as operators; so that the supply always exceeds the demand. The witness thinks there are about 2,500 women employed by the Western Union, and that their wages would not average as much as the wages of the men, because they can not do as heavy work. (223-224.)

Mr. Clark thinks that the wages of the Western Union employees are satisfactory, and that they are higher than in Europe; just how much he can not say, because the classifications are entirely different. In Europe operators come under civil-service rules, and their salaries therefore are not governed by the law of supply and demand, as they are in this country. (217.)

Mr. Chandler, of the Postal Company, states that the wages of employees vary according to the nature of the work. The salaries of operators range from \$25 to \$85, the average being about \$80, the salaries of clerks averaging somewhat less. It is the intention of the Postal Company to make no discrimination in wages because of sex, but to pay a woman the same wages as a man for the same work. In general, however, the wages paid to women are less than those paid to men, as there are comparatively few women who are as skillful operators as men, and as there are limitations to the nature of the service that can be performed by women.

In Mr. Chandler's opinion there has been little change in the rate paid to telegraph operators either way in the last 15 years. Wages paid by the Western Union Company are, he thinks, very nearly uniform with those paid by the Postal Telegraph Company for the same service.

The amount paid in salaries by his company, Mr. Chandler states, is approximately, 70 per cent of the total expense of operation.

Comparing salaries paid in this country and those paid in Great Britain, he says that in America a young man of good conduct and of skill demands a first-class operator's salary very early in his career. In Great Britain, the youth having acquired a fair amount of skill, is appointed at a salary of about \$4 per week, and so long as his conduct is satisfactory and he develops ordinary skill as a telegrapher, he receives regular annual increments until he arrives at the maximum figure for a first-class operator, about \$65 per month. In considering salaries paid to the British operator it must be remembered that at the age of 60 he is retired on a pension. (200, 205, 206.)

Mr. HITCHCOCK says one of the worst features of the Western Union Telegraph monopoly is its utter disregard of the welfare of its employees. Their wages are insufficient for comfortable living. The average operator should receive about double his present wages. (893.)

3. *Hours of labor of telegraph employees.*—Mr. CHANDLER says that the hours of labor vary somewhat in different localities, and in small offices and branch offices the hours of duty are arranged with reference to the necessities of the case. In the principal cities 9 hours are counted a day's labor, and 7 hours a night's labor. (200.)

4. *Attitude toward labor organizations.*—Mr. ROBERTS states that the Western Union Telegraph Company is opposed to labor organizations, and that out of this opposition grew the great strikes of 1870, 1871, and 1883. According to the statement of President Green, of the Western Union Telegraph Company, "after the great strike of 1870 the company took back some of the strikers on condition of their taking what was called the 'iron-clad oath'—an oath to renounce their union and never connect themselves with any similar organization." After the strike of 1883 practically the same promise was required. The Western Union will not permit any of its employees to petition for increase of pay or shorter hours on penalty of dismissal. That company was the first corporation to establish a black list. (269.)

Mr. Clark states that he does not care to discuss the question as to whether his company is opposed to labor organizations. There was, however, an organization in 1883 which the company refused to recognize. The company is always ready to deal with its employees directly with reference to any personal grievances which they may have, and he supposes the employees are perfectly satisfied. (223.)

Mr. Chandler reports that he does not know of any organization of telegraph employees that is in existence now. The Postal company makes its engagements with operators singly, no inquiry being made before engaging them as to whether or not they belong to a union. (200.)

K. Taxation of telegraph property.—Mr. CLARK states that as to taxes and supervision there is a difference in methods in all of the States. The total amount of taxes paid by the company last year was about \$529,000. He thinks the taxes are very high, but does not desire to be considered as not wishing to pay on the full valuation of the property. In some of the States the taxes are based upon the proportion of the capital used in the State; in some, on the estimated value of the property. Connecticut makes a charge upon each mile of wire, while Texas puts a tax of 1 cent on every message sent. In New York a law was recently proposed authorizing the entire capital stock of the company to be taxed at one mill and a quarter on the dollar, which means practically \$125,000 per year on the capital of the Western Union, besides a tax on the capital of the other companies that it is responsible for in that State. This would be a very harsh and unjust law. (216-217.)

Mr. CHANDLER states that the methods of taxation are almost as many as there are States. He thinks that generally telegraph companies are not taxed reasonably. There is a hardship, he holds, in the levying of license fees in the form of a lump sum, as is sometimes done, as this bears unequally upon the small telegraph company as compared with the large one. It is a hardship, also, for the municipality to make a fixed charge per annum for each pole and each mile of wire constructed on the streets and highways, as that bears more hardly upon the telegraph company which has to construct its lines on the highways, as is the case with the Postal company, than upon the company which is able to construct its lines on railroad rights of way, as is the case with the Western Union company. As an equitable method of taxation he suggests that there be a single assessment on the entire property which a telegraph company has within a State, that the company pay the entire tax to the State, and the State distribute it among the localities. (204, 205.)

XIV. THE TELEPHONE BUSINESS.

A. History and description of business.—1. *Early telephone conditions.*—Mr. EDWARD J. HALL, vice-president and general manager of the American Telephone and Telegraph Company, testifies that the telephone first received public notice at the Centennial Exposition at Philadelphia in 1876. Attempts were made to develop its commercial use shortly thereafter. At first agents were appointed by the Bell Company to rent telephones and bells for the equipment of short private lines. Each customer built his own line, usually employing the agent who rented the telephones, and the agent's income was derived from the profit of this construction and a commission on the rental charged for equipment. The telephone exchange soon grew out of the desire of the owners of these short lines to be interconnected with other users of the telephone, and as a result there was a demand for the building of lines by the company or its agents. The Bell Company did not have the capital necessary for the construction of these lines, and local companies were organized wherever there was a demand, each company having exclusive exchange rights within the area allotted to it, and the Bell Company reserving to itself to give other licensees the right to connect exchanges with each other by trunk lines. The Bell Company also issued licenses for lines connecting the small local companies, usually to the most progressive of its licensees. Larger companies were soon organized which purchased the local interests, with the result that better service was rendered. Fairly good service was given between the larger exchanges and their tributary points, but the state of the art up to 1885 made it impossible to talk any considerable distance. Up to 1885 the apparatus in use was adapted wholly to grounded circuits, and iron and steel wire was practically universal. Some experiments had been made with the hard-drawn copper wire, which promised good results. (817.)

2. *Development of long-distance service.*—Mr. HALL says that early in 1885 the American Telephone and Telegraph Company, which has since been popularly known as the long-distance company, was organized, and the construction of a commercial line between New York and Philadelphia was at once commenced, and the line was completed 2 years thereafter. Very heavy poles were used and 24 hard-drawn copper wires were strung. A serious difficulty was encountered in transferring the current from the metallic circuit trunk lines to the grounded circuit wires, but this was finally overcome also, and with the introduction of the metallic-circuit service in the local exchanges the companies were obliged to go through another era of plant reconstruction. (817-818.)

Mr. Hall states further that the present era of telephonic development in America commenced with the opening of the long-distance line between New York and Philadelphia, January 1, 1887. Lines were commenced about the same time from New York to Boston and from New York to Buffalo, and there has been a constant extension and development ever since, until at the present time the American Telephone and Telegraph Company and 38 associated companies, known as the Bell system, furnish local exchange service to about 900,000 stations and trunk-line service over nearly 700,000 miles of wire. (819.)

3. *Capital stock of the American Telephone and Telegraph Company.*—Mr. HALL testified that the capital stock of the American Telephone and Telegraph Company has been increased from time to time, as developments required, both for the construction of long-distance lines and the purchase of telephones, real estate, etc. A table accompanying his testimony shows that the capital outstanding on March 3, 1885, was \$100,000, and on July 1, 1901, it had increased to \$94,237,500. The authorized capital has been increased to \$150,000,000, and stock to the amount of \$20,709,000 has recently been offered for subscription at par. In addition, collateral trust 4 per cent bonds have been sold to the amount of \$15,000,000. (819.)

4. *Earnings of telephone companies.*—The following extract from the annual report of the American Telephone and Telegraph Company, for 1900, shows its earnings and expenses. (823.)

Comparative statement of earnings and expenses.

EARNINGS.

	1899.	1900.
Dividends of subordinate companies	\$3,044,908.89	\$3,846,821.67
Rental of instruments	1,714,526.64	2,427,037.82
Telephone traffic	2,668,859.01	3,027,171.85
Real estate	42,286.11	31,824.67
Interest	217,301.58	201,648.50
	7,687,381.08	9,534,499.21

Comparative statement of earnings and expenses—Continued.

EXPENSES.

	1899.	1900.
Expenses of administration.....	\$591,826.34	\$746,259.48
Legal expenses.....	103,748.46	85,134.07
Interest and taxes.....	1,284,275.83	1,376,199.94
Telephone traffic.....	1,487,021.88	1,840,847.86
	3,416,872.51	4,048,441.35
Net revenue.....	4,270,508.57	5,486,057.86
Net revenue, 1900.....		5,486,057.86
Dividends paid.....		4,078,601.25
		1,407,456.61
Carried to reserves.....		937,258.22
Carried to surplus.....		470,198.39
		1,407,456.61

5. *Present development of the telephone industry.*—Accompanying the affidavit of Mr. Hall is a report of the president of the American Telephone and Telegraph Company for the year ending December 31, 1900, which shows a great growth of the industry from 1891 to 1900.

The estimated number of exchange connections made during 1900 in the United States by companies operating under licenses of this company amounted to about 1,825,000,000. The average number of daily calls per subscribers' station throughout the United States is about 7.1. The average cost to the subscriber varies according to the size of the exchange and character of the service from less than 1 cent to 9 cents per connection. The long-distance toll system owned and operated by the company on the 1st of January, 1901, consisted of 12,427.63 miles of pole line and cable, and 167,410.39 miles of wire, connecting 359 offices. The total mileage of wire, local and long distance, is 1,354,202. The past year has been one of marked progress in the development of the business. The message-rate system with metallic-circuit lines and correspondingly lower rates have increased the service very materially and at the same time the efficiency of the service has been steadily maintained; 705,000 miles, or more than one-half the entire mileage, is operated under the surface of the streets. The expenditures which were required for the extensions of the business throughout the country have been greater than any previous year, nearly \$29,000,000 having been expended by the company and its licensees for this purpose, and in addition thereto over \$2,000,000 was invested in real estate for telephone purposes. The entire expenditure for construction, including real estate, to the close of the last year has been \$168,474,517.83. Further expenditures on a large scale will be required for the current year. (820-822.)

6. *Bell Telephone Company—Its relations to American Telephone and Telegraph Company.*—Mr. BETHELL testifies that the American Telephone and Telegraph Company rents its instruments from the Bell Telephone Company, but he does not consider this payment as in the nature of a royalty. The Bell Company owns at least 51 per cent of the stock of the American Telephone and Telegraph Company. (810-811.)

7. *New York telephone system.*—Mr. U. N. BETHELL, general manager of the New York Telephone Company, testifies that the New York telephone system is the largest in the world and has the greatest per capita development, the number of subscribers' stations now amounting to more than 62,600. The system embraces not only the old city of New York, but all of Greater New York and many places across the river in New Jersey, and a few in Canada. The business was first started in New York in 1878, and up to 1894 the development was not very rapid. Since 1894 there has occurred a great development in the system. During the last 2 months there has been a gain of about 2,000 subscribers, and at the close of the present year, 1901, there will be perhaps 75,000 stations in New York City. The causes of this rapid development are efficient service and general recognition of the utility of the telephone, and principally the reduction in rates and the adoption of the rate-message plan. The policy of the company has been to adopt improvements whenever they have been demonstrated to be useful regardless of cost. The metallic-circuit underground system has been established, and at present there is not a pole on Manhattan Island, outside of a very small section north of 130th and 140th streets, excepting

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one main trunk line used for long-distance wires, which runs the entire length of the island. The entire plant was reconstructed between 1887 and 1893 at a very large expense. The most important change that has been made recently was the introduction of the common battery system, about 3 years ago, which required the substitution of an entirely new equipment at all of the central offices. This work will be completed about September, 1901. A European expert recently wrote that New York has not only the largest but technically the best system in the world. The underground system is installed in subways, which were provided for by act of the legislature, the subway system having been in charge of electrical commissioners under whose supervision the work of construction was carried out. The functions of this board are now lodged in a commissioner. The subways were constructed by a separate company, but most of the capital came from the telephone people, many of the members of the subway corporation being also members of the telephone company. The municipal wires and those of telegraph, electric light, and other companies are also placed in the same subways. (777-780.)

Mr. Bethell declares that the New York plant is maintained at all times so that the service is absolutely permanent and reliable. The rapidity of the operator is tested without the operator's knowledge, and for the last 3 or 4 years tests have shown that the average time elapsing between the giving of the subscriber's signal and the answer is from 3 to 5 seconds. In only one case during the last year and a half did the average go over 5 seconds. The New York service has been praised by a number of experts. (786, 787.)

Dividends.—Mr. BETHELL testifies that from 1888 to 1896 the New York Telephone Company paid no dividends. Since 1896 it has paid 6 per cent per annum. The percentage of expenses to earnings for the same time has been about 65 per cent. During the first 4 months of this year it was 65.3. (783.)

8. *Relations of Western Union Telegraph Company to the American Telephone and Telegraph Company.*—Mr. BETHELL testifies that the Western Union Telegraph Company can not be considered as a competitor with the American Telephone and Telegraph Company because both do a different class of business. He is not a director of the company, but from newspaper reports he thinks that some of the directors of the Western Union Telegraph Company are also directors of the American Telephone and Telegraph Company. He does not know to what extent long-distance telephoning has affected the telegraph business, and he does not know whether the American Telephone and Telegraph Company is doing any telegraph business. (813.)

9. *Underground wires.*—Mr. HALL testifies that upon the multiplication of wires a general demand arose that they should be put underground, especially in the business centers around the large exchanges. The rapid development of high-tension currents for electric lighting and street-railway purposes tended to seriously impair the service over single wires using the ground for a return. It took some time to devise suitable cables for underground purposes, and even now they can not be used over long-distance lines, except in the short section from the terminal exchange to the customer's station. The purpose of the American Telephone and Telegraph Company from the outset was not to use the method which largely prevails in other countries, of requiring users of the lines to come to special toll offices at terminal points, but to connect the long-distance line with the subscriber's line. (818.)

10. *Secrecy in telephoning.*—Mr. BETHELL testifies that under the laws of New York it is a misdemeanor to divulge telephone messages, and very few complaints have ever been made to the management on this matter. Occasionally some subscriber thinks his conversation has been listened to and used, but these complaints do not average more than 2 a year, and upon investigation they have been found to be without foundation. Most of the service in New York is on direct wires, there being very little of what is known as party lines, that is where 2 or 3 persons are on the same wire. (813.)

11. *Telephone system of Detroit.*—Mr. BETHELL said that he was not very familiar with the telephone system of Detroit, but he understood that there was great dissatisfaction there and the competition by the independent telephone companies created worse conditions than existed previously. (807.)

B. Telephone rates.—1. *General charge of excessive rates.*—Professor PARSONS refers to the telephone rates in the United States, especially in the city of Washington, and compares them with the rates in cities of practically the same size in Europe, where the municipalities own and control them. He states that the rates in Washington are from \$36 to \$96 for residence and \$120 for a business phone. While telephone instruments can be bought in this city cheaper than they can in Europe and while the wages of the operators are practically the same, Stockholm, which has a population substantially the same as Washington, has a telephone system with metallic circuit, underground wires, unlimited service, with a rate of \$16 for a resi-

dence and \$22 for business phones, and interurban communication within a radius of 43 miles; and that the Bell Telephone Company, when it was operating the Stockholm system, was charging \$44 for a very inferior service without metallic circuit or underground wires.

Professor Parsons submits the following table as showing the relative rates for telephone service in leading American and European cities, together with the relative number of persons in the population for each telephone. American figures relate to years 1897 and 1898, and those of European cities to somewhat earlier years. The relative sizes of the various cities are indicated by comparisons with Washington, D. C., which has a population of 250,000. The cities marked with an asterisk have public systems and the others have private plants. (177).

Cities.	Relative size.	Rates.	Number of persons to 1 telephone.
Washington (1898)	1	\$36 to \$135, \$100 average.	120
Stockholm*	1	\$20 average	23
Christiana	1	\$22 average	30
Trondhjem	1	\$13 average	38
Berne*	1	\$10 upward	40
Zurich*	1	\$10 upward	50
Berlin*	7	\$36	60
Copenhagen	11	\$41	70
Amsterdam	2	\$50 to \$100	150
Paris*	10	\$78	170
Greater London	22	\$100	700
Greater Boston	4	\$25 to \$150	60
Greater New York	13	\$90 to \$240	120
Chicago	6	\$60 to \$175	130
Philadelphia	5	\$60 to \$250	170

In most of the American cities offers have been made to furnish telephone service at a much lower rate than the Bell Company was charging. In the state systems of Europe the charge for a local telephone conversation to a nonsubscriber is from 2 to 5 cents, as against a charge of 10 to 15 cents in many of our cities. In the small places an average charge of from \$8 to \$12 or \$15 per year is a fair charge for the use of a telephone, while in larger cities a somewhat higher rate is made necessary. In Boston, where the underground system is necessary, a company is operating a system at about one-half the rate charged by the Bell Company. While it costs more to install an underground system in the first instance, the expenses of maintenance are less than for an overground system. The witness believes it would be possible to furnish telephone service in Washington City for from \$30 to \$35, unlimited. One of the reasons why the Bell Company can not furnish service at such rates is that it is greatly overcapitalized, and is trying to pay a dividend on watered stock. The New England (Bell) Telephone Company, operating in Boston and other cities and towns in Massachusetts and New England, is capitalized at more than \$300 per subscriber's line, whereas the Massachusetts Telephone Company (independent) has installed a system there equally as good at less than \$100 per line.

The witness also states that in Grand Rapids, Wis., there is a cooperative telephone system, comprising about 300 subscribers' lines. The average cost of construction per line has been only \$42, as compared with \$300 for lines in some of companies controlled by the Bell Company. The charges are only \$1 per month for residence service and \$2.25 for business service. One and one-half per cent dividends have been paid monthly on the shares, which are held by the telephone users, so that the actual charges for a residence telephone amounts only to 25 cents per month, and for business telephones \$1.50 per month. The Bell Company in this place charges \$36 per year for resident telephones and \$48 for business telephones.

Professor Parsons refers also to a small telephone system in Kansas which operates at a profit of 10 or 12 per cent while charging only \$12 or \$15 per year for telephones. In Rochester, N. Y., an independent telephone company is making rates of \$36 to \$48 while paying 8 per cent dividends on a large amount of watered stock.

The witness criticises the decision of the supreme court of the District of Columbia in *Manning v. Chesapeake and Potomac Telephone Company*, which held unconstitutional an act of Congress, fixing the minimum telephone charges in Washington at \$50 per year with 1 telephone on a wire, \$40 for 2 telephones on a wire, \$30 for 3,

and \$25 for 4 or more on the same wire, and undertakes to show that the court was incorrect in holding that the rates charged by the telephone company in Washington were necessary for the successful operation of its business. The evidence in the case showed that wherever the rates are lowered there is a much larger use of the telephone, and that fact was not thoroughly considered by the court in its decision. The witness believes that the lowering of the rates to the level fixed by Congress would very largely increase the number of subscribers without any very great increase of the expense of maintenance, so that the company would in reality make as much money as it did under the present system. The Supreme Court of the United States has clearly recognized the principle that the increase of business from lower rates must be taken into account. He further states that he has consulted with the president of the new company operating in and about Boston over the matter of reduction of rates proposed for Washington, and that official thoroughly agreed with him that the reduction was possible.¹ (173-179.)

He admits that in many cases the public is not ready for it, and thinks for the present, in most instances, public regulation would be better than governmental ownership and operation. (100, 173-179.)

Mr. BETHELL, commenting on the figures given regarding the charges for telephones in Grand Rapids, Wis., implies that it is absurd to suppose that telephone service should be furnished by any company anywhere at \$3 per month if proper methods of accounting for expenses were employed. Even if the concern were cooperative, so that the members did part of the work or met part of the expenses, it would be difficult to conceive of any efficient service at this rate. (811.)

Professor PARSONS, in an affidavit replying to these criticisms, testifies that the data relative to the Cooperative Telephone Company of Grand Rapids, Wis., was received by him from the first president of the company, who is a man of excellent reputation and thoroughly familiar with the facts, and that the statements theretofore given to the commission by him were taken from a letter from the president of that company. (883.)

Professor BEMIS thinks that there is quite an opportunity for municipalities to develop telephone service in connection with the police and fire-alarm system, and thus extend it gradually; some little tendency in that direction was observed in Chicago until a private company made a greatly reduced rate to the city. He believes there would be much more use of the telephone and that the companies would not lose anything in the end by greatly reduced rates; and he instances the case of the town of Manhattan, in Kansas, with a population of only 3,000, or about 600 families, where a private company had placed 220 telephones or one to every 3 families, and had made over 10 per cent on its investment by charging only \$1 a month for the household use of telephones and a little more for mercantile use. He admitted that in larger cities the cost would increase somewhat with the size of the plant, because the number of connections had with others tends to increase the operating expenses somewhat per phone, but not enough to justify the general charges prevailing in large cities. (100-101.)

2. *General defense of existing rates.*—Mr. HALL testifies that the constant and rapid changes made in the telephone industry, requiring continuous reconstruction of the plant and improvement in other conditions, make the question of rates one of great complexity. At first the fixed flat rate for the unlimited use of the telephone by the subscriber was put in force, but later it developed that the message-rate system, by which charges are based on the number of messages, was the proper one, and it is so recognized generally by the customers. The flat rates are reasonably equitable in small places, where traffic is fairly uniform, but they have no place in the service of a large city, where uniform conditions do not prevail. Trunk-line long-distance rates were originally started under the message-rate plan. At first the rates were usually about one cent a mile, with an allowance of five minutes for each message. The prevailing rate to-day in this country is substantially three-fifths of a cent per mile for a conversation of three minutes, with a proportionate increase for use in excess of that time. (818.)

Mr. PARSONS in his affidavit says that he believes in the message-rate plan for large plants, but thinks the double flat rate, one for residences and one for business establishments, simpler and better for small exchanges. If the message charge is carried too far it will limit communication and subserve no useful purpose. (883.)

Mr. BETHELL testifies that it has been demonstrated and is acknowledged on all sides that it is more costly to operate a telephone system in large cities than in small ones. More than half the operating expenses go for labor, wages, rents, and other

¹The decision above discussed regarding telephone rates in the District of Columbia was reversed by the district court of appeals in 1901, which held the rates established by Congress to be adequate.

items, which are very much higher in a great city than in a small town. Then there are so many subscribers in a large city that there have to be numerous exchanges, all connected together, and this requires plant and labor of a kind and amount which is not required at all in the smaller exchanges. A large exchange, therefore, requires many fold more labor and more plant to accomplish a particular thing than does the smaller exchange. Again, in a very large exchange there is necessarily a very large surplus plant. Underground cables must be of a standard size, say of 50 or 100 wires, and very often it may be necessary to take the 100-wire cable when only a fractional part of that number is required for the service. There are surplus subways for the same reason and for the additional reason that when once the street is opened ample conduits for future growth must be laid, and there is thus a great investment lying idle for a long time, and during the slack hours of the day and night the plant must be up to the highest requirements of the busiest five minutes of the day. The message in a great city costs vastly more than a message in a small city, but the volume of traffic in a large city tends to equalize that and to bring down the cost. Every message occupies the whole line during its transmission, thus differing from a railway, where many trains may be operating at the same time.

The witness thinks the average use per line would doubtless be increased by lower rates. It has been increased in New York by lower rates, and the New York system may be capable of carrying more traffic than it does carry, but there are so many facts and conditions surrounding the question that it is not by any means easy of solution as to whether a reduction of rates would pay or not. There is a limit to the carrying capacity of a telephone line—not as a single line between two points, but as part of a very complicated and very extensive system of lines, any two of which may have to be connected at any moment. One might use his telephone 50 or more times a day, but such use is only possible when the line over which such a number of messages is sent is connected with other lines not used to that extent. That line is so fully occupied by outward messages that few, if any, incoming messages can be handled over it. Practically it is "busy" to all inquirers. It is obvious that all lines could not be used to any such extent; an attempt to so use them would necessarily result in complete failure. The rate of \$30 a year, suggested by Professor Parsons in his testimony before the commission as a proper rate for New York, would not be fair. (808-810.)

Mr. Bethell testifies that a committee of the New York legislature in 1888 investigated the system and reported that the loss to the New York company through installation of the new underground metallic circuit system amounted to three-fifths of the company's net profits from its organization, and that the company's profits for seven years were 9.66 per cent on investment. This committee also reported that no telephone company in the State had made unusual profits and that some of them had lost money, and that nowhere in the State had it found excessive salaries paid to telephone officials. (782, 783.)

3. *Interior Department service.*—Professor Parsons refers to the operation of the telephone by the Interior Department in Washington. The Department had been paying an average of \$75 per 'phone for 65 'phones. The Bell Company having refused to reduce the rates, the Department put in a system of its own, which it operated at a total cost of \$10.25 per 'phone, including interest, depreciation, and repairs, or \$6.43 without those items. (173.)

Mr. BETHELL testifies that he found the system of telephones for the Interior Department confined to a few buildings, all near together and connected with a very few wires. The Government had invested \$6,000 in that plant. He criticises the testimony of Mr. Parsons; says that for 65 'phones the figures given would allow only \$248.30 a year interest, depreciation, and repairs. The interest alone at 4 per cent on \$6,000 would amount to \$240 a year, which would leave only \$8.30 for depreciation and repairs. The repairs alone would require the service of one man practically all the time. From official reports of officers of the Interior Department, made in 1897 and 1898, and which were filed as exhibits to his testimony, Mr. Bethell states that the Interior Department service was very inferior in quality. (786.)

Professor Parsons, replying to these criticisms, says in an affidavit that he had obtained the facts about the Government telephones directly from the books of the Department by a personal visit to the Department. At the time of his former testimony he did not know that the Department exchange had been given up, but he now finds that the installation was not satisfactory and that a wider service was needed. He used the data in his former testimony to show that the Bell Company was wrong in its refusal to reduce the rates to the Department, and that idea is borne out by the fact that the Bell Company now supplies a wider service and long-distance facilities at rates close to the cost under the public system. (883.)

4. *Rates in New York.*—Mr. BETHELL says that during the early period, when single wires were used, the rates were all flat; that is, all subscribers had the same character of equipment and paid the same amount, whether they used the service much or little. The correct idea is that the company's business is to render public service, and consequently the flat rates were discontinued and what was known as the message-rate system was introduced. During the early days the flat rates in New York ranged from \$60 to \$150 a year for single service, and when the metallic service was introduced they ranged from \$120 to \$240 per year. Under the message-rate system the message instead of the station is taken as the basic unit in making the rate. There is a minimum charge for which the subscriber may send a stated number of messages, with additional charges for additional messages, the amount per message decreasing as the number of messages increases. The rates in New York range from \$24 per year up for exchange services. There are also rates for supplemental stations, some of them being as low as \$8. In Manhattan the rate is \$60 a year for 600 messages. Additional messages are charged at from 6 cents down to 3 cents each, being arranged so that the traffic-carrying capacity of a subscriber's line in New York practically limits the total rate which he might pay in most cases to \$240 a year. In Harlem there is a rate by which the subscriber pays 5 cents for a Harlem message and 10 cents to any other part of Manhattan or the Bronx, guaranteeing the company \$3.25 a month, or \$35 a year, from the combined business. The message-rate plan has been worked out also in a way adapted to business concerns. A small switch board is located on the subscriber's premises, and in the various parts of his building, where he may desire them, telephones are located. The rate is \$12 a year for each. A trunk line runs to the nearest central office, which is paid for at the rate of \$36 a year. The subscriber guarantees 3,600 messages a year, and may send all the messages he pleases for 3 cents each. This system has proved very popular. At present the New York company is operating more than 1,200 such private exchanges. In hotels the rates for stations in connection with a private branch exchange are from \$8 to \$12 per year per station. The average annual rate actually paid by all subscribers in the city of New York under the message-rate system was on the first of the year 1900 \$87.62. At present, June 15, 1901, it is about \$85. This includes all stations, even the \$240 flat-rate stations. At the pay stations the rate is 10 cents per message to any part of Manhattan, 8 cents of which goes to the company. The rapid development of telephone business in New York City shows that the rates and service are generally satisfactory to the public, and there is no demand for a revision or reduction of rates. (780, 781, 782.)

5. *Telephone franks.*—Mr. BETHELL testifies that the State of New York in adopting its new constitution provided that the giving of franks to public officials should be prohibited, and since the adoption of that constitution no frank has ever been issued to any official for telephoning. The constitution would interfere with the Bell Telephone Company giving free service to any official or politician of the State, and would prevent any discrimination in favor of any person. The city of New York itself has to pay for its telephones. There may be a little courtesy occasionally shown the police and fire department, but speaking generally the service has to be paid for at the same rates. (810, 812.)

C. Comparison of American and European telephone rates and conditions.—1. *Generally.*—The statements of Professor PARSONS as to local telephone rates have already been referred to. For the long-distance telephone, continues this witness, the rates in this country are very much higher than they were in Europe. As an instance, the rate from Philadelphia to Washington is \$1.25 for 5 minutes. In England the rate for the same distance would be 48 cents and in France 30 cents.

"They have a distance rate in France of 10 cents for 62 miles and in England 6 cents (3 pence) for the first 20 miles—any towns within 20 miles—and 12 cents (or 6 pence) for towns within 40 miles, and 12 cents for each 40 miles afterwards. New York is 228 miles from here (Washington) and the charge is \$2. In England it would be 72 cents and in France 40. Boston is 417 miles away; * * * the telephone rate is \$4. In England it would be \$1.30 and in France 70 cents. Chicago, 716 miles; the rate is \$4.25, England \$2.16, France \$1.20. Richmond is 116 miles away; our rate is 75 cents, England 36 cents, France 20 cents. New Orleans is 1,116 miles; our rate is \$6.35, England \$3.16, France \$1.90. * * * The English distance tariff is from one-half to one-third of ours and the French from one-third to one-sixth of ours."

The services of the telephone in other countries where the system is public is far superior in its coordination with the post-office and telegraph to what it is in this country. In some countries letters and telegraph messages can be telephoned. (174.)

Mr. HALL, of the American Telegraph and Telephone Company, says that the development of the telephone industry in America is greater than that in Europe. The charges for service are higher here than in Europe, but there are so many different conditions that it is almost impossible to make a fair comparison. The greatest single factor in the problem is the low cost of labor in Europe. Charges for long-distance service in Germany, if one desires prompt service, are sometimes as much as three times the regular rate. In Sweden double rates are charged for prompt service. In Holland the regular schedule is doubled between noon and 4 p. m. The trunk lines provided in Europe are very limited, and one does not know when he will be served unless he offers in advance to pay two or three times the regular rate. In England a customer is absolutely limited to a three-minute talk, no matter how much he desires to use the instrument longer. (818-819.)

Summing up the results of his comparison of the American and European systems of telephones (see below), Mr. BETHELL said the cheapest and poorest conditions are obtained through Government and municipal ownership; the next best conditions under private ownership with Government control, and the best conditions are obtained where there is unrestricted private ownership. There are 20 American and 44 European cities with 200,000 or more population. In the American group there are 21 telephones per 1,000 population; in the European 13 telephones per 1,000 population. Among cities of 1,000,000 or more, New York stands at the top, with twice as many telephones per capita as any other city in its class except Berlin, which has been favored by the Government in the matter of rates. Of the cities of 500,000 to 1,000,000 Boston is at the top, with twice as many as any European city except Hamburg, and almost twice as many as that. Of the cities that run from 200,000 to 500,000 Stockholm is at the top, with San Francisco a close second. The European small towns have shown a most insignificant development and the American small towns a great development. "The English and American maxim is that whatever can be done without Government should be thus done. The continental principle is that whatever can be done by Government should be done." (807.)

Professor PARSONS, in a supplementary affidavit, says that the comparison made by Mr. Bethell as to the telephone developments of the various cities and countries is entirely unfair, because he selects carefully American cities where service is most highly developed. The fact that New York City has 26 telephones per 1,000 people while Paris has 13 per thousand proves nothing as to public ownership, because there is even a greater difference in favor of New York in respect to transit and other interests which are private in both cities. Moreover, in Mr. Bethell's comparison the heart of New York is selected for comparison with all Paris, instead of taking the whole city of Greater New York. A fairer comparison would be between London's 7 telephones per 1,000 people, under private ownership, and the 13 per 1,000 in the public system of Paris, for general conditions are more similar in London and Paris than in New York and Paris. The low development in Warsaw and Moscow and other similar places in Europe are the principal factors in pulling down the average of the European cities dealt with by Mr. Bethell.

In Greater New York there are 20 telephones per thousand people; Brooklyn, 11 per thousand; Philadelphia, 16 per thousand; St. Louis, 17 per thousand; Washington, 14 per thousand. These are all under private management. Berlin, with public ownership, has 25 per thousand.

Mr. PARSONS criticises especially Mr. Bethell's comparison of Larchmont's (N. Y.) 170 telephones per thousand with Trondhjem's (Sweden) 38 per thousand. Larchmont is a guilt-edged residence town filled with wealthy New Yorkers, while Trondhjem is a city of more than 30,000 people of various classes. A fairer comparison would be with Chester, Pa., with 34,000 population and only 6 telephones per thousand; or Camden, with 10 telephones per thousand; Trenton, with 19 per thousand; Wilmington, Del., with 14 per thousand. Mr. Bethell's statements in reference to the telephone system of Stockholm are misleading. In that city the impulse for development came from the Government and not from the company, as Mr. Bethell indicates.

The truest comparison is between public and private ownership in the same place. The true test of telephone development is not the number of telephones in a few of the most progressive cities, but the average development throughout the country. The variations between 6 telephones per 1,000 in Chester, and 7 in London, and 62 in San Francisco, and 170 in Larchmont, all under private ownership, are much greater than the difference between the public group and the private group. A table of comparisons of the principal cities of the United States and Europe is submitted in Mr. PARSONS' affidavit in favor of his argument. (883, 884.)

Mr. Bethell says that in comparing New York conditions with European conditions, consideration must be given as to whether the service is self-sustaining and also as to wages, purchasing power, conditions of living, and other matters of that kind.

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There is no common factor between the New York and European conditions to make the comparison simple. The proper method of fixing rates is that the amount to be paid by the telephone subscriber in a large city should be more than that to be paid by the subscriber in a small town. This is the almost universal practice by private companies and governments, except Switzerland and Sweden. The comparisons given below are based on public documents or on personal observation. (785, 787.)

In the report of the president of the American Telegraph and Telephone Company there is a comparison of telephone development in the United States with the countries of Europe, which shows that the German Empire, with 229,391 stations, comes next to the United States in telephone development. Then follows, in the order named, Great Britain, Sweden, France, Switzerland, Austria, Russia, and Norway. The United States, with 800,000 stations, has a greater development than all the countries of continental Europe combined. (822.)

2. *Telephones in Great Britain.*—Professor Bemis stated that in England he had found the municipal operation of telephones extending very rapidly. In Glasgow and London municipal operation is soon to begin and the charges will be scarcely more than one-half those of the private companies. The National Government owns the trunk lines in England connecting the various cities, while the municipalities will construct plants for their districts. Much confidence is expressed by the people in the result. In Norway and Sweden, and some portions of Germany, where there is public management of the telephones, the result had been entirely satisfactory. (1004.)

Mr. BETHELL testified that in Great Britain the telephone was held by the courts to go under the telegraph act of 1869, which made the telegraph a Government monopoly. Under this decision the postmaster-general had an exclusive right to provide the telephones, but being unwilling or unprepared to do so, he granted licenses to various private companies, limiting the operation of each to a specified area, and providing for the payment of a royalty to the Government of 10 per cent of the gross receipts. All these licenses were made to expire in 1911. The restrictions to specified area prevented interurban communication and proved most unsatisfactory, and in 1894 other licenses, which removed the restrictions and limitations as to the area in which the licensed company could operate, were granted. As a result, trunk lines were very rapidly built between the several telephone centers and the long-distance business grew up. For a time the post-office endeavored to establish a competing system, but met with no success, notwithstanding the fact that it was taking 10 per cent out of the earnings of the private company as a royalty. The Government competing exchanges have entirely disappeared, with the exception of those at Newcastle and Leicester. In 1898 the National Telephone Company was formed and it now operates all over Great Britain. The rates have been reduced practically to one-half of what they formerly were. The concentration under private management has produced better results than under Government management. The reduction in rates is accounted for by the fact that there were economies through concentrated management and uniformity of methods which could not be practiced before. In London and Glasgow the local authorities persistently refused to permit the substitution of underground for overhead wires, and the company is unable therefore to render efficient and satisfactory service. In 1899 the English Parliament voted the necessary funds to enable the Government to begin competition in London and empowered the postmaster-general to grant licenses to municipalities to construct and operate their own systems. It was stipulated in the law that whenever the postmaster-general licensed a municipal competitor the National company's license should be extended for a like time. The post-office is now constructing its plants and will probably begin rendering service in London before the end of the year 1901. Glasgow has already opened an exchange, but the movement has not yet proceeded far enough to produce any results. The dissatisfaction in respect to rates and the lack of service were the moving causes on the part of the British Parliament in enacting this law. Mr. Bethell quotes numerous authorities to the effect that the service in England was not so efficient as in the United States; but says that the development in Great Britain was far in excess of that attained on the Continent under Government ownership. On January 1, 1901, London had 41,111 telephones, or 7 per 1,000 population. New York at the same time had 26 telephones per 1,000. Among large cities in Europe, London's development is exceeded only by that of Berlin.

The rates in England, generally speaking, are flat, but a committee of Parliament in 1895 reported in favor of the message-rate system. The London rates for direct-line business service is \$100, the residence rates \$60, with discounts for long term contracts. The National company has a very large fund which it carries forward from time to time, as rentals are paid in advance. Its annual statement at the close of

1900 showed \$3,840,000 carried forward in that year. The average rate in London approximates \$72. Inasmuch as there is a great difference in wages, the witness thinks the New York rate is in reality lower than the London rate. The wages of the company's operators in London vary from 5s. to 17s. per week. Lady superintendents receive about 2 guineas per week and wire-men 6s. a day. The other pay per week for the operators in Glasgow is 9s. 4d. New York wages average double those in London.

Mr. Bethell says further, that private companies operating telephones in Great Britain have been constantly hampered by the Government, so that any deficiency in the service or any unduly high charges are chiefly to be attributed to this policy. The witness quotes from a writer in the London Times, from a speech of Mr. Arthur Chamberlin, as well as from articles by 2 English telephone experts, all to the effect that the Government had impeded the private companies in many ways. The Government royalty upon the use of the telephone is considered unjust by some of these English authorities. They assert further that the British have had to borrow their inventions and improvements in telephones from the United States. Obstruction has been due not only to the action of Parliament and of the central executive authorities, but also to action of municipal governments. An officer of the National Telephone Company is quoted as saying that the history of the telephone branch of electrical engineering has been one long fight by the company to be allowed to serve the public properly. (797-803.)

3. *Telephone conditions in Germany*.—Mr. BETHELL testifies that in Germany patents were never allowed for a telephone, and the Government had monopolized the business from the beginning. It is now operated as a part of the postal-telegraph system. There has been a very large development in Germany, especially in large cities which have been favored by the German rate policy. Until recently there were uniform rates throughout the Empire. There are 720 telephone centers in Germany, and Berlin alone has 25 per cent of the total stations. At the beginning of this year 1901 Berlin had 47,586 telephones. Up to 1899 the service was rendered only from 7 in the morning until 10 in the evening. Since that time a night service has been installed, but there are extra charges for night calls. The lines are largely single wires and a very large percentage of them are still over head. In Berlin the subscriber has to do a great deal of his own operating; that is to say, he calls the nearest central office and must work his own way from that office to the next, and so on. On the whole, the Berlin service is not to be compared with the New York service, but it is apparently satisfactory to the Berlin public.

The uniform rate in Germany prior to April 1, 1900, was \$37.50. At that time flat rates, varying from \$16 to \$45, and minimum message rates from \$20 to \$30, were put into force, the rates now differing with the size of the town. Since that time the development in the smaller towns has been more rapid. The administration many times reported to the German Parliament that the Berlin system did not pay, with the result that the rate in 1899 was increased 20 per cent—to \$45. The postal telegraph and telephone accounts are all merged together. Wages, rents, and almost all other items that enter into the cost of furnishing telephone service range from 2 to 4 times as high in New York as in Berlin. Considering the character and amount of service and the purchasing power of money, the rates in New York are lower than in Berlin. In Bavaria the telephone system is operated separately from the imperial system by the telegraph department of that Kingdom. They have the same rates and the same policy as to rates as exist in other parts of the German Empire, and the general conditions are about the same. The plants and the service in Munich are much better than in Berlin. (791-793.)

4. *Telephone conditions in Austria-Hungary*.—Mr. BETHELL says that private companies conducted the telephone in Austria until 1894 and 1895. Then the Government purchased the plants, and since then has run the business as a monopoly. Nearly all the development is to be found in the greater cities in Austria, chiefly in Vienna, and in Hungary, chiefly in Budapest. The Vienna plant was bought by the Government on a valuation fixed by experts. The Government took possession of it on the 1st of January, 1895, at a cost of \$1,600,000. There were between 7,000 and 8,000 stations. In November of that year the Government began the construction of a new plant, and has expended \$1,200,000 on it up to this time. The number of stations in Vienna is about 13,326, and in all Austria there are 31,902 telephones. Vienna's population is substantially the same as that of Chicago, but Chicago has more than twice as many telephones. When the private company operated the system, the Vienna flat rate was \$40, and it has continued the same. Elsewhere in Austria there is what is known as the installation charge or entrance fee of \$40 per kilometer of line, plus \$20 per year. The wages are low—operators receiving from \$1.80 to \$3.40 per week and linemen about \$5 a week. In Vienna the telephone business

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suffered very greatly because of the fact that for 3 years the Austrian Parliament did not meet and no appropriations could be made for its support.

In Hungary there is no development outside of Budapest worth speaking of. In this city, with a population of 729,000, there are 5,796 telephones. With the exception of Moscow and Warsaw, in Russia, Budapest has the lowest telephone development among cities of its size or larger. The people in Budapest are very progressive, the city having been practically reconstructed in recent years. Magnificent buildings have been erected, and the first electrical underground railroad in the world was constructed there. Yet the telephone plant is antiquated and the service is inferior. The rates are the same as in Vienna and wages are even lower than in Vienna. (791.)

5. *Telephone conditions in France.*—Mr. BETHELL states that up to 1889 the telephone industry in France was operated by a private company. Since that time it has been a Government monopoly. The development outside of Paris is practically nothing. There are more telephones in New York than in the whole of France. Comparing the large cities of France with cities of practically the same size in the United States, Mr. Bethell says that the American cities have from 4 to 5 times as many telephone stations as in France. There is a very large development, relatively, in Paris, which has 33,000 telephones to 2,536,000 people, due in a great measure to the inferiority of other means of communication. The rates are now relatively low, and the system is technically far behind the times. There are few modern appliances, much of the old apparatus used by the company before the Government took hold of the company being still in service. Except possibly in Belgium, it would be difficult to find a less efficient service in any large European city than is found in Paris. The subscriber is required to buy his own instrument, and as the Government has approved 500 styles of instruments, from which he may select any one, it is readily seen that there is no such thing as uniformity of instruments in the telephone service. There is a very lax discipline among the employees, because they are all civil-service employees. The provincial conditions outside of Paris are very much worse than in the city. The rates in Paris, when the system was operated by a private company, were \$120 a year. The Government now charges the flat rate of \$80 a year, business and residence alike. In 1902, in accordance with a law recently passed, the rate will be reduced to \$60 a year, if the plant can be provided by that time. The French rates do not include the original cost of the instrument, or of a line from an underground cable, which is in the sewer. If the subscriber is beyond the fortifications he must pay for the whole cost of construction beyond that point. In a town outside of Paris the flat rates range from \$30 to \$60 per year. The operators in France get about \$6 per week, and the linemen and mechanics \$7.20 to \$8.50 a week, with 10 hours a day. There are no separate telephone accounts, as distinguished from the post-office system, and it is impossible to say whether the service is self-sustaining or not, but considering the low wages and other differences, the Paris rate is absolutely higher than the New York rate. (787, 788.)

6. *Telephone conditions in Switzerland.*—Mr. BETHELL testifies that in 1900 there were 38,864 telephones in use in Switzerland. Zurich, the largest city, with a population of 152,000, has 6,000 telephones. The Government operates the system at present. Rates are uniform without regard to difference in size of places. For the first year the subscriber pays \$20, for the second year \$14, and after that \$8 a year for the privilege of having a telephone. There is an additional charge of 1 cent for every local message. Mileage at the rate of 4½ francs per 100 meters is charged for the construction of the subscriber's line for every distance beyond 2 kilometers from the central exchange. In the larger cities these extra installation charges amount to as high as \$150. More and better service can be had in any of the American towns and cities than in the Swiss towns. The telephone plant in Switzerland is cheap, and grounded circuits are still in use. There has been a very small outlay for maintenance. The post-office collects the accounts. Wages are low, skilled operators being paid \$4, wiremen and chief operators in large offices \$7, linemen \$4.20 to \$6, and foremen \$6.50 to \$8.40 per week. Wages in all other functions in Switzerland are very low. The telephone receipts in 1899 were \$1,007,011. The expenses were \$1,254,803, being 125 per cent of the earnings, which would result in bankruptcy if it were a private concern. The responsibility for the antiquated conditions in Switzerland can be traced to politics. The telephone has practically been a political plaything in Switzerland; the service has been starved, and the rates run down. (789, 790.)

7. *Telephone conditions in Belgium.*—Mr. BETHELL testifies that in Belgium the telephone industry up to 1889 or 1890 was conducted by a private company, and since that time it has been a Government monopoly. At the beginning of the year 1901 there were 14,920 telephones in the whole of Belgium, or about one-fourth of the number in New York City alone. In Brussels, which has a population of 560,000, there were 4,525 telephones; in Antwerp, population 278,000, 2,802 telephones. In

general, the plant installed before the company took hold of the office is still in use. The central office equipment is completely out of date and almost worn out. Single wires or grounded circuits are generally in use, but work is under way for installing a metallic circuit. The company rates were adhered to as to the grounded circuits, but for metallic circuits they were raised. In Brussels and Antwerp the grounded circuit is \$50 and the metallic circuit \$70. Elsewhere in the Kingdom the minimum rates are \$25 for ground circuit, \$54 for metallic circuit. Operators get from \$1.90 to \$2.77 per week. Belgium is a cheap country with respect to labor. Telephone accounts are not separately kept, but it might be safe to say that the system is self-sustaining, because the rates are so high and the system is so small and the expense for maintenance is so little. The telephone development nowhere in Europe or America is as poor as in Belgium. (788, 789.)

8. *Telephone conditions in Sweden.*—Mr. BETHELL says that the Swedish Government has no monopoly of the telegraphs or telephones, but has the advantage of exclusive rights over State highways. Except in Stockholm, the telephone industry is now conducted exclusively by the State. The development of the telephone in Stockholm is the largest among cities of its class either in Europe or America, with the possible exception of San Francisco. On January 1, 1901, it had 69 telephones per 1,000 population. There is a public and a private system in the city, which have been in active competition since 1890. The private company has at least two stations to the State's one. Operators are paid \$1.95 to \$2.92 per week; linemen and mechanics about \$6, and foremen about \$8.30 per week. In the entire territory in and around Stockholm there are 27,247 stations and 573 employees, or 1 employee for every 47 stations, as against 1 employee for 17 stations in New York. The private company and the Government company have been in very bitter competition, with the result that rates have been placed very low. The shares of the private company are held principally by a retired manufacturer, who is satisfied with little or no profit in order to sustain his battle with the Government. The rates are too low even for Sweden. The private telephone company has obtained the right to work telephones within a system of 70 kilometers radius from Stockholm, but may not extend operations outside of that circle. The Government rates in Stockholm are much lower than in any other part of the country. If the telephone does not pay, the State has its own revenues from other sources to fall back upon if necessary. There are now 7,000 or more subscribers who have to take both telephones, and the number of intercommunications amounted last year to 1,099,837. The result of this double service is quite annoying to the public, and causes a waste of capital and energy. The State plant is operated by the State telephone and post department, and has an exclusive right of way over State highways and on Crown property. The municipality of Stockholm has strongly supported the private company and will not permit the State to have underground privileges within the municipality. The State discriminates against the company over its long-distance lines by imposing an extra charge on messages originating at the company's stations, and thus forces a number of people to take its service merely to avoid these charges. This accounts for the many duplications in service. Many quotations from writers of eminence and others are cited by Mr. Bethell to support his statement. (803-807.)

9. *Telephone conditions in Holland.*—Mr. BETHELL testifies that a private company conducted the telephone industry in the cities of Amsterdam and Rotterdam until 1896, when the cities obtained franchises from the State for 25 years. The company's rate was \$47.20. The municipal rate is \$36 yearly at residences and business places and \$46 for hotels, restaurants, and places accessible to the public, plus in each case an installation charge of \$10. Under its franchise the company had been required to pay the city 21 per cent of its gross receipts. In 1894 this tax amounted to \$17,125.22. In 1898 the city treasury received from the telephone industry only \$20,000. The slight increase in receipts was more than an offset for the increase in the community's general expense due to the telephone operations. Whatever reduction in charges was made benefited the subscribers at the expense of the general taxpayer. At The Hague the telephone is conducted by private enterprise at a rate of \$24 a year. In Amsterdam the service is better now than under the company's administration, but it is not so much that the present service is especially good as that the former was inferior. The service now is not so good as that rendered in private companies in Scandinavia or the United States. It is entirely inadequate for so large a city. The operators in Amsterdam receive from \$2 to \$4 per week, linemen \$6.40 to \$8 per week, 10 hours per day. The plant was developed 50 per cent in the 3 years following the taking of it by the Government, but compared with that in cities of the same rank in this country or Europe where private companies operate, the development was insignificant. There are 4,462 telephones, 8.7 per 1,000 population. Boston, with a population substantially the same, has 42.3 per 1,000 population, while Manchester, England, has 19.6 and Liverpool 20.1 per 1,000 population.

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The development of the service in the suburbs of Amsterdam is practically nothing, because the rates are so high in such territory as to deter anyone from using it. Rotterdam and Amsterdam lie very close together and their interests are closely united, yet each municipality is proceeding in different ways, different styles of equipment and engineering methods, and different rates being offered to the public. The traffic is light because there are so few places where the subscriber can reach. The cost per station in Amsterdam, including working expenses, interest, and depreciation, was less than the New York company's outlay per station for labor alone in the year. At Rotterdam the rates range from \$26.40 to \$38.40 per year, plus an installation charge of \$30. In 1896 there were 100 telephones and at the first of the year 1901 3,089, or about 10 telephones per 1,000, a little better development than that of Amsterdam. (793-797.)

10. *Telephone conditions in Copenhagen.*—Mr. BETHELL testified that the telephones in Copenhagen's suburbs are operated by a private company, and the system is one of the best in Europe. It has 15,311 telephones, or 49 per thousand. The residence rate is \$27, and business rates from \$32.40 to \$48.60 per year; message rates, \$13 per year up. Skilled operators are paid from \$2 to a little over \$3 per week; linemen about \$5.70 per week. The overhead wire plant is used, but is now being gradually changed to the metallic circuit underground. The central office plant is somewhat out of date, but plans for a new building and new equipments are now under way. Considering the relative purchasing power of money, the rates in Copenhagen are relatively as high as those in American cities. (803.)

D. Labor conditions.—Mr. BETHELL testifies that the New York Telephone Company has 3,615 employees in New York City, and the pay roll, exclusive of officers' salaries, is more than \$40,000 a week. Very liberal wages are paid. The hours are reasonable, and the conditions which surround the employees are the best that any telephone operators in the world enjoy. The employees are of a high character. The company has gone to a very large expense in providing rooms for the comfort of the operators when they are off duty, and dining rooms where the company furnishes tea, coffee, and milk free of charge. The average wages of all employees are about \$12 a week and are from 50 to 150 per cent higher than the London wages. The trained female operator in New York is paid from \$8 to \$12 per week. When a girl is first employed she serves a period of apprenticeship, and is paid about \$3 a week. As soon as she is able to go to work she is advanced. Linemen, wiremen, and inspectors and mechanics are paid from \$12 to \$21 a week. Foremen are paid from \$18 to \$25 per week. The hours of labor for men are 8 hours a day in New York. The girls at the switch boards have various shifts. An operator who works on Sunday has a day of rest with pay in lieu of Sunday. There is extra pay for Sunday and overtime, the rate being time and a half or double time. There is a night force and a day force, and the arrangements are such that the operators going on early in the morning go off early in the afternoon, and those going on later in the morning remain later in the afternoon. They have an hour at noon, and there are 2 rest periods, 1 in the morning and 1 at night. The actual employment is from 8 to 8½ hours per day. The telephone traffic is very light during the night and up until about 10 in the morning. From that time until 12 it increases very rapidly. It slackens again during the lunch hour, and in the afternoon at 2 or 3 o'clock it goes up to a very high pitch, and off again toward evening. More operators are on duty during the busy hours than during the slack hours.

The company has never had a strike or labor trouble of any sort. It endeavors to anticipate the demands that may reasonably be made of it and never has any grievance presented from any body of employees. No one employed by the company can be dismissed except for cause, and then only with the approval of the officer of the company. The effect of the work upon the girls is not deleterious. There are very few resignations, except when a girl gets married or gets a better position. The private branch exchange systems which have been created in New York have made a great draft upon the skilled operators of the company, and the wages paid there are higher than in the central office. An inspector of the New York board of health reported officially that he found all the conditions under which the operators worked most excellent, and that he found no ill health among any of the operators. (783, 784, 785.)

For further comparisons as to labor conditions see under Section C.

Professor PARSONS in an affidavit criticises the statement of Mr. Bethell with respect to the wages of the telephone girls. He is informed on high authority that in the smaller cities of this country the telephone girl receives only \$10 or \$12 a month, \$16 being considered good pay. The comparison made by Mr. Bethell of the wages of the telephone employees in New York City with the wages of the employees in foreign cities was very unfair, because New York is recognized as the high-wage center of the country. (883.)

XV. MUNICIPAL PUBLIC UTILITIES.

A. General discussion of regulation and public ownership.—

1. *Importance of problem.*—Professor EDWARD W. BEMIS, of the Bureau of Economic Research, says that the problem of municipal public utilities is made important by the fact that competition has broken down under them and that they are virtually monopolies. The same problems are already confronting us in cities as will later become conspicuous regarding railroads, and the experience in the management of public utilities in cities will be a valuable lesson. The magnitude of the problem may be judged from the fact that the capital of the privately owned water, gas, and electric plants in the country is nearly \$1,400,000,000, while the capital of street railways is \$1,800,000,000. The further fact that certain syndicates and individuals are getting controlling interests in the street railway, gas, and electric-light companies of very many different cities increases the importance of the problem. (86-87.)

2. *Tendency of public utilities toward monopoly.*—Professor Bemis declares that competition in the street railways, electric light, and water supply business has almost entirely broken down. Efforts have been made in the most important cities in this country to maintain competing companies, but in nearly every instance the experiment has ended in consolidation. The tendency toward consolidation has been slightly less marked in the case of electric-light companies, but consolidation has still gone on very rapidly, and in most cities street lighting and household lighting are furnished by a single corporation, although large establishments are often able to supply themselves by means of private plants.

Consolidation of plants of this sort results in great economies. There is a saving in office force, in avoiding the duplication of mains, pipes, and wires, in the collection of bills, and in other ways. (87,100.)

3. *Consolidation of plants of same or similar character.*—Professor BEMIS says that in recent years there has been a marked tendency toward the concentration of ownership of plants in different cities and of plants of different character in the same city. Thus in New York City the Consolidated Gas Company increased its stock in July, 1900, to \$80,000,000, and bought up the other gas and electric light companies of that city. The same syndicate has also a controlling interest in the street surface railways of New York, although the elevated roads are in the hands of a different syndicate. The Elkins-Widener-Whitney syndicate also controls the street railways of Philadelphia, Chicago, and a rapidly increasing number of other cities. Similarly, the United Gas Improvement Company of Philadelphia has a controlling interest in the gas companies of over 40 different cities, among them Jersey City, Kansas City, and Atlanta. The officers of the Standard Oil Company have also a very large interest in gas and street railway enterprises all over the country. In Chicago the surface railroads and several of the elevated railroads have been at times in the past, and doubtless will be in the future, owned by a single syndicate. (87, 100.)

Mr. ALLEN RIPLEY FOOTE advocates the consolidation of the gas and electric-light plants of a municipality, and also the consolidation of the electric street railways with the electric-light plants. It would make a saving in the cost of the management and would cheapen the cost to the consumer.

In dealing with a consolidated syndicate, however, there should be thorough control of capitalization to prevent stock watering, and thorough publicity of accounts. Without such system of public accounting consolidation might not be beneficial to anybody but the syndicates themselves. (116, 117.)

4. *Possible methods of managing public utilities.*—Professor BEMIS says that there are three methods of solving the problem of municipal public utilities. One is to regulate the private operation of them; another is direct public ownership and operation, while a third is public ownership with private operation. Regulation of private ownership has been most advanced in England and Massachusetts; public ownership has gone furthest in England, while the system of public ownership and private operation scarcely exists in the United States, but is very common in England. (91.)

5. *Comparison of public and private ownership of municipal utilities.*—Professor BEMIS declares that there are certain evils and dangers in public management to be carefully guarded against, but he still believes that progress lies in the direction of public management of municipal utilities. Private companies in England do not oppose the public as they do here. Since the Brooklyn Bridge Railway has been taken over by private management there is a great deal more dissatisfaction than ever before, while under public management for many years it had given universal satisfaction. (102.)

Professor Bemis holds that the principle of municipal ownership of gas, electric lights, and street railways is the same as that in respect of water supply, which is generally considered a public function, but that it is more a question of expediency as to how fast we should go in relation to those utilities. He does not believe all

industries should be owned and controlled by the people, but where competition breaks down of its own weight and monopoly thus results, then the public must control it in some way. We should begin by learning through publicity of accounts what profits these monopolies are making and by seeing what can be done through regulation and taxation; but experiments in municipal operation should be at once undertaken and the causes of success or failure carefully studied. (97, 99.)

Mr. Foote thinks that in a sense the socialistic idea is the basis of or the initial point in the advocacy of municipal ownership. The people feel that the public should have the benefits and profits, if there are any, in the operation of the quasi-public plants, and that private corporations have been making excessive profits and have exercised more or less venality, not only in the securing of their franchises, but also in the operation of the plants. (113, 115.)

Mr. Foote asserts that it is impossible to compare the results of a municipal or political monopoly with those of the properly supervised private industrial monopoly. When the waterworks are under private ownership everything has to be paid for by private capital in the way of extending lines and making improvements, etc., and the rates have to be sufficient to pay all operating expenses and whatever profit is made. If the municipalities should buy these works, they would frequently reduce the price to the consumer, but would make up the difference by taxation. They would especially extend the service lines and charge the cost to special improvement assessments on property rather than to consumers. The city does not have to earn profits.

As to whether there is any advantage in municipal ownership, assuming honesty of operation in both cases and the same elements of cost, etc., there are not sufficient data at hand to reach a conclusion, and they can not be obtained without having the accounts of the municipalities and quasi-public corporations public and uniform. The witness, however, does not think the business of the municipalities of the country is yet sufficiently developed to permit the satisfactory operation of their public utilities by the taxpayers. As yet it always costs more to do public business than to do private business of the same nature. (111, 113.)

Mr. Foote says further that if it were possible to get men sufficiently patriotic to work for the people as a whole as loyally as they would in their own business, municipal ownership would be very desirable; but such a condition does not exist, and when the factor of self-interest is eliminated from industrial management there is eliminated at the same time the factor of efficiency. The witness has never yet seen an industry so well managed by the public but that a set of private men, having the same opportunities in the details of the management, could operate it and make a profit, and give the price as low, if not lower. (117.)

Mr. Foote believes, however, that there are more reasons why waterworks should be managed by municipalities than any of the other public utilities, because there are more regulations required in the operation of these plants that partake of the nature of police regulations. He sees no reason, indeed, why a small municipality might not operate its own waterworks plant more economically than a private company, because in a small plant the duties of the officials of the private company would be so light that to pay any sort of salary to them the cost of operation would be high; whereas, if the plant were operated by a municipality, the work could be performed by officials of the municipality who had other municipal duties to do. (119-121.)

Mr. Foote says that if the theory of municipal ownership should be adopted he would recommend the management by the municipality of every public utility where an economic gain could be made to the public; but that he would still insist that the accounts of the municipalities should be kept in such a way that it could always be ascertained what the actual cost of construction and of the management of the plant would be. He instances several cases of municipalities owning and operating certain utilities in which the accounts were so kept that while on the face of the records there seemed to be great economy in such operation, yet as a matter of fact they had been operating less cheaply than a private corporation could have done. (115.)

6. *Political effects of extension of public ownership.*—Professor BEMIS asserts that whenever there has been a failure of any municipal public-service plant, such failure can be traced generally to the spoils system in politics or to a lack of general business sense in the council, which has led to the selection of poor managers, or to the plant not being properly equipped. A proper reform in the civil service would show the people that they could improve the government, and have it practically useful in a cooperative way, by cheapening transportation, fuel, light, telephone, and telegraph service. Moreover, an increase in public functions increases the popular interest in having the government better managed. (99.)

Professor Bemis thinks the efforts of the influential and wealthy companies to keep their own old franchises, or get better ones, or to escape their share of taxation, are a potent source of municipal corruption. A very intelligent employee of a certain gas company informed him that all the employees in that company had to be recommended to their places by the political boss of their precinct, and had to keep up their membership in the political organization in order to retain their positions. When the Philadelphia Gas Works were still under public management, they were buying 40 per cent of their gas from a private company, and they always took their employees at the recommendation of the Philadelphia aldermen, and did not keep them longer than they could help. Their motto was: "The more different people we can hire in a given month the more aldermen we can please the more times." It would be easier to convince the people of the need of civil-service reform and business efficiency than it would be to get rid of the demoralization connected with this relation of private companies to legislative and administrative bodies. (102.)

Civil service in municipal affairs.—Mr. Foote advocates a rigid civil-service reform in municipal affairs in case municipalities should take over to themselves the operation of their public utilities. He believes that the employees engaged in operating utilities should be retained for life, during good behavior. The witness declares that he is somewhat different from the average civil-service reformer in that he does not believe it is of any interest to the public how a man gets his position, but that it does interest the public what he does after he gets it. Therefore primary appointments should be made in any way that would seem best—not necessarily by examinations—but there should be a probationary period of six months before the employee goes upon the regular roll. Promotions should be made from the lower to the higher grades from those in the service, and not from the outside, thus creating a stimulus for efficient work. (118, 119.)

7. *Proposed legislation in Ohio.*—Mr. Foote states that in the State of Ohio the municipal code commission has been studying the question for two years, and finally brought in a bill at the 1900 session of the legislature permitting every municipality in the State to own and operate its own water-works, gas works, street railways, telephone system, garbage plant, or any other utility. He criticises this bill because the public has not safeguarded the grant of power sufficiently. Under this bill the electors might vote bonds to acquire the properties, to operate them by the municipal government, and if there was any deficiency of revenue as the result of their operation, that deficiency should be entered into the tax list. He asserts that it would be a very easy matter under such a system to have innumerable deficiencies piling up. Thus, in the case of street railways the municipality would be authorized to reduce the fare to a very low figure, and create a deficiency; and thus the general public would be made to pay for the operation of the road, whereas the correct principle should be that those who use the roads should pay for such use. (119.)

8. *Will perpetual franchises interfere with municipal ownership?*—Professor BEMIS believes that when the public is ready to treat the companies having what is known as perpetual franchises as they treat each other it would be a very easy matter to find many legal ways to get rid of those franchises without interfering with the rights of private property. There are certain reserved rights possessed by the people which the courts would recognize. Legislatures could regulate the charges and could tax monopolistic earnings by special forms of taxation. The witness refers to the famous perpetual franchise granted to Robert Fulton and his associates to operate steamboats on the Hudson River, which was declared unconstitutional by the Supreme Court of the United States. (99.)

9. *The relation of municipal ownership to labor conditions.*—Professor BEMIS says that the tendency of public employment is to improve labor conditions. The hours of labor are usually reduced. The municipalities in England attempt to pay the standard trade-union rate of wages. Tramways when operated by private companies had refused to recognize unions and had worked their men very long hours; but as soon as the municipalities took hold of the plants, union wages and hours, etc., were introduced. (95.)

B. Experience with municipal ownership in the United States.—

1. *Extent of municipal ownership.*—Professor BEMIS says that there is no instance in the United States of public ownership of street railways except in the case of the railway over the Brooklyn bridge. There is a rapidly growing number of electric-light plants owned by municipalities. The capitalization of private gas plants is \$330,346,274; of public plants, \$1,918,120. Private water companies have a capitalization of \$270,752,468, and public plants are valued at \$513,852,568. (87, 88.)

2. *Results of municipal ownership of water plants.*—Professor BEMIS states that it is difficult to study the water question satisfactorily, but one thing is most conspicuous,

that the charges are usually lower under public management, while the service is better. At the same time there has been a reduction of fire risks. There is a growing desire to increase the number of municipal waterworks. The city of New Orleans is the only instance in the history of the country of the waterworks' plant of any large city, originally started in public hands, going back to private ownership, while in a list of over 50 of the largest cities there are 20 instances of a change from private to public management. Of the 78 cities in the United States having a population in 1900 of over 50,000 only 19 have private ownership of waterworks, the most important being San Francisco, Omaha, Los Angeles, and Memphis.

The witness further states that he has known a great many waterworks' engineers who were very proud of the fact that they were connected with the public enterprise, and that the sentiment is almost overwhelming that water should be owned and managed by the community. (97.)

Professor PARSONS asserts that, according to Baker's Manual of American Water Works, charges of private water companies in the United States average 43 per cent above those of public waterworks. (146.)

3. *Municipal ownership of electric-light plants.*—Professor BENIS says that there is a rapid increase in the extent of municipal ownership of electric-light plants in the United States. At present the capitalization of privately owned plants is \$265,181,920, and the cost of publicly owned plants is \$12,902,677, but the private plants are largely overcapitalized and their cost of construction is not so much greater than that of the publicly owned plants as these figures would indicate. The acquisition of plants would be more rapid were it not that many legislatures, under the influence of corporations, either refuse to allow cities to operate plants or forbid them to sell light to private consumers, restricting them to furnishing public light. In other cases the terms under which private plants may be acquired are regulated in such a manner as to make acquisition expensive. Thus, in Massachusetts the law requires that municipalities desiring to operate electric-light plants must first offer to buy out existing plants at a price to be determined by referees. The law implies that while referees shall not take account of the probable increase in earning power in the future, they are to base their valuation on existing earning power, which is often excessive because of monopoly prices. Several cities complain that they have paid very high prices—much more than the original cost—for plants which were worth practically nothing. There is a growing sentiment in this State in favor of more liberal provisions regarding the construction and acquisition of electric-light plants. (88, 92, 98.)

Professor PARSONS introduces the following table as showing the cost of electric lighting in a number of cities which have changed from private to public ownership.

Column 2 is made up of the operating cost plus 5 per cent on the investment for insurance, taxes, and depreciation, and 4 per cent for interest, except where the actual interest is known.

Cost of electric light before and after public ownership.

City.	1.	2.	3.
	BEFORE. Price paid private company per street arc just before public operation began.	AFTER. Cost per arc, including operating expenses, taxes, insurance, depreciation, and interest.	Cost under complete public ownership, excluding interest, there being no interest when the people own the plant free of debt.
Aurora, Ill.....	\$325	\$72	\$61
Elgin, Ill.....	228	65	56
Fairfield, Iowa.....	375	95	80
Marshalltown, Iowa.....	125	40	30
Bay City, Mich.....	100	67	58
Detroit, Mich.....	132	83	68
Allegheny, Pa.....	180	86	75
Bangor, Me.....	150	58	48
Lewiston, Me.....	182	58	52
Peabody, Mass.....	185	73	62

Mr. A. D. ADAMS, an electrical engineer of Boston, states that where gas works have been supplanted by electric-light plants the result has been more a question of quality than of price. Electricity can not compete with gas on a private basis, and is selected by the great majority of users because they like it better, though more expensive. (282, 283.)

4. *Electric-light plants in Massachusetts.*—Mr. A. D. ADAMS states that for the last 2 years he has been investigating the subject of electric lighting in Massachusetts for the purpose of making comparisons between municipality-operated plants and plants operated by private companies. In 1891 Massachusetts passed a law allowing towns and cities to buy existing electric-light plants or to build new ones. The law required existing plants to be purchased by the municipalities under certain conditions, instead of permitting construction of new plants. Three municipalities in Massachusetts operate gas plants in connection with their electric-light plants. The investigation of the witness covers 14 cities and towns which operate their electric-light plants only. These towns ran in population from a little over 1,000 to a little over 27,000, and the plants have been in operation from 3 to 13 years, two of them having been constructed prior to the passage of the law of 1891. (275, 276.)

Mr. A. D. Adams states further that in order to compare the results attained in these municipal plants with the results in private plants it is necessary to reduce all the earnings of the municipal plants to a money basis. In some of the municipalities the plant in addition to furnishing all the public light also furnishes light to private consumers. It is a difficult matter to determine the value of the public lighting furnished by cities because of the great variance in the prices paid for electric lighting in private municipalities in Massachusetts as well as elsewhere. His plan therefore has been to take a number of Massachusetts towns and cities, all as nearly as possible of the same population as those having municipal plants, and find the average price in those towns paid for electric-light service. For 17 such towns the average price paid for arc and incandescent lighting per lamp hour is 4.7 cents for arc light and 1.2 cents per incandescent lamp. On this basis he finds the value of the public lighting furnished in the 14 municipal plants for the year ending June 30, 1899, to be \$173,429.40. The income of those towns from the sale of electric light and power for the same time was \$83,948.38, making the total earnings \$259,377.78. The operating expenses were found to be \$148,493.63, leaving net earnings of \$108,884.15. The aggregate total investment for the municipal plants in these 14 towns and cities was \$891,591, making the ratio of net earnings for the total sum of money invested 12.3 per cent.

These statistics show, says the witness, a higher proportion of profit than in private plants. His comparison is made as follows:

The investments of private corporations in the electric light and power plants in Massachusetts, including Boston and the other large cities, are as follows: Capital stock, \$10,926,030.40; bonds, \$3,771,200; notes payable, \$1,933,215.46, or a total of \$16,630,445.86. Under the law of Massachusetts the stocks and bonds of corporations operating public utility plants can only be issued for money or its equivalent actually paid in, so that the capitalization given represents actual value. The net earnings of these plants in 1899 were \$1,699,265.96, or 10.2 per cent on the investment. This comparison takes in all the large cities of Massachusetts except 2 or 3 good-sized towns where the electric and gas plants are owned by a single corporation, and consequently includes those cities where the sale of electric light and power is supposed to be more profitable than in the smaller cities where the municipal plants exist, because small towns and cities do not afford so profitable a field for the sale of electric energy as do the large cities. (278, 279, 281.)

Mr. Adams states that the next basis of comparison taken by him is therefore with all the electric plants operated by private corporations in Massachusetts cities having less than 30,000 population, there being 43 such cities. The total amount invested in electric-light plants in these 43 cities is \$3,797,862.56, their net earnings being \$246,067.67. The ratio of net earnings to total investment is found to be 6.4 per cent, as compared with 12.7 per cent for the municipal plants in the 14 cities mentioned. The calculations are based entirely on the 1,200 candlepower for arc lights. Most of the plants furnish light only, while two or three of them furnish light and power. There is very little call for electric power in small places. (279, 280.)

Mr. Adams concludes therefore that the result of his comparison of the 14 cities having municipal control of their electric plants with the cities with private corporations shows that the capital invested by the municipalities in electric plants is more economically invested for the community and is earning a better return than capital invested through the medium of private corporations.

The witness states that he found the people in Massachusetts towns very well satisfied with municipal ownership of electric plants. No municipal plants have been bought out by private corporations, but in several instances the municipal authorities have bought out the private corporations. The municipal plants, under the law, must charge a depreciation of not less than 5 per cent per year, but so far as the witness knows there is no fixed per cent of depreciation for the private plants. His explanation as to why the municipal plants show a higher per cent of profit than

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the private plants is that the municipal plants are more efficiently and carefully managed. The people in the small places where municipal plants are operated are very jealous of any unnecessary expenses, while the State gas and electric light commission takes much interest in these plants, so it is not possible for them to run into excessive outlays or to operate at a loss.

There are private gas works in 8 of the towns having municipal electric plants. The city of Taunton, which has a public electric plant, has a gaslight company with a capital stock of \$80,000. These gas plants, of course, reduce the use of electricity by private consumers. (281-283.)

Mr. Adams makes another comparison on the basis of the actual prices charged by private companies for public lighting in Massachusetts and the actual cost of operation in municipal plants. The figures in each case are reduced to cents per hour for arc lamps and incandescent lamps. The municipal figures include interest on the plant and depreciation at the rate of 5 per cent. The 2 tables thus prepared are as follows:

Prices per hour paid for street lamps under private operation.

Municipality.	Prices, 1,200 candle- power arc lamps.	Prices, 16 to 25 candle- power in- candescent lamps.
	Cents.	Cents.
Pittsfield	3.6	1.02
Marlboro	3.8	.74
Amesbury	4.7	1.80
Leominster	3.2	.71
Gardner	4.8	.96
Abington	4.8	.99
Millford	4.6	1.04
Athol	5.5	1.10
Greenfield	4.4	1.40
Andover	5.1	1.07
Frammingham	4.6	1.10
Whitman	5.9	.92
Orange	4.6	1.40
Westboro	1.5	1.50
Union	5.8	2.10
Winchendon	5.4	1.09
Amherst	5.9	1.00
Average cost per hour	4.7	1.20

Cost per hour of operation of electric lamps by municipal plants, including interest and depreciation, year ending June 30, 1899.

Municipality.	Incandes- cent lamps, 25 to 32 candle- power.	Arc lamps, 1,200 to 2,000 can- dlepower.
	Cents.	Cents.
Belmont	2.05	8.19
Braintree .....	.98	3.92
Chicopee .....	.....	3.65
Danvers	1.07	3.21
Hingham .....	.....	.....
Hull	4.34	.....
Marblehead .....	.59	2.29
Needham .....	.83	.....
North Attleboro .....	.88	.....
Peabody .....	.75	2.02
Reading .....	.....	5.55
Taunton .....	.....	3.41
Wellesley .....	.56	.....
Hudson	1.38	7.88
Middleboro	2.01	6.83
Wakefield .....	.....	6.10
Westfield .....	.55	3.05

He points out that this table shows that in the majority of cases the cost per hour of lamps operated by municipalities is lower than the average for the private plants, in some cases scarcely exceeding one-half the private rate. (277, 281.)

C. Capitalization. Charges under private and public ownership.—1. *Overcapitalization of private municipal monopolies.*—Professor Bemis declares that there is a very slight connection between the cost of construction and the capitalization of private corporations conducting municipal monopolies or utilities. Usually capitalization is based on earning power. Often the bonds issued by such corporations cover the cost of construction, while the stock, even in many cases preferred stock, represents only the hope of extra profits. Overcapitalization deceives the public as to profits. Moreover, investors will pay more for two shares of stock bearing 4 per cent interest, than for one share of 8 per cent stock. Finally, the banking syndicates, which are largely interested in these corporations, desire large stock issues because the profit in floating the stock is greater for the promoters and underwriters.

It is frequently the case in the initiation of these plants that a broker is employed to arrange for floating bonds, and he receives a large block of stock as a bonus. It is doubtless necessary to issue enough stock to obtain the necessary funds, and if stock can not be sold at par there must be overcapitalization; but if fewer securities were issued it would not be so difficult to sell them at par; indeed, with the expectation of profits based on monopoly prices, stocks representing the actual value could be sold much above par. (88, 90.)

Mr. Foote says that in authorizing the construction by a private company of a plant for quasi public service, or in authorizing any consolidation of existing interests, he would provide that the investment account, or the "initial account," as he calls it, should be determined in one of three ways:

1. Either by agreement between the municipalities and the corporations;
2. By arbitration; or
3. By asserting the right of eminent domain.

After that point had once been established, a proper system with public accounting would permit no addition to that investment unless it was certified to by the State auditor as being necessary and the money actually invested for the full amount entered into the account. (117.)

2. *Overcapitalization of street railways.*—Professor Bemis says that in Massachusetts there has been since 1885 a fairly effective restriction on the issue of securities by street-railway corporations. This has prevented the issue of capital stock except for actual improvements and extensions. We find accordingly that the average capitalization per mile of single track for street railways in that State was \$44,683 in 1897. In the rest of the country the average capitalization per mile of track was twice as great. In 9 States in the Mississippi Valley, ranging from Ohio and Kentucky to Minnesota and Missouri, where the same number of cars are operated per mile of track, the average capitalization of street railways was \$91,500 per mile. In the Atlantic States, from New York to Virginia, where 23 per cent more cars are operated per mile of track than in Massachusetts, the capitalization per mile of track was three times as great—\$138,600. In 1900 the capitalization of street railways in Massachusetts was only \$38,500 per mile, while in the Mississippi Valley, in the States named, it was \$91,360, and in the Atlantic States \$153,650. (88-89.)

Professor Bemis says further that the steam railroads of the country are capitalized at only \$59,610 per mile, while street railways are capitalized at \$90,000 per mile. The latter do not have to pay for right of way. The net income above operating expenses per mile of road is more than 50 per cent greater for street railways than for steam railways, while the entire passenger receipts on street railways are half as great as the passenger earnings of steam railways. (90-91.)

Mr. Foote, while not criticising the testimony of Professor Bemis relative to the capitalization of street railways, calls attention to different items which enter into the cost or capitalization in the several States. In one State the cost might mean simply the laying of the track on the street; in another it might be the laying of track through a street and paving a street for 3 feet on each side of the rails; while in Philadelphia, for instance, it means the rebuilding of the street entirely, paving it from curb to curb. Therefore until all the items which enter into this cost and capitalization are fully known it is impossible to make any comparison that would be of any great value. There is not sufficient information at hand under the different systems of accounting in vogue in different parts of the country to determine the relative merits of public and private ownership of municipal monopolies. (117, 118, 120.)

3. *Overcapitalization of gas plants.*—Professor Bemis declares that a capitalization of \$3 or \$4 per 1,000 feet of annual product of gas is considered by experts to be ample to cover the real structural value of gas plants. The average capitalization of gas companies in the large cities is about \$9 per thousand of annual product. In 1898

the Mutual Fuel and Gaslight Company of Hyde Park, in Chicago, was capitalized at \$2.69 per 1,000 feet, and was making a very large profit by selling gas at an average price of 87 cents, but when it entered into combination with the People's Gas Company its capital was raised to \$9 per 1,000 feet. (90.)

4. *Cost of gas, and price.*—Professor BEMIS says that the report of the United States Department of Labor, recently published, shows that returns of several hundred gas companies indicated an average cost of manufacturing gas and delivering it to the burner, aside from taxes, interest, and depreciation, of about 46 cents per 1,000 feet. If 5 cents were added for taxes, 7 cents for depreciation, and 7 per cent on an average capitalization of \$4 per 1,000 feet of annual product (a reasonable capitalization), the cost will be brought up to 86 cents. But the average price of gas charged by the largest companies is \$1.14, which indicates an excessive profit. Recently the Mutual Fuel and Gaslight Company of Hyde Park, in Chicago, reported that the cost of manufacturing gas, aside from interest and depreciation, was 37.45 cents per 1,000 feet. The company further stated the value of its tangible assets at \$3.80 per 1,000 feet of annual product. Eight per cent on this added to the cost would have made the price 67.5 cents. The actual average price was 87 cents, but this was raised to \$1 after the consolidation with the People's Gas Company. In New York City the price until recent years was \$1.25, but by an act of the legislature it was reduced 5 cents yearly, and reached \$1 on January 1, 1901.

Professor Bemis asserts further that the differences in the cost of coal do not affect the cost of gas as greatly as is generally supposed. A ton of coal will make about 10,000 feet of gas, so that if coal goes up \$1 per ton the cost of gas would increase 10 cents in the absence of residual products, but the value of coke and other residuals rises with the rise in coal, so that the net additional cost from an increase of \$1 per ton on coal is only from 5 to 7 cents per 1,000 feet of gas. In the manufacture of water gas 4 or 5 gallons of crude oil are used in making 1,000 feet. In Ohio this oil costs 2 or 3 cents per gallon, and an increase of 50 per cent in price would only cause an increase of 6 or 8 cents per 1,000 feet in the cost of gas. (89-90, 94.)

5. *Electric plants—Rates under private and public ownership.*—Professor BEMIS says that the charges of municipal electric-light plants are much lower in general than those of privately owned plants. In many instances public plants are restricted to the furnishing of light for public purposes, so that they could not be expected to operate as cheaply as plants furnishing private light also. Professor Bemis admits that there is often a misunderstanding in comparing public and private plants, from the disregard of interest, depreciation, and taxes in calculating the cost of public plants.

In the municipal plant in Chicago, continues the witness, the cost of furnishing an arc light per year was formerly, in 1895, \$96.76. By more efficient administration and civil-service reform the cost was reduced to \$55.93 in 1899. In Detroit there are 2,000 lights under public management, and the operating expenses, which were at first about \$102 per year, have been reduced to \$66.45, including 4 per cent on the cost, 3 per cent for depreciation, and a proper amount for taxes. The private company before the construction of this plant offered a ten years' contract at \$102 per year, although it also supplied private consumers. In Allegheny the cost of operating 1,300 arc lights in 1899 was \$47.35 each, while by adding 4 per cent for interest and 5 per cent for depreciation and taxes the cost is brought up to \$71.17. In Pittsburgh, across the river, a private company charges from \$95 to \$100 for the same kind of service.

A large majority of municipal electric plants are allowed to do only public lighting. In England and in Massachusetts municipal plants are allowed also to furnish supply to private consumers. (97, 98.)

Referring to the testimony of Professor Bemis, Mr. FOOTE asserts that while on the face of the reports it would seem that there was a saving in the operation of the Detroit electric plant by the city of about \$12 yearly per arc light, yet he believes, from personal examination, that if all the items entering into the cost of the operation of the plant were fully known, including interest, depreciation, and loss of taxes, it would be found that the saving is more apparent than real. The private company itself could, and perhaps would, have reduced the price substantially to the same extent as the city has done. While the accounts of Detroit are as well kept as those of any other municipality, still there is not such uniformity as would warrant a just conclusion on the relative merits of public or private operation of the plant. (114.)

6. *Street-railway fares in England.*—Professor BEMIS states that in England fares are graduated according to distance in the case of private as well as public management. The tendency under public management is to increase the distance one can ride for a given fare, and a few cities are talking of introducing the uniform fare like America. The uniform fare has already been introduced in a private subway recently completed in London. (102.)

D. Municipal ownership in England.—Professor BEMIS thinks the best place to study municipal ownership is in England, because it has had a longer experience than any other country. The movement has, however, been checked there in the matter of water and gas by the high prices that had to be paid to buy out the plants, the private companies there having originally secured perpetual franchises. The keen regard the English have for vested interests in property made the prices of sale high. Within the last 10 years, however, some 40 gas plants have changed from private to public management, and over half of the water plants are under public management, while a little over half of the gas sold outside of London is made and sold by municipal plants.

In the case of electric lighting and street railways, which are of more recent development, the public has become aware of the dangers of perpetual franchises, and consequently these latter companies when chartered have been given franchises for very limited periods—21 years ordinarily in the case of tramways, and from 21 to 42 years in the case of electric light. In other cases the cities have built their own plants originally. Nearly one-half of all the electrical supply, both for lighting and power purposes, is in the hands of the cities. In many instances these two classes of service are combined. The witness further states that his own investigations show that in the case of tramways, electric light, and water there is especial satisfaction in England with the results of public management, and that the transfer to public management, whenever it has been made, has been attended with enormous development of plant and output and a large reduction in charges.

In the case of publicly managed gas works one of the greatest difficulties in England consists in keeping the workmen energetically employed to the same degree as in private management. While well paid, they do not yet fully appreciate that they are working for the public. Nevertheless public employment tends to create a somewhat higher morale and a better feeling of public responsibility than working for private companies. The municipal councils in England are composed of a very fine class of business men; they include often prominent labor leaders as well. Some complaint is made by engineers in the public plants that it is harder to get an increase in salary than in a private plant, because of the publicity that is given to the subject, but there is more liberality in paying them than there was formerly. (94-95, 102.)

Advantages of municipal operation.—Professor BEMIS enumerated several advantages which have come from municipal operation, especially as seen by him in Great Britain. Municipalities charge less to the public than the private companies and give the same or even a better service. There is a financial advantage in that the municipality can borrow at from 3 to 3½ per cent, which is very much below the rate charged the private companies. In public management there is fully as much enterprise and a greater readiness to introduce the latest inventions, this being accounted for particularly by the fact that they pay higher wages and work the men fewer hours, and therefore feel the desirability of having as much labor-saving machinery as possible. The consumption of the product or service has greatly increased. In Great Britain there is very little difference in operating expenses between public and private corporations, aside from interest and dividends. In municipalities better machinery is put in, which counterbalances any tendency to increase the labor cost. In the case of gas the net cost of production is a trifle less in municipal plants than in private companies, although the men are paid better wages. The municipal plants are growing very rapidly, but owing to the fact that they cheapen the price they get along without adding to the force. A better class of men than formerly has been found willing to go into the city councils in England and to serve the public in the management of the financial interests. (95, 96.)

Street railways in Glasgow.—Professor PARSONS declares that when the city of Glasgow took over the management of the street railways, in 1894, fares were reduced at once about one-third. Fares are graduated according to distance. The average fare was at first reduced to 2 cents, but later reductions have brought it down to 1½ cents, while more than 35 per cent of the fares are only 1 cent. The private tramways had collected an average fare of 3.84 cents. It is true that the density of traffic is greater and that the distances are usually shorter in Glasgow than in American cities, and it is impossible to get the average rates per mile. The average number of passengers per car mile in Glasgow is 12, in Boston 7, in New York, on Broadway, 12, and in Chicago 5 or 6. The witness does not think that our street-car companies could afford to apply the Glasgow fares, because of the longer distances and the higher wages. Nevertheless, the fact that fares were reduced under public ownership in Glasgow, and that the city with the lower fares realizes at least as high a profit as the private company did, shows the possibility of economical and satisfactory public operation. At the same time the conditions of labor have been improved and the character of the service is very much better, electric traction having been introduced. (140, 147.)

E. Regulation of private ownership.—1. General discussion.—Professor BEMIS insists that the municipality has the right to regulate corporations operating public utilities, and especially to require publicity from them. There is undue secrecy in the operation of private companies holding municipal franchises. There ought to be a difference between them and ordinary private enterprises. They are monopolies in most instances; they get their rights by grant of the State or the city; they are given the right of eminent domain—the right to use the streets and the highways. The power which they have over the public, as well as the special privileges which the public grants to them, accordingly justify public regulation to prevent abuses. Professor Bemis especially favors the requirement that the accounts of these quasi-public corporations shall be open to public inspection and subject to public regulation. (91, 93, 98.)

Mr. Foote holds that no public need should be supplied under the management of a political monopoly that can be supplied with equal advantage to the users of the service under the management of any industrial monopoly, the best interests of the users of the service being the first object of the protection and care of the State. He lays down two general propositions:

(1) That an industrial corporation organized to supply a perpetual municipal need shall have the exclusive right to supply the need perpetually.

(2) That all accounts shall be honestly and correctly kept; that economic thrift shall be insisted upon in every department, and that charges for the use of service shall bear a fixed relation to the necessary cost of production.

The basic principle in the settlement of this question is that there should be a uniform system of accounts of all governmental offices and of all quasi-public monopolies. (103, 104.)

Mr. Foote quotes from a paper by the State examiner of Wyoming, Mr. Henderson, opposing public ownership of public utilities and expressing the opinion that a uniform accounting and State supervision would accomplish the desired results much better. The public-service company should be permitted—

First. To retain from its earnings the interest on its bonded debt.

Second. A reasonable interest on the investment.

Third. A reasonable profit upon the investment.

Fourth. A sinking fund for the redemption of the bonds as they mature.

Fifth. A reasonable amount for maintaining the physical condition of the property. The residue, if any, should be divided between the company and the municipal corporation. (110.)

2. *Public regulation in Massachusetts* (see also under *State Railroad Commissions*, p. CLXXII, and *Capitalization*, p. LXII).—Professor BEMIS says that Massachusetts has created a street railway and railroad commission and an electric-light and gas commission, with very considerable powers to regulate these classes of corporations. These commissions have the right to compel the companies to make reports in such manner as they see fit. They may prescribe the methods of bookkeeping, although as a matter of fact this has not been done to any considerable extent. They may send auditors to examine the books. The two commissions do not publish all the facts which they gather, as the witness believes they should do. Moreover, they are not supposed to take any direct action unless complaint is made by city officials or by 20 consumers. If their decisions are not obeyed they may inflict penalties, although more usually appeal is made to the legislature, which issues special orders. There had been no appeal against the decisions of these commissions for a number of years until a decision as to the gas company in Haverhill, in 1899, was appealed to the United States courts. The Massachusetts law also requires the consent of these commissions for any increase in the capitalization of the corporations. (88-92.)

Referring to the laws of Massachusetts, Mr. Foote states that the commissions created by those laws require reports from all corporations, municipal as well as private, but that there is no uniformity in their accounts. They are kept in a way only sufficient to enable the commission to make its report. The law does not require that the price of the service should be based upon cost plus a proper profit; it does not go far enough. (120.)

3. *Regulation of public utilities in England.*—Professor BEMIS states that great interest is manifested in England in the regulation of public utilities, but that the tendency toward public ownership is strong. Regulation there is always by act of Parliament. Companies can not increase their capitalization; they can not even buy an extra foot of land without going to Parliament for permission, at which time an opportunity is always offered to investigate charges and efficiency of service and to prevent any watering of stock. There is also an auditing of the accounts of the companies by central boards. Electric-light companies are required to submit complete

accounts to examination by the board of trade. The accounts of the municipalities also are very carefully audited by 2 auditors, one selected by the city council and the other elected by the people at large, and these auditors exercise a powerful influence. The great lesson to be learned from these attempts at regulation is the importance of publicity of accounts of the municipalities and also of private companies furnishing quasi-public service. The English city governments have thus been preserved from many abuses that exist here. (93.)

4. *Municipal ownership and private operation.*—Professor BEMIS states that in Great Britain there were at one time 44 instances of the ownership of the street-railway track by the municipalities with private operation of the railway, but that the companies did not seem to be progressive, and as their franchises ran out the plants are being taken over very generally and operated by the municipality. He does not know whether the unsatisfactory character of the operation by the private companies was due to the system of ownership or whether it was due to the limited duration of the franchises, which were for 21 years only. While the English people are opposed to the system, it yet has had its benefits, in that it enabled them when they did want public ownership to get it more easily and cheaply than in any other way. (102-103.)

F. Uniform and public accounting—Municipalities and public-service corporations.—1. *General advantages.*—Mr. ALLEN RITLEY FOOTE, editor of Public Policy, of Chicago, believes that there should be uniformity and publicity of accounts of corporations performing quasi-public services and of municipalities, so that the effect of each essential economic factor will be shown, to the end that correct comparative statistics may be obtained as a basis for intelligent, economic discussion and legislation. An agreement should be had as to what items properly constitute the cost of public utilities, and those items should be all included in any statement of cost. The correct principle as to the returns which should be made by a corporation receiving franchises from the public is in the nature of a quid pro quo, the duty of the government being to see that the people get a fair return for the grant. The only way to ascertain whether this is done at all is to have the accounts kept by uniform methods and made public. There should be no secrecy in respect of the corporations. The public is generally willing that a corporation should have a reasonable profit, say 8 or 10 per cent, upon its actual investment. When the accounts are properly kept the price of the service can be very readily fixed. If the business of the country were actually done on this basis an economic condition would result which would make the United States master of the world in commerce. (115, 116.)

Mr. Foote asserts that the system of uniform accounting as applied to municipal plants would, if the accounts are properly audited by an auditor independent of the corporations and the political parties, make a uniform system of cost in the purchase of all supplies by municipalities and would tend to create a uniformity of price for the sale of the municipal product; that no municipality would pay more, for instance, for coal used in the manufacture of gas than any other municipality under the same conditions. A large percentage of the failures in municipal establishments come from the fact that the men who manage the affairs do not know how to figure the cost of the operation of the plants, because their system of bookkeeping is inefficient. (116.)

Professor BEMIS thinks that legislation as to publicity of municipal public-service corporations would have to come from the States, but that there should be uniformity of State legislation along certain lines. The United States Department of Labor might well continue its investigations of cities and report upon them annually. While the Department has no authority to dictate any form of bookkeeping, it would have an influence in calling the attention of the country to the need of it the more it tried to get the information. In Massachusetts, in his opinion, the gas and electric-light companies admit that the publicity given to their accounts in that State has been of great benefit to them in showing them what some companies are doing, and thus leading them to introduce improvements. In the States power should be conferred upon the State auditor to investigate and audit the accounts of quasi-public corporations using the streets, and also the accounts of municipalities. While there is nothing radical in this course of procedure, it is susceptible of great results. (101.)

Professor BEMIS is of opinion that, inasmuch as public utility companies got their right to exist from the State, and are thus quasi-public corporations, the people should have the right to demand publicity as to the cost of construction and operation. There should be uniformity of accounts in all plants. There is now so much secretiveness that even the United States Government is not permitted to ascertain any of the facts except under the pledge of absolute secrecy as to names of plants. (91.)

2. *Necessity of public accounting in national affairs.*—Mr. FOOTE holds that it would

be a very great benefit to the Government if the Interstate Commerce Commission had the authority to go into the accounts of the railroads and audit them as they ought to be audited, and that if such were done the railroad tariffs of the country would be very materially affected. A uniform system of public accounting and independent auditing of public accounts in the new possessions of the Government would be of very great benefit, and would be easy of introduction there. (122.)

3. *Uniform accounting in Wyoming.*—Mr. Foote states that Wyoming has done the best work in the line of uniformity of public accounts of any State. That State has had for 10 years an officer known as State examiner, who has authority to examine the accounts of all the State institutions, and all other accounts affecting the public interest. He may enter any public office at any time without notice, and may even turn out the incumbent of the office if he finds a condition that justifies it. He can compel the attendance of witnesses, the production of books and papers. He is responsible only to the governor of the State. Mr. Foote thinks that the same principle would apply to any of the larger States, necessitating, of course, assistance to an examiner where the work required it. He further states that the duties of the examiner relate only to purely public accounts and not to the quasi-public corporations operating municipal monopolies. (104, 105.)

Professor Bemis called attention to what he considered the great work now being done in Wyoming in the auditing of municipal and county accounts. In that State all of the accounts of the counties and subordinate local bodies have to be audited by the State auditor, who prescribes their methods of bookkeeping. The American Economic Association, the New England Waterworks Association, and other like bodies are agitating the extension of this sort of bookkeeping to other States and municipalities, and its application to local monopolies in private hands. (94, 95.)

4. *Views of the State examiner of Wyoming.*—Mr. Foote introduced as a part of his testimony a paper read by Mr. Harry B. Henderson, State examiner for Wyoming, before the League of American Municipalities at Charleston, S. C., in December, 1900, the substance of which was as follows (pp. 105-110):

The system of uniform accounting and public auditing or examination superinduces a higher standard of intelligence and morals among office seekers and officeholders, and lessens the burdens of taxation. The Territory of South Dakota was the first to provide for a Territorial examiner, whose duties, however, were quite limited and superficial. Minnesota afterwards provided for an examiner, and included in his duties the examination of accounts of building associations; but Wyoming was the first and only State so far to provide for the thorough examination of accounts of all State, county, and local officers, accounts of State institutions and State banks, and, in fact, every public account. The only opposition to a measure of this kind came from officeholders, schoolbook companies, bridge companies, individual members of boards of trustees, etc., none of whom had any material interest in the economical administration of the affairs of the government.

Mr. Henderson defines uniform accounting as being a system of accounting where all the accounts are kept alike, or in the same regular form; so that if an officer from one county should go into a similar office in another county he would at once be able to keep the accounts and perform the duties of the office.

The principal objects sought to be accomplished by having a system of uniform accounting are: (1) To prevent lavish expenditure in the use of public moneys by public servants; (2) that public affairs should be administered as carefully as private interests; (3) that in the administration of public affairs an equivalent should be rendered for every dollar expended; (4) that it is necessary to a correct determination of the policy of municipal ownership to have a uniform system of accounting so as to determine the cost of construction and operation of any particular industry; (5) that it is the right of every taxpayer to have public accounts so kept that the various expenditures made for any purpose whatever should be clearly shown; (6) that the principle is an evidence of progress and forms a base upon which the revenues for the support of the government can be estimated with a reasonable degree of certainty.

Mr. Henderson in his paper asserts that there are many advantages to be derived from the supervision of public accounts, among which he enumerates:

First. A curtailing of public indebtedness. In this connection he states that in Wyoming he has succeeded in securing the enactment of a law making it an offense to create any floating indebtedness in excess of the actual receipts of the current year, and providing that any such indebtedness shall be null and void, but would operate as a lien against the officers creating the same and their bondsmen. The result of this is that every county in the State is now on a cash basis, and the expense of maintaining the county and municipal governments has been decreased.

Second. State supervision eliminates the opportunities for embezzlement, and at the same time corrects the innocent mistakes of fiduciary officers.

Third. This system reduces taxation. (105-110.)

5. *General interest in public accounting.*—Mr. FOOTE states that within the last 2 or 3 years the movement in the direction of uniformity in public accounts has grown very rapidly. There are some 12 or 14 organizations, representing every species of public utility, and different organizations of municipal reformers, at present on record in favor of initiating this system of accounting, and they have committees appointed studying the question. He calls attention to certain proposed bills, prepared by himself, which he states will be introduced in many of the legislatures at their next sessions.¹ (122, 123.)

The League of American Municipalities adopted the following resolution in 1900: "Resolved, That uniform municipal accounting is desirable, and that the executive committee of this league is authorized to cooperate with other organizations to that end, through its president and secretary, or in such other manner as it sees fit." (111.)

G. Street railway development and problems.—1. *Effect of application of electricity to street-railway systems.*—Hon. CHARLES FRANCIS ADAMS, of Boston, says that the introduction of electricity has entirely changed the character of the street-railway system and is really introducing a subordinate system of railroads. The motive power is the only difference between the street railways and the railroads. All the conditions in respect to street railways have changed so far as speed is concerned, and they are rapidly changing with regard to the methods of doing business. Sometimes the street railways go through at least a dozen different municipalities and operate roads 50 miles in length. The time is not remote when these street railways will have to be operated at a rate of speed which has hitherto been incompatible with the joint use of the street with other conveyances. In order to perform their functions they will have to run very large cars close together. They will have to carry freight and do other things not done in the past. The cars are now being made very much heavier than used to be the case, and the solidity of the track used is not in any way different from that of the railroad. With the heavy cars and the solid track, a very great rate of speed can be made with safety. (825, 828.)

2. *Growth of street-railway systems.*—Mr. ADAMS says that although the recent growth of street-railway systems has been very great, the appliances and methods are all tentative and elementary, and that street-railway systems are going to be developed to an extent beyond anything which can now be realized. The time will soon come when there will have to be a separation of the highway from the railroad traffic. In the cities there will be elevated roads or subways; in the country districts, instead of running on streets, as is now the case, the street railways will run on private rights of way. In the West, street railways now run for miles and miles on private rights of way through the country. (826, 827.)

3. *Legislation for street-railway franchises.*—Hon. CHARLES FRANCIS ADAMS, of Boston, says that in order to secure satisfactory results from our street-railway systems there will have to be a great deal of new legislation. We must go back in legislation and build from a new foundation. A new power has come into existence which requires radically different treatment from anything we have had in the past. It would require great study to determine what legislation should be enacted. The one thing that is clear is that there should be such legislation as would permit the separating of highways and street railroads. (826, 829, 830.)

Hon. CHARLES FRANCIS ADAMS, of Boston, says that the street-railway companies of Massachusetts are organized under a general law, but have to obtain their franchises from each municipality in which they operate. This system of local franchises is part and parcel of the old theory that a street railway is merely a matter of local interest, whereas to-day the street railway runs through a number of different towns and has to face the regulations and the selectmen of those different towns and satisfy them all. The system works badly and is an impossible one under present conditions. (827, 828, 830.)

Mr. Adams further says that in Massachusetts street railways have always had indefinite franchises; that is, franchises subject to revocation at any time by the local authorities. It is an absurd system of tenure, and it would not have been expected that any large investment of capital would have been made under it; but as a matter of fact it has been found that more satisfactory results, political and economical, have been produced under it than under any other system yet devised. In many of the Western States, where limited time franchises, subject to renewal, have been granted, the renewal of the franchises has been one of the most crying causes of municipal corruption. (829, 830.)

4. *Comparison between American and European street railways.*—Mr. C. F. ADAMS says that there is not a street-railway system in Europe that he has seen or has

¹ Such a bill was actually passed in Illinois.

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knowledge of which would bear comparison with the street-railway systems in American cities. Everything up to date which the European systems have is purely American. All the companies want is to get their money back, and they get it back by giving the poorest of accommodations and by managing their traffic in the most niggardly way. The European municipalities are very restrictive. They have been so afraid of being cheated that they cheat themselves and will not give an opportunity for that development which is essential to any enterprise. The Glasgow street-railway system is nothing but a very imperfect American system. Fares are graded according to the distance traveled. There is no system of transfers, such as is found in this country, by which a passenger can ride 15 or 20 miles for 10 cents. (828.)

5. *Massachusetts Electric Company.*—Mr. JACKSON, a member of the Massachusetts State board of railroad commissioners, says that the Massachusetts Electric Company is an unincorporated association which owns stocks in certain street-railway corporations, very largely those in eastern and southeastern Massachusetts. These stocks stand in the names of certain persons as trustees. The trustees, who are 15 in number, have a legal title to the stock and control the management of the street-railway corporations in which they own by voting the stock. They exercise practically the ordinary duties of a board of directors. The association issues preferred and common shares and has a so-called capital stock. Strictly speaking, the association has no stock. It has no shares known to the laws which cover the issuing of stock and which limit the purposes for which stock may be issued. Mr. Jackson's understanding is that the Massachusetts commissioner of corporations does not pass upon the ownership of the certificates issued by this company.

In order to equalize things and to make the prosperous companies help out the weaker companies, there might be a temptation for the trustees to improperly manage some particular company or companies which they control, but these trustees are governed by the same laws which apply to the ordinary holders of stock. The Massachusetts board of railroad commissioners, in passing upon questions which come up in connection with the street railways controlled by these trustees, pays no attention whatever to the ownership of the stock. The financial interests or affairs of the Massachusetts Electric Company receives no consideration from the board of railroad commissioners. Mr. Jackson thinks that the certificates issued by the Massachusetts Electric Company aggregate something more than the actual investment value. (844, 845, 846.)

6. *Boston street-railway system.*—Mr. J. F. JACKSON, a member of the Massachusetts State board of railroad commissioners, says that the Boston Elevated Railway Company now controls all the surface street railways operated in Boston. There is only one suburban company independent of the Boston Railway Company which makes Boston its terminal. There are two distinct methods of street-railway operation now in Boston—subway and surface. The elevated railway will be in operation very soon. The elevated system goes from one end of the city to the other, and passes through the congested district; the subway is in the congested district itself; the surface roads are in both suburban and congested districts. The general opinion is that the subway has been a success. (843, 844.)

7. *Vestibules on street cars.*—Mr. JACKSON, a member of the Massachusetts State board of railroad commissioners, says that a statute was passed in Massachusetts making it mandatory upon all street railways outside of Boston to have vestibules on the cars during certain winter months, for the protection of the motormen and conductors. It was contended by the Boston Elevated Railway Company that vestibules would be dangerous in some of the narrow streets of Boston. The legislature referred to the board of railroad commissioners one question, viz: Whether or not it was consistent with safety that the Boston Elevated Railway Company should use vestibules on its street cars. The board held several public hearings and made inquiries all over the United States and Canada, with the result that it decided that vestibules could be used with safety, under proper conditions. As a result of that decision the Boston Railway Company must equip its cars within a certain number of years with vestibules. In order that there might be no injury done, however, the board interpreted the statute so that the company is to test the vestibule in the most difficult places first. If the decision of the board that vestibules are safe is proved to be erroneous it may recall its recommendation. (842, 843.)

XVI. RAILWAY LABOR. LABOR QUESTIONS GENERALLY.

[See, also, as to conditions of labor in anthracite coal field, p. CLXIV.]

A. Employment and discharge.—1. *Conditions of entrance to employment.*—Mr. FULLER, representing the brotherhoods of railway employees, says that railroad companies have various rules regarding the conditions of entering employment. Some of these requirements, such as those that the men shall be examined as to the working rules, the handling of machinery, apparatus, and their duties generally, are considered fair and just. Other conditions imposed by certain railway companies, however, are considered unfair by the employees. Thus, some companies attempt to prevent employees from holding membership in labor organizations. Various States have passed laws forbidding this practice, but the courts have in several cases held them unconstitutional. The practice is also forbidden by act of Congress, but the spirit of the law is often violated. The requirement that employees shall become members of railway relief associations is sometimes made and is also considered unjust. (10.)

2. *Physical examinations.*—Mr. FULLER says that railway companies very generally require employees to pass a physical examination. The witness submitted a form of the surgeon's certificate required by one company. This provides a test for the ability of the eyes to distinguish types at certain distances and to distinguish colors. The hearing is also tested. The certificate declares that the applicant has been successfully vaccinated and that he does not manifest any evidence of the abuse of intoxicating liquors. Disqualifying defects are enumerated in the surgeon's certificate and also defects which do not disqualify, and the surgeon expresses his opinion as to whether the candidate is qualified or otherwise. The witness has been told that this company makes its examinations very rigid and that the applicants are required to strip before the surgeons.

These physical examinations have resulted, says Mr. Fuller, in injustice to many competent employees. Even slight injuries, such as the loss of a finger or a part of a hand or foot, which would not in the least interfere with the performance of duties, are made grounds for excluding applicants.

The reports of the Interstate Commerce Commission show that in 1898 1 trainman out of every 11 received some injury, and such rules as these accordingly tend to exclude a very large number of persons seeking new employment.

Many railroads have also adopted an age limit, and will not employ persons above that age. Some roads make this age as low as 25 years, while others fix it as high as 40 years. There is a great army of employees over this age, and the result of the rule is often to deny employment to thoroughly competent men who lose their former situations. (10-14.)

3. *Discharge and suspension of employees.*—Mr. FULLER says that the plans of discipline on the different railroads vary greatly. An act which would be considered a serious offense on one road may be treated lightly on another. The general reasons for discharge and suspension are violating rules, negligence, responsibility for accidents, oversleeping, and intemperance.

Mr. Fuller believes that discipline is often inflicted upon employees for offenses which result from the excessive strain placed upon them. The adoption of heavier engines and longer trains, and especially the introduction of new systems of reporting business, which often require twice as much time on the part of employees as before, has greatly increased the strain upon them.

There are also many instances in which men are discharged or suspended through the prejudice of subordinate officers. Where the employees are strongly organized they often succeed in securing the reinstatement of persons unjustly discharged or suspended.

The witness believes that legislation should be enacted, requiring railroad companies to allow employees who are accused of any offense to see and hear all evidence against them, and that specific reasons in writing should be given to them for discharge. (12.)

B. Blacklisting.—Mr. FULLER, representing the brotherhoods of railroad employees, declares that blacklisting of railroad employees is still a common practice, though apparently not as serious as it used to be. With reference to the blacklisting of employees after the strikes of 1894, the witness quotes from an editorial in the Railroad Trainmen's Journal for April, 1895, which states that in the past few months the force of this most potent weapon of capitalism had been felt as never before. Men looking for railroad work since the strike who were not able to give a satisfactory account of their whereabouts and actions during that time by positive

proof were entirely unable to secure employment. There was no doubt in the minds of workmen of the existence of the blacklisting system, though it was practically always impossible to obtain evidence of it. The editorial quotes a newspaper report from Denver, dated March 7, 1895, to the effect that J. A. Hamilton, formerly a conductor on the Atlantic and Pacific Railroad, committed suicide on that day. He had been out of work ever since the strike. Wherever he went the blacklist was ahead of him. Even if he got work for a day or two, he would be dismissed as soon as his connection with the strike was discovered, the statement being given that his service was unsatisfactory. As a last resort he wrote to his old trainmaster, but received a reply that nothing could be promised to a man who had taken part in the strike.

The editorial referred to commended a bill which had been introduced into the Minnesota legislature prohibiting blacklisting, and especially declaring against the use of watermarks and ciphers or secret marks in letters furnished to employers.

Mr. Fuller says further that many States have passed laws against blacklisting, and that the act of Congress approved June 1, 1898, makes it a misdemeanor for any employer to attempt to prevent a former employee from obtaining employment. All these laws, however, are evaded, and it is almost impossible to obtain proof of the use of the black list. As evidence of the feeling of employees on this subject the witness quotes a resolution adopted by the organized employees at San Antonio, Tex., September 9, 1896, declaring that the system is in direct conflict with the principles on which this Government is founded and demanding legislation which will forever prohibit it. The witness says that in recent years the former method of blacklisting has been largely abandoned, but that practically the same results are secured by private correspondence between railroad employers. Men seeking employment are required to give the names of all roads for which they have worked during a certain number of years and the reasons for leaving. The employer then writes to the former employers, and if their statements are not satisfactory the applicant is rejected. The witness submitted a blank form used by one railroad company for applications as illustration of the method employed. This form contains a note to the effect that the applicant, after swearing to the application blank, may be allowed to enter service on probation, "but it must be distinctly understood that before he can be considered an accepted employee the written approval of the employing officers must be obtained." By this arrangement, says Mr. Fuller, a man may be put to work immediately when badly needed, but the railroad company retains the right to dismiss him as soon as it has heard from his former employers.

The witness considers that this method of private correspondence regarding the qualifications of employees frequently results in great injustice. Unscrupulous officers often pursue former employees vindictively, although it may be that they have been guilty of no wrong and have not broken any rules of the company. If the employee were permitted to see the charges made against him and to combat them, the system would not be so objectionable, but he is denied this privilege and is merely told that his references are not good, or, as in one instance cited, is falsely told that his medical examination was not satisfactory.

In view of these conditions, Mr. Fuller recommends the adoption of State and national laws prohibiting any railroad company from furnishing any record whatever of any employee to any other company, either by private letter or otherwise. The postal laws and the interstate-commerce laws should prohibit the transportation of such correspondence.

The witness also criticises the requirement of an oath in connection with applications for employment, which is very common and which is provided for in the application blank submitted by him. He says that oaths should not be used too commonly lest the respect for them shall be diminished. Moreover, employees who are ordinarily honest and law-abiding are tempted by fear of unfavorable reports from former employers or for some other reason to make false statements in connection with their application. (12-17.)

Mr. FITZPATRICK, of the Brotherhood of Railroad Trainmen, says that it is the general custom in railway service to give letters of recommendation to men who are discharged because of necessary reductions in the force. Usually the superintendent, of his own accord, sends such a letter to the discharged employee. (838.)

Blacklisting by the Reading Road.—Mr. FITZPATRICK, of the Brotherhood of Railroad Trainmen, says that the men who have been discharged by the Reading road because of their membership in the Brotherhood of Railroad Trainmen, have been practically blacklisted. When they seek employment elsewhere the officials refuse to employ them until they refer back to the road by which they were last employed.

After it is discovered that the officials of the Reading road disapprove of their working anywhere else the men are told that they are not needed. A great many officials would employ a man if he were sober and industrious regardless of the kind of recommendation which came from the Reading road. Unfortunately, these men have not fallen in with these officials. The Pennsylvania law, providing that workmen shall not be discriminated against because of membership in a labor union, has been declared unconstitutional. An appeal, however, has been taken from that decision. (835, 836.)

C. Wages of railway employees.—1. *Rates of different classes.*—Mr. FULLER, representing the brotherhoods of railway employees, says that engineers are paid the highest wages among the different classes of railway employees, conductors the next highest, and firemen, brakemen, and telegraphers follow in the order named. The reason why telegraphers are paid the lowest wages, despite the fact that they are very skilled employees, is that they have been the last to form organizations and are as yet very weakly organized. There is perhaps also an oversupply of operators turned out from the business colleges of the country, although most who receive employment have learned the business from railway agents and operators themselves.

Railway companies often justify reductions in wages because of a falling off in the volume of their business. They seldom restore wages after reductions or advance them unless under the pressure of labor organizations. Thorough organization is essential to stability of wages. (11.)

2. *Influences affecting wages.*—Mr. FULLER declares that beyond question the wages of railway employees are more or less dependent upon the revenues of the railroads. The employees like to see the roads prosperous and making money. Rate wars doubtless tend to reduce wages, and the same is true of ticket brokerage. There is no doubt, Mr. Fuller says, that the scalping business has taken many dollars from the earnings of the railroads, and being founded on deception and forgery, the practice should be prohibited by law. Conductors especially are injured by ticket scalping.

The watering of stock also tends to reduce wages by requiring larger dividends. Consolidations sometimes result in detriment to the employees, especially where the wages and conditions on the lines which do the absorbing are unfavorable and are extended to the employees on the lines absorbed. Where the conditions and wages are more favorable on the absorbing lines, the employees of the absorbed lines generally share in these advantages, especially as the employees on the large lines are usually well organized. (71.)

D. Relations of employers and organizations of employees.—

1. *Railway brotherhoods.*—Mr. FULLER says that the objects of the railway brotherhoods are to better the pay, hours, and general conditions of their members through negotiations with the managements by committees. They have also secured favorable legislation and have raised the moral standard of railway employees. They have quite thorough control over their members. On some roads nearly 100 per cent of the employees belong to the brotherhoods, and on others not more than 75 per cent. Employees who are not members profit by most of the advantages secured through organization, which are very numerous and great. (69, 70.)

Mr. Fuller believes that more compact federation between the different organizations of railway employees would be advantageous to each organization in its dealings with employers. The success of the strongly organized brotherhoods shows the desirability of carrying organization further. (11.)

Mr. FITZPATRICK, third vice grand master of the Brotherhood of Railroad Trainmen, says that the brotherhood was formed, as stated in its preamble, to unite the railroad trainmen, to promote their general welfare, to establish harmonious relations between them and their employers, to insure the lives of its members, and to protect those dependent upon them. The money for the insurance fund is raised by monthly assessments. Wages and hours of labor were secondary considerations in the formation of the association. The association has, at the present time, more than 38,000 members. The members are principally switchmen, brakemen, and conductors. The association is closely associated with the Brotherhood of Locomotive Firemen and Engineers, and, in fact, with all labor organizations. (831, 832.)

Consideration of grievances by Brotherhood of Railroad Trainmen.—Mr. FITZPATRICK, of the Brotherhood of Railroad Trainmen, says that it is provided by the rules of that brotherhood that any member who considers that he has been unjustly treated by his employer shall make a statement of his grievance in writing, and after having secured the signature thereto of the majority of the members of his lodge, shall present the same at a meeting of the lodge. If, by a majority vote of the members, the

grievance is sustained, the local grievance committee lays the matter before the proper railroad officer. If the result of this is not satisfactory, the matter may be referred to the general grievance committee. In 16 years the Brotherhood of Railroad Trainmen has been engaged in but 2 strikes, each of which was settled by the arbitration committee. (831.)

2. *Strikes and disputes on railways.*—Mr. FULLER says that the chief cause of strikes on railways is difference of opinion as to wages and conditions of employment, though there are many disputes over unjust suspensions and dismissals. Through strong organization of employees and growing consideration by employers, strikes have in late years been greatly reduced. They are conducted in a peaceful manner and the results are beneficial even though the men do not win their immediate demands, since the strike demonstrates that the employees will resist injustice.

The interstate-commerce and antitrust laws have tended to some extent to repress strikes. The legislative and executive branches of the Government have been inclined to deal fairly with employees, but the judicial branch has been inclined to oppress them. Mr. Fuller feels that the railroads have taken unfair advantage of the fact that they transport United States mail in connection with strikes. In many instances the strikers have agreed to work sufficiently to transport the mails, if other cars were not put on the same trains, but the companies would not agree to this, and the Government should require them to do so and not allow the mails to be detained for the sole purpose of getting other cars through with them and prejudicing the public mind against strikers. (70.)

3. *Joint agreements as to the conditions of employment.*—Mr. FULLER, representing the brotherhoods of railway employees, says that where railway employees are strongly organized the conditions of labor are as a rule determined by mutual agreements between them, through their committees, and the chief officers of the railroads. These agreements determine wages, hours and overtime, conditions of advancement, methods of trial of employees before suspension and dismissal, etc. The system generally gives the greatest satisfaction. Where employees are unorganized they are compelled to work under conditions laid down by their employers. (10.)

4. *Arbitration and conciliation.*—Mr. FULLER declares himself a firm believer in conciliation and arbitration. Employees generally seek these methods, but employers as a rule are unwilling to submit questions to arbitration, declaring that they have nothing to arbitrate, or that they can not afford to let outsiders dictate as to the management of their roads. The witness does not think compulsory arbitration would be safe for the employees. It would be only a matter of time until the courts would be made arbitrators, and their decisions would be more or less affected by corporation influence. (70, 71.)

5. *Attitude of Reading Railroad toward organized labor.*—Mr. FITZPATRICK, of the Brotherhood of Railroad Trainmen, says that during the last 10 years quite a number of complaints have been made to the brotherhood that men have been discharged by the Reading road because of their affiliation with the brotherhood. There are at present about 200 Reading employees out of a total of some 3,500 who are eligible who are members of the Brotherhood of Railroad Trainmen. Their membership in the association, however, is not known to the railroad officials. There are some 12 or 15 lodges of the Brotherhood along the route of the Reading road. The members, however, consist principally of Pennsylvania Railroad men, though there are a few Reading men in every lodge.

The lodges are at junction points of the two roads. Mr. Fitzpatrick refers specifically to two recent cases where men have been discharged by the Reading road for, as he believes, belonging to the Brotherhood of Railroad Trainmen. In January, 1900, he was requested to organize a lodge at Shamokin, Pa. Upon his arrival there he found that some 6 or 8 of the applicants had been discharged. When these men called upon their division officers and asked for the cause of their dismissal the officers declined to assign any cause. All of the men discharged were prospective members of the new lodge.

In February, 1900, 10 members of the Brotherhood in Philadelphia were discharged by the Reading road, all being discharged within a few days of each other. All of these men were able to produce letters showing that they had been very highly complimented by the railroad officials for faithfulness and diligence in the discharge of their duties. They presented their grievances to the lodge to which they belonged, and a committee was appointed to present the matter to the railway officials. The railway officials, however, refused to treat with the committee. The men had stated to the officials that they were members of the Brotherhood and had been appointed by the members to consult with the officials. The three members of the committee were discharged on the following day. Some of the men who were discharged took

the matter up personally with the general superintendent, and he told them plainly that they were discharged on account of their affiliation with the Brotherhood of Railroad Trainmen.

The National Brotherhood officers have not attempted to reach the railway officials in respect to this matter. It was felt that, inasmuch as they had refused to meet a committee of their own employees, it would not be of any use for the national organization to attempt to make an appeal to them. Furthermore, the attitude of the Reading road in the past had led to the belief that its officials would not consult with the officers of the organization. Attempts made by officers of the Brotherhood to approach the railway officials in the past had not been successful, and there was no reason to believe that one made at this time would be more successful. The road has the same general superintendent now that it had when consultation with the Brotherhood was refused formerly. Some 10 or 12 years ago the road made it a condition of employment that no man should belong to a labor organization. While the road was in the hands of a receiver, the Brotherhood of Railroad Trainmen went into court to establish the right of employees of the road to belong to it, and the court records will show that the company was bitterly opposed to organizations of railroad men. If it had not been that the officials of the road were the same ones that had opposed the organization in the past, Mr. Fitzpatrick would have communicated with them and have ascertained their attitude.

All of the men dismissed at Shamokin and at Philadelphia were members of the Brotherhood, and no case has been found where a man not a member of the organization has been discharged in the same mysterious manner in which these men were discharged. The places of these men have been, so far as known, filled by non-union men.

The organization had never had any grievance presented to it by employees of the Reading road up to the time of the Shamokin and Philadelphia troubles. This was due, however, largely to the fact that there is no open organization of the men employed by the Reading road, and that the company has the men under complete submission. The Reading road is the only road in the United States that refuses to treat with organized labor. (833, 834, 837, 840.)

Mr. CHARLES HEERNER, counsel for the Philadelphia and Reading Railway Company, states that the company has no testimony to offer in respect to the questions raised by the testimony given by members of the Brotherhood of Railroad Trainmen. (841.)

6. *Attitude of Pennsylvania Railroad toward organized labor.*—Mr. FITZPATRICK, of the Brotherhood of Railroad Trainmen, says that the Pennsylvania Railroad has been very generous in its treatment of the Brotherhood of Railroad Trainmen. The organization has frequently met with the general manager of the Pennsylvania Railroad to consider grievances of employees. In one case a general manager refused to meet with the officers of the organization, but it is not the policy of the Pennsylvania road to refuse men a hearing. As a general rule, Pennsylvania Railroad officials settle such questions of difference with their men directly. (838, 841.)

E. Accidents. Employers' liability.—1. *Reports of accidents.*—Mr. FULLER favors the enactment of legislation requiring railroads to report to the Interstate Commerce Commission the real causes of injury to their employees. This requirement would tend to reduce the number of accidents by the use of extra precautions. (41.)

2. *Employers' liability generally.*—Mr. FULLER, representing the Brotherhood of Railway Employees, says various States have passed laws extending the liability of employers to their employees, especially with regard to railroad companies. In general, however, these laws have not greatly modified the common-law doctrine which makes the employee bear practically all the risks, in occupations which they voluntarily enter. In particular such legislation, except in a very few States, does not make railroad companies liable for injuries resulting from acts of all their employees, the liability being generally confined to agents and certain specific classes of employees.

In addition to such provisions some States have limited the amount which an employee can recover for injury. In other States, however, the Constitution prohibits the passage of legislation limiting the amount of liability.

Mr. Fuller says, further, that the decisions of the courts under the common law, in the absence of statutes, are, as a general rule, favorable to the employers. The common-law doctrine especially, in so far as it exempts the employers from liability for the acts of fellow-servants, is considered very unjust by the witness. The early English decisions establishing this rule were made with the idea that employees, being thrown together, were in a better position to know their abilities and to pro-

tect themselves against injury than the employers. But at that time employees usually actually worked together on the same piece of work; often there were only two or three employees in a shop. The justice of the rule entirely disappears when it is applied to gigantic manufacturing institutions and railroads, where thousands of persons work in a common employment who never see each other or know anything about each other's capabilities and disabilities. Even if an employee did know that another was incompetent he could not stop his train or refuse to perform his duties since he would be in danger of dismissal for doing so.

Again, the witness considers that the doctrine of the courts as to liability makes an unfair discrimination between the public and the employees. A passenger buying a ticket and an employee entering service alike make no contract to release the railroad from responsibility. If the passenger loses two fingers he can recover thousands of dollars, while if the employee loses a leg or an arm he can recover nothing.

3. *Pennsylvania decisions.*—Mr. FULLER submitted a brief summary of the legislation and court decisions on this subject in Pennsylvania. There is no general employers' liability act in this State and the common-law rule is in operation. The constitution, however, provides that no legislation shall limit the amount to be recovered for injuries or death, and in case of death a right of action must remain to the heirs of the person killed. By legislation this liability for injuries resulting in death must be made the subject of suit within 1 year after death.

As to liability of employers for acts of fellow-servants, the Pennsylvania court decisions cited hold in general that only direct agents of the employers, having full control over the employees in a department, are to be considered as vice principals, all others being considered fellow-servants. Thus, in two or three decisions it is held that only when a master places the entire charge of his business, or of a distinct branch of it, in the hands of an agent, retaining no oversight of his own, does he become liable for the negligence of such agent. One employed as foreman to conduct and manage some part of the general business, even with authority over his coemployees, is not considered such a representative of the employer. Thus a mining boss is held to be a fellow-servant with those under him. A station agent and a brakeman are fellow-servants; also a mail agent and a railroad employee. Laborers employed on a railroad and brakemen and conductors or others employed on a moving train are fellow-servants.

In another decision, however, it was held that where the master delegates duties which the law imposes upon him to an agent, the agent, whatever his rank, in performing that duty acts as the master and the master is liable.

By other decisions it has been held that if the master exercises ordinary diligence in selecting his employees he is not liable for their acts. If the officers of a railroad have made careful inquiry and believe their employees to be faithful and competent the company is not liable.

Another decision which Mr. Fuller considers particularly unjust (*Frazier v. Pennsylvania Railroad Company*), holds that where the injured servant remains in the master's employment with the knowledge of the incompetency of his fellow servant, he can not recover for injuries resulting from such incompetency unless he shows that he had reason to believe that he would be discharged for refusing to perform his duties or that he would be placed where the negligence of the incompetent servant would injure him. By this decision, says Mr. Fuller, a trainman might complain to a railway company that an engineer was incompetent. The engineer might accordingly be reduced to the position of fireman, brakeman, switchman, or even section hand. In any of these positions his negligence might cause injury to the complainant. The courts would then doubtless hold that the complainant could collect no damages because of his knowledge of the incompetency, even though the incompetent person was employed in an entirely different department.

In general those decisions which hold that employees of a common master, even though of an entirely different department, are fellow-servants are considered unjust by Mr. Fuller. Thus if a trainman at Philadelphia is injured by the negligence of a telegrapher at Harrisburg whom he does not know and has never seen he can not recover.

Still other decisions with reference to liability for defects in materials and machinery are cited. Thus it is held that the servant assumes the risk of obvious defects in things which he voluntarily uses. The employer is not bound to stand by during the work and see if a danger arises, it being sufficient if he provides in advance against such dangers as may possibly arise. On the other hand it is not necessary to create liability that the master shall have actual knowledge of defects, if he could have discovered them by reasonable care and diligence. (35-40.)

4. *Desirability of uniform legislation.*—Mr. FULLER maintains further that the deci-

sions of the courts under the common law in Pennsylvania and other States are very conflicting and confusing. Eminent lawyers confess that the law is so uncertain as to demand statute regulation. Mr. Burgen, one of the most prominent lawyers in New Jersey, reported to the State department of labor statistics that "the present law on the subject is exclusively judge made, and has come to be a mass of legal subtleties more fruitful of controversy and litigation than justice."

In view of this state of affairs Mr. Fuller advocates legislation by Congress giving employees of interstate railroads the same right of recovery for injury as is given persons not employees, and similar legislation by the States as to the rights of persons not engaged in interstate traffic. Since the railroads, by their strict rules as to the age of those seeking employment and as to physical examination, take the best of American manhood the obligation upon them is the greater when their employees are crippled and maimed. The witness refers to various resolutions passed by organizations of railway employees in favor of such legislation. (40.)

F. Railroad relief associations.—1. *General criticism.* *Attitude of employers.*—Mr. FULLER, representing the brotherhoods of railway employees, protests against the management of the relief departments which are maintained by various railroads. He says that though nominally voluntary they are really compulsory; that the employees have not sufficient voice in their management; that the requirement that the employee shall release the company from responsibility for injury in case he accepts relief from the fund is unjust; and that the system tends to injure the organizations of employees and to increase the dependence of the employees upon their employers. The system, he declares, is generally unacceptable to railroad employees, who believe that by it they are financially robbed and are deprived of their legal rights. In this connection the witness submitted a resolution, adopted by the State legislative board of the various organizations of railroad employees of Pennsylvania, adopted April 27, 1900, which refers specifically to the relief associations on the Baltimore and Ohio, Pennsylvania, and Reading railroads. One of the resolutions adopted was as follows:

"*Resolved*, That we condemn these associations, and assert that instead of their object being that of benevolence, as claimed by the companies, they are based upon iniquitous principles, controlled by arbitrary laws, and are in violation of the laws of Congress; and we earnestly ask Congress to investigate these associations and pass a law that will prevent their being further imposed upon railroad employees."

Mr. Fuller states that while at present only a small number of railroads operate relief associations others are gradually adopting the system, and the large lines which now have them are leasing and buying other roads and thus extending the application of the system. From a competitive standpoint, those railroads which operate relief departments have an advantage over those who do not.

In support of the above contentions Mr. Fuller submits a large amount of evidence, which is summarized below. (43-50.)

Mr. FITZPATRICK, of the Brotherhood of Railroad Trainmen, says that railroads, generally, do not establish relief associations. The principal roads having such associations are the Burlington, the Baltimore and Ohio, the Pennsylvania, and the Reading. It is understood (1900) that the Southern Pacific is going to inaugurate the system. Roads having these associations require their employees, after a doctor's examination, to become members of the association. Employment is conditioned upon membership, and the assessments are deducted from the salaries of members. The employees, Mr. Fitzpatrick understands, are required to sign an agreement that they will accept the insurance paid by the relief association in lieu of all other claims against the companies for injuries. Among the 15,000 railroad men with whom Mr. Fitzpatrick has had association during the past year, he has not found one who approved of the plan or the workings of the railway company insurance associations. (832, 833.)

2. *Compulsory membership in relief organizations.*—Mr. FULLER declares that in practically all of the relief departments maintained by railroad companies there is virtually compulsion upon employees to become members. Applicants for employment are not engaged unless they agree to join the association, and pressure is brought to bear upon old employees to join. While the railroad companies refer to the payments made by the members to these funds as "contributions," they define, in the regulations, the meaning of this word as referring to that portion of wages which the member has agreed in his application shall be applied for the purpose of securing the benefits. The word is, in the opinion of the witness, deceptive, since the general understanding is that a "contribution" is something given of one's own free will.

Mr. Fuller submits the blank form of application of four of the leading railroad relief departments. In the Baltimore and Ohio relief department, and in that on the

Plant System, these applications contain the words: "I, —, desiring to be employed —, do hereby, as one of the conditions of such employment, apply for membership in the relief department." On the Pennsylvania Railroad and the Philadelphia and Reading Railroad the application for membership does not contain these clauses, the applicant merely stating that, being employed by the railroad, by reason of such employment, he applies for membership. In the case of all four blank forms, the applicant agrees to be bound by the regulations of the department and agrees that the company shall monthly apply from his wages sums at a specified rate as a contribution, in return for which the applicant receives benefits at a specified rate, the payments by the employee varying according to the amount of benefit to be received. In all four forms also the applicant agrees that the application shall constitute a contract and an irrevocable authority to the company to appropriate the said amounts from wages.

In view of the provisions in the Baltimore and Ohio and Plant System departments, Mr. Fuller asks: "When the employee is required to join the relief department, as a condition of employment, is not membership in that department compulsory?"

Mr. Fuller further submitted a circular, issued by President Huntington, of the Southern Pacific Railway, February 15, 1900, declaring that after March 1 applicants for employment must become members of the relief department. He also submitted a letter, dated March 20, 1900, signed by a supervisor on one of the divisions of the Pennsylvania Railroad, addressed to all foremen, and directing them to increase their respective forces by an additional laborer: "Condition of employment of this man is that he join the relief fund." Another letter by the same supervisor, with reference to a particular employee, which says: "Please get him to join the relief fund at once. If he will not, get another man that will."

The witness also refers to the evidence of Prof. E. R. Johnson before the Industrial Commission as to the statements of officers of railroad corporations regarding the compulsory features of these associations. He also submits replies from many organizations of railway employees to the effect that membership in these departments on the Pennsylvania and Baltimore and Ohio railroads is virtually compulsory. (43, 47, 48, 52, 53, 68.)

Mr. Fuller refers to the act of Congress of June 1, 1898, which prohibits railroad employers from requiring employees to contribute to relief departments or to sign contracts releasing the employers from liability. He contrasts this provision with the facts above described, and comments especially on the testimony of President Cowen of the Baltimore and Ohio to the effect that the act is to be considered invalid, and that the only way to secure a decision as to its constitutionality is to refuse to comply with it. (69.)

Mr. ANDERSON, secretary of the Chamber of Commerce of Pittsburg, asserts that membership in the relief department of the Pennsylvania road is entirely voluntary. On the Pennsylvania lines west of Pittsburg, out of 30,000 employees, 18,500, or about 61 per cent, are members of the relief department. From the date of organization, July 1, 1889, to February 28, 1900, nearly 11 years, the department paid on account of deaths, numbering 1,899, about \$1,160,000; on account of accidents, in 54,433 cases, about \$820,000; on account of sickness, in 80,870 cases, about \$1,024,000. (637, 638.)

3. *Release of liability on account of relief departments.*—Mr. FULLER especially objects to the railway relief departments because the companies require employees, who take advantage of the benefits, to release the employer from all liability for injury or death. He declares that this is especially unjust, because the employees pay practically the full cost of their insurance.

In this connection the witness calls attention to the fact that the blank forms of application for membership in the relief departments on the Baltimore and Ohio, Pennsylvania, and Philadelphia and Reading, and on the Plant System, which he submits, all contain an agreement on the part of the applicant, in consideration of the contributions of the company to the relief department, that the acceptance of benefits from the fund for injury or death shall operate as a release of all claims against the company, by the applicant or his representatives, for damages by reason of such injury or death.

Mr. Fuller asserts that the chief motive of the railway companies in establishing the relief funds has been to free themselves from legal liability for injuries to their employees, and that by this system they make a financial gain for themselves at the expense of the employees. The objects of the funds, as stated in the rules and regulations, are, in a general way, to provide relief to the members. But, in the opinion of Mr. Fuller, these statements are intended to mislead employees as to the real purpose of the railroads, which is to deprive them of their right to sue in case of

injury. As collateral evidence of this motive on the part of the railroads, the witness maintains that in general the railroads use every possible device to escape their just liability for injuries. An editorial from the *Railway Conductor*, of March, 1897, is also quoted, which maintains that the principal objection to these associations is the fact that employees are required to sign a contract relinquishing their right to recover damages for injury, and that the funds are "established and maintained as a means of escaping legal liability." The replies of lodges of railway employees on the Pennsylvania and Baltimore and Ohio railroads also unanimously state the belief that this is the chief motive of the railway companies.

Mr. Fuller further testifies that when, in 1897, a bill was before the legislature of Iowa which sought to prohibit and nullify contracts releasing railroad companies from liability in virtue of the establishments of relief departments, the Chicago, Burlington and Quincy Railroad, which has such a department, used all its influence, resorting to some questionable means, to defeat its passage.

Again the Pennsylvania Company, at the session of the Indiana legislature held in 1899, tried to secure the passage of a law declaring it lawful for railroad companies to maintain relief departments, and providing that in case any employee, as a member of the department, accepts benefits from the fund, it shall be in lieu of any damages resulting from his injury or death. In a letter from the chairman of the Indiana railroad employees' legislative board to Mr. Fuller, it is stated that this bill was believed to have been drawn up by the chief counsel of the Pittsburg, Cincinnati, Chicago and St. Louis Railway (part of the Pennsylvania system), and that this company kept six employees at the statehouse during the entire session of the legislature working in behalf of the measure. The title of the bill, which was very lengthy, referred with especial fullness to the advantages of relief departments, the only reference to the provision exempting the companies from liability being in the words: "Prescribing the effect of such acceptances, and matters relating thereto."

That this provision was the essential one, however, was evidenced, so Mr. Fuller declares, by the fact that when, on account of the opposition of representatives of the employees to this feature, the entire section including it was finally stricken out, the member of the legislature who had introduced the bill moved to strike out the enacting clause. (43, 52-59.)

4. *Effect of relief departments on labor organizations.*—Mr. FULLER further criticises railway relief departments on the ground that they make employees more dependent on their employers. After an employee has contributed to a fund for some length of time, he does not wish by striking or quitting employment to lose the benefit of the insurance furnished, thus sacrificing all his previous payments. Furthermore, employees who belong to these departments are less able to belong to the labor organizations of railway employees, most of which provide for insurance, since they can not afford to pay the dues in both organizations. The railway companies are thus in a better position to dictate the conditions of employment to their men. The tenth report of the Interstate Commerce Commission is quoted by Mr. Fuller as expressing the opinion that relief departments tend to produce the effect described. Numerous replies to interrogatories by lodges of the railway brotherhoods upon the Baltimore and Ohio and Pennsylvania railroads also declare that the existence of the relief departments tends to keep members out of labor organizations. (43, 49, 57, 64.)

5. *Expense of railway relief departments.*—Mr. FULLER declares that fully five-sixths of the expense of insurance in railway relief departments is paid by the employees themselves. It is thus, in his judgment, especially unfair that railway companies should insist on being released from liability for injury. It might happen that an employee losing a leg or an arm could collect through the courts \$5,000 damages. Under the relief department system he may receive \$100, of which he himself has contributed \$80, while the company has paid only \$20. Since the employees pay much the greater part of the expense of operating the funds, they should have a majority of representatives upon the boards which manage them. In fact, however, while the companies allow the employees some voice in managing the departments, they retain for themselves a majority of representatives in the management, and virtually dictate the policy.

The witness quotes a paper, prepared by the editor of the *Brotherhood of Locomotive Engineers' Journal*, printed September, 1896, with reference to the cost of membership in the relief department on the Plant System. The application provides that members must insure in the class corresponding to the salary which they actually receive. It also provides that free medical and surgical attendance shall be given by the company's surgeons to all members.

Mr. Fuller testifies that in a leading old line accident insurance company for an insurance of \$1,000 against death by accident or otherwise, with a weekly indemnity

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of \$7.50 on account of injury, the rate of payment for the middle class of risks (not those extra hazardous) is \$10.12 per year, while in the relief department on the Plant System, practically the same insurance, except that only \$500 is paid in case of death from natural causes, costs \$24 per year. For an insurance of \$2,500, with \$12.50 per week during the accident, the old line company charges \$18.75 per year, the Plant System \$51 per year. The old line company does not provide for sick benefits, but on railroads where hospital departments are maintained, the payments for the class covered by the \$1,000 policy on the Plant System do not exceed \$4.50, and those for the \$2,500 class, \$12 per year, while the excess of the charge on the Plant System above the old line company is \$13.88 and \$32.25 for these respective classes.

In the case of extrahazardous employments, corresponding to the first class of employees named by the Plant System, the old line company charges, for a \$2,500 policy, with \$15 weekly indemnity during the injury by accident, \$51.36 per year. On the Plant System the same policy costs \$66 per year. Moreover, on the Plant System an employee dying a natural death receives only \$1,250, while the old line company pays the full amount. Sixty per cent of railroad employees die natural deaths, so that the expense in the Plant System is much greater, so the article maintains, than in the old line company.

This article also makes comparison between the cost of insurance on the Plant System and in the insurance department of the Brotherhood of Locomotive Engineers. The Brotherhood does not provide for weekly benefits on account of sickness or injury, but does pay a benefit equal to the amount of death benefit in case of the loss of a hand, foot, or eye, while the Plant System makes no such payment. The cost of carrying a \$2,500 insurance in the Brotherhood of Locomotive Engineers in 1898 was \$41.66, while various local divisions of the Brotherhood provide a weekly indemnity equal to that on the Plant System, at the rate of \$9 per year, making a total cost for \$2,500, with weekly indemnity, \$50.66. This provides a benefit for loss of hand, foot, or eye, and the full amount is paid in case of natural deaths. The cost on the Plant System, without payments for loss of hand, foot, or eye, and with a payment of only one-half the indemnity in case of natural deaths, is \$66 for the first class, corresponding to the members of the firemen's organization. The article calculates that if the Brotherhood paid no more benefits than the Plant System, it could furnish insurance for \$22.50 per year.

These figures are tested in another way. If the members of the Brotherhood of Locomotive Engineers pay \$50.66 per year for accident and death insurance and weekly indemnities, it would amount to \$854,127.60 in the year. In 1899 the Brotherhood paid 253 policies for deaths and permanent disability, amounting, at \$2,500 each, to \$630,000, leaving \$224,127.60 to meet the weekly indemnities. On the Plant System a payment of \$66 per year for an equal number of members would amount to \$1,112,760. This company would have paid only 214 policies, the others paid by the engineers being for disability. The number of natural deaths in 1899, for which insurance was paid by the Brotherhood, was 141. For these the Plant System would have paid only \$1,250 each. The total payments therefore by the Plant System, under the same circumstances as those met by the Brotherhood in 1899, would have been only \$358,750, leaving a balance of \$754,010 for the payment of weekly benefits, \$529,873 more than in the case of the Brotherhood.

In the opinion of the writer of the article, this system meant that the employees were meeting the cost of their insurance, and were contributing toward the general profits of the company. The advantage of the system to the company would be the more conspicuous if the diminution in the expense of maintaining the local department, because of the release of the company from liability for damages, were calculated.

Mr. Fuller also refers to an editorial from the Railroad Trainmen's Journal of May, 1893, regarding the Reading Relief Association. In the preceding year the receipts of the association had been \$262,787 and the disbursements \$241,101. Under the guise of philanthropy it was declared the company took more from the men than it paid them, holding the balance in "anything but a reliable depository." (43, 53-58.)

6. *Opinions of railway organizations regarding the relief system.*—Mr. FULLER, in reference to the statement of Mr. Cowen, president of the Baltimore and Ohio Railroad, that he believed 99 per cent of the employees of the company approved the relief system, submitted a tabulation of replies made by the local lodges of the Brotherhood of Railroad Trainmen on the Baltimore and Ohio and Pennsylvania railroads to certain interrogatories sent out in February, 1900. On the Baltimore and Ohio system there were replies from 28 local lodges, in 26 cities and 7 States, representing 1,674 members. All of these replies declare that membership in the relief

department of the system is considered to be compulsory, that men do not receive employment unless they apply for membership in the relief department, and that the actions of the company's representatives make the men believe that the blank must be filled. Sixty-nine per cent of the replies say that employees who are already in the service and not members of the department are coerced into joining it. The percentage is low, because in 24 per cent of the lodges all the members belong to the relief department, so that there is no reason to coerce them.

Ninety-two per cent of the replies from the lodges on the Baltimore and Ohio express the opinion that membership in the relief department has a tendency to keep members out of labor organizations, while all of the replies declare that it is unfair that employees should be required to release the company from responsibility for injury, and further express the opinion that the chief object of the railroad company in maintaining the department is to secure such release.

On the Pennsylvania system replies were received from 45 lodges, in 8 different States, representing 4,031 members. Although membership in the relief department of that system is nominally not compulsory, 96 per cent of these replies declare that the employees consider it to be practically compulsory. Seventy-eight per cent of the replies declare that men seeking employment do not receive it unless they become members, and several of the other replies qualify their statements to the contrary. Ninety-four per cent of the replies state that blank applications for membership in the relief department are handed to new employees without solicitation on their part, and 83 per cent say that the company's representatives lead the applicant to suppose that he must join the department. Eighty-five per cent of the lodges report that employees already in service and not members of the department are virtually coerced into joining it, and various methods of coercion are enumerated.

All of the replies from the Pennsylvania Railroad express the belief that the relief department tends to keep members out of labor organizations, and that it is unfair that members should be required to release the company from responsibility for injury. Ninety-two per cent of the replies hold that the prime object of railroad companies in operating these departments is to release themselves from liability and to alienate their employees from the brotherhoods.

The witness also submitted several letters, received from members of the relief department on the Baltimore and Ohio and Pennsylvania railroads, confirming the statements made by the lodges of the railroad trainmen. One of these letters states that while the Baltimore and Ohio Railroad promises that members of the relief department reaching the age of 65 years shall be pensioned, the writer's father, who has been employed 49 years, is now 71 years old and is told that he can not be given a pension because there is not enough money in the fund. (59-68.)

G. Use of intoxicants by railway employees.—Mr. FULLER states that formerly railway employees used intoxicants to a dangerous extent, but that largely through the influence of railway brotherhoods this is no longer the case. (71.)

Mr. ANDERSON, secretary of the Chamber of Commerce of Pittsburg, declares that the prohibition of the use of intoxicants while on duty is strictly enforced on all the larger roads, and also the habitual use of them or the frequenting of places where they are sold. The enforcement of these rules has had a most excellent effect, and drunkenness is rare among railroad men, where it was very common 20 years ago. (638.)

H. Labor organizations.—Mr. ANDERSON, secretary of the Chamber of Commerce of Pittsburg, has been an employer of labor nearly all his life and has been opposed to labor organizations, but he is less opposed to them than he was. Within the last half dozen years he has met officers and representatives of such bodies, and he finds them to be intelligent and not unreasonable. In the recent sheet-steel trouble the labor leaders have showed themselves as intelligent in their line of business as the managers of the Carnegie works are in theirs. He has never seen a case in which organized labor has asserted itself, and there has been a meeting of the two parties, in which the trouble has not been brought to a settlement. Most strikes, he thinks, could be avoided and most differences settled by a friendly plan of arbitration and a recognition of labor associations. He does not see any difference of principle between consulting the men who are in a workshop directly and meeting three or four intelligent men who are their representatives. Five thousand men in a big works can not come in a body to the proprietors. The men who control the great modern industries do not know their workmen as the smaller employers of earlier days did and do not know their work or their rights or their wrongs. It is hard to see how the difficulties and the rights of workmen are to be settled otherwise than by recognizing the right to organize and the right of representation. (639, 648, 649.)

I. Arbitration and conciliation in general.—Mr. GREENE, of the Audit Company of New York, thinks that everyone who is familiar with labor matters believes in some organization of labor. It is as necessary as combination of capital. At the same time the control of business can not wholly be given over to labor organizations. In Great Britain, for example, trade unions have practically stopped improvements in machinery. The witness thinks that the best way to determine the conditions of labor is by conciliation between representatives of organized labor and of employers. If disputes result in actual cessation of work, arbitration might be necessary. It would perhaps be desirable to have labor unions incorporated in order that they might be responsible in contracts which they make with employers. (474.)

Mr. HADDOCK, independent coal operator, thinks that compulsory arbitration is desirable in the case of labor disputes in which the public interests are deeply involved, as in the anthracite coal strike of 1900. Some means ought to be devised to settle a difficulty which results in so much loss and inconvenience to the community. The witness admits that there is difficulty in establishing compulsory arbitration. It is hard to compel men to work or to compel employers to run their establishments. He believes that it might be desirable to have trade unions incorporated, so that they would be responsible in making contracts and in carrying out the decisions of arbitrators. (533.)

Mr. WALTER, president of the Lehigh Valley Railroad, believes that effort should be made to minimize the amount of friction between employers and employees. He thinks that as a general thing labor organization is desirable, and puts the laborer in a better position to discuss conditions with his employer. The witness is doubtful as to the desirability of compulsory arbitration, even in the case of strikes affecting such industries as the anthracite coal industry, where the public interests are deeply concerned. If there could be some arrangement by which the public should protect the employers against loss under other conditions, it might be proper to compel the employers to regard the interests of the public in their disputes with their workmen. (546, 547.)

Mr. SAWARD, of the Coal Trade Journal, declares himself in favor of the arbitration of disputes between labor and capital. He does not, however, believe in compulsory arbitration. Although the public suffers greatly from strikes in some cases, as in the case of the anthracite coal strike, the people directly concerned must fight these matters out—they do not want to bring in a third party. The proper way to settle the conditions of labor is by conference of employers and employees. The witness has seen conferences in the coal trade. The operators sit on one side of the table and the men on the other side, the table being wide enough so that they can not hit one another. At the first session they almost come to blows, at the second session they are more sober, and the third time they straighten out their disputes. (520.)

Mr. THOMAS, of the Erie Railroad, thinks that the time has hardly come when we can have compulsory arbitration of labor disputes, even those which greatly affect the public, like the anthracite coal strike, with justice to either party. It certainly would be desirable to prevent such serious disputes if it could be done fairly. (556, 557.)

Mr. FLEMING, of the Anthracite Coal Operators' Association, declares himself in favor of the arbitration of labor disputes, provided both parties are equally responsible. He recognizes the right of the public as a party in interest. At the same time, compulsion would be undesirable if it could be applied only to the operator. It is very difficult to compel the laborer to obey the decision of arbitrators, since he has no property. (542.)

J. Chinese and Japanese in California.—Mr. WHEELER says that the Chinese question is not especially a live one in California at present. The people anticipate no difficulty in securing the reenactment of the exclusion law. It is most assuredly desirable that it should be reenacted. The Chinese are not increasing as compared with the general population, and the witness even believes that the census will show a decrease throughout the State, as it certainly will in San Francisco. Many Chinese have made a competency and returned to China. Mr. Wheeler does not regard the Japanese with the same disfavor as the Chinese. From a commercial and business standpoint the Chinese are undesirable. They are conservative, and continue to wear Chinese clothes and eat Chinese food and to live herded together like cattle. Thus they undersell American workmen. Moreover, they send their earnings back to China, and buy much of the merchandise which they use from China. The Japanese on the other hand soon adopt American food and clothes and create a demand for American goods. The witness has heard some complaint from labor organizations regarding them, but from the commercial standpoint they are much more satisfactory than the Chinese. (755.)

XVII. LABOR CONNECTED WITH WATER TRANSPORTATION.

A. Ocean and coastwise transportation.—1. *Navigation laws and condition of sailors.*—Mr. HAYNE says that the conditions suggested by Mr. Furuseth,¹ of the Seamen's Union, and the proposed law which the seamen themselves drafted to amend the navigation laws for the improvement in personnel of the merchant marine do not go any further in the amelioration of the condition of the seamen than the regulations of the Merchants and Miners' Company. He quotes from that proposed law and from the regulations of the company in support of his statement. (422, 423.)

Mr. PENJE, of the Lake Seamen's Union, states that the condition of the seamen in the coastwise trade is far better than that of those engaged in lake commerce. The men generally get watch and watch, and none but competent men are employed. The wages are better than on the lakes, the poorest wages being \$20 per month some years ago. At present on the Pacific coast wages are \$45 per month, and on the Atlantic from \$25 to \$35 per month. The highest wages on the lake passenger boats for a deckhand is \$35. The coastwise men work fewer hours, and the loading is done by longshoremen principally. (408, 409.)

Mr. Hayne states that, generally speaking, he believes the regulations of the coastwise vessels are in advance of the navigation laws of the United States. (414.)

2. *Terms of employment on ship—Coastwise transportation.*—Mr. HAYNE states that the terms of employment are controlled by what are known as "shipping articles," prescribed by law, in which the contract of employment is clearly expressed. The shipping article is in writing; it is read over to the men when they sign, and copies of it are posted in conspicuous places on shipboard. He believes the fact that there are continued applications for employment on the coastwise vessels, while the tramp steamers find it necessary to have agents to secure help, is an indication that the conditions of the men in the coastwise trade are better than on the sailing vessels. Under the liberal policy of the president of the Merchants and Miners' Company there is a personal solicitude for the welfare of the men. Men are engaged for the voyage at the time of their first signing. They are engaged and paid by the month. They have the right to leave at any port, provided they leave immediately after the ship is docked. The employer has the right of dismissal at the ports. There is a custom in coastwise traffic of giving the men a furlough of a few hours at the terminal cities when the vessel lands. The shipping articles contain a provision favorable to the employees that, "while without any cause notice to either party terminates the service of any signer at the expiration of any voyage as prescribed in the articles, it is presumed that this provision will not be enforced to the hurt or disadvantage of any employees without good and sufficient cause, but that reasonable opportunity will be afforded for return to the port of embarkation." (413-415.)

3. *Sailors' rights and remedies.*—Mr. HAYNE states that in case of an injury to a sailor engaged in coastwise transportation or of any difference in construction of the terms of employment, the employee has the right, if the injury occurred on land or if the contract should not be a maritime contract, to seek redress in the State courts, but if the injury occurred on ship, or if the contract was a maritime contract, they would have recourse either in the State courts, or in the United States courts in admiralty. The employees prefer the State courts, because they secure juries there more favorable to their cause than in the Federal court. There is sufficient means of redress for any injury to employees. The most common method among sailors is to apply to a United States district court commissioner, who hears the case, and may pass it on to the court for a hearing. (416.)

4. *Sailors' rations.*—Mr. HAYNE states that his company has adopted the ocean ration as provided by the law of 1898. There is some question as to whether that law applied to coastwise vessels, but the Attorney-General of the United States finally held that it did. The men on the vessels of this company, however, fare very much better than the law prescribes, because of the additional amount of supplies the vessels are required to put on board for their regular passenger traffic, a good deal of which is not used by the passengers and is turned over to the sailors. (414, 416.)

5. *Wages of seamen.*—The following shows the wage rate of the various employees of the Merchants and Miners' Company, board and accommodation being given to the ship men in addition: Masters, \$150 to \$250 a month; first officers, \$75;

¹See Reports of Industrial Commission, Vol. IV, pp. 691 ff.

second officers, \$55; boatswains, \$30; quartermasters, \$30; sailors, \$25; chief engineers, \$120; first engineers, \$75; second engineers, \$60; oilers, \$40; water tenders, \$40; firemen, \$40; coal passers, \$30; stewards, \$55 to \$70; first cooks, \$50 to \$60; second cooks, \$35; mess men, \$20 to \$25; waiters, \$20 to \$25; pantry men, \$20 to \$30; stewardesses, \$18. (417.)

Mr. GUILLAUME, president Old Dominion Steamship Company, submitted a table of wages for service in that company showing that the masters of his vessels received as much as \$200 a month; the chief engineer, \$125; seamen, \$25; firemen, \$40; and various other special classes on a graded scale, ranging down to \$15 for deck boys and \$10 for forward stewardesses and third cook. The average number of the crew is 60. (448.)

Mr. PENNE, of the Lake Seamen's Union, states that there is little difference between the German and English sailors in respect of wages, the English sailor getting a little more money, but the purchasing power of the German's money is greater. In 1881 English wages were about \$12.50 per month, and there has been a little increase since. The wages in the American coastwise trade are better. The wages paid in deep-water traffic in England are £4 (about \$20), while the coastwise wages here are about \$25. The custom in foreign trade is to engage the crew in Europe for the round trip, so that the wages are fixed there. Rules and regulations on all the ocean vessels are practically the same, although there are some countries—especially Denmark, Germany, and Holland—where the sailors fare better than American sailors, even since the passage of the law of 1898. (412.)

6. *Inspection of vessels—Safety.*—Mr. HAYNE states that there are two forms of inspection of vessels, one by the Government and one by the owner. The local Government hull inspectors and engine and boiler inspectors make an annual inspection and their report is kept permanently posted on shipboard. This inspection is in great detail. The owners' inspections include a voyage inspection, a departmental inspection, and the periodical docking and general overhauling. The most important inspection is the one immediately preceding the voyage, at which time all the machinery is turned over and tried, the engines are kept running 15 or 20 minutes before starting, and all the appliances of every kind are tested.

The owners find that in constantly keeping the vessels up, there is less deterioration; the deterioration would otherwise probably run as high as 10 per cent a year. Another condition that makes the owners unusually alert is that if some accident should happen through any imperfection that might have been discovered by careful inspection, all the insurance on the hull and cargo, and every bill of lading issued on the cargo, would be vitiated. A vessel that is overloaded is unseaworthy, and the crew have the right to object to going to sea in a vessel that they feel is in an improper condition. (417-418.)

7. *Classes employed—Nationality.*—Mr. HAYNE states that, generally speaking, all men on shipboard are considered seamen. There is a subdivision into officers and crew. On the 15 ships of the Merchants and Miners' Transportation Company there would be about 552 men employed. The sailors are a shifting class to a certain extent, but there is a certain stability in the personnel on the ships.

Mr. GUILLAUME says that the higher grades of seamen are necessarily American, but the lower grades are foreign, largely Scandinavians. Following the sea is not attractive to American men in this day, and it is a very difficult thing to get the old line of well-trained American seamen. Prizes of high positions are too few, and other callings are more inviting. It is a hard thing to find a captain that has had the old training. The foreigner who is capable of managing a ship must be naturalized before he is eligible to promotion. The Old Dominion Line has only one captain of foreign birth, and he has been an American citizen for a good many years. The others were from Maine and Massachusetts, and have come up through efficiency. To the average seaman and petty officer the coastwise trade offers greater inducements than the deep-sea trade, because they can be at home more and have more home life. (450-451.)

8. *Larceny under United States navigation laws.*—Mr. HAYNE states that the navigation laws of the United States fail to provide for larceny committed on shipboard within the State. There is a general law touching embezzlement and damage to freight and cargo, but it is not broad enough to cover larceny. While the United States law specifically embraces larceny on the high seas and in places within the exclusive jurisdiction of the United States, it does not embrace crimes committed within the jurisdiction of any of the several States. There is great difficulty in securing a conviction for such larceny, because of the difficulty of ascertaining within what State jurisdiction the offense was committed, and because, if it were committed in a jurisdiction different from the port at which the landing was made, the offender

could easily escape before extradition papers could be served upon him. Again, if the offender is tried in the wrong jurisdiction, he would of course escape punishment and would have a right of action for civil damages for false imprisonment. The suggestion of Mr. Hayne is that the United States statute in respect of larceny (sec. 5556, Rev. Stat.) should be amended so as to embrace "waters within the maritime jurisdiction of the United States," such jurisdiction having been extended by statute to all navigable waters within the limits of the United States. (414, 415, 421-425.)

This witness submitted an additional statement containing a draft for a bill amending the law on this subject (823.)

9. *Condition and wages of stevedores.*—Mr. HAYNE says that the Merchants and Miners' Company employs continuously about 1,300 stevedores at the various ports touched and pays them by the hour. The stevedores in the South are mostly colored men and in the North white men. He has never known of any strike on the part of any of the company's employees. The company has regular gangs of stevedores and the shipmen are confined to the navigation of the vessel. While in port the shipmen are engaged in cleaning up, inspecting, and seeing that the ship is in proper trim. The officers are often married men, but the seamen as a rule are not. About 75 per cent of the force are Americans, coming largely from New England. There are no colored seamen. (413-417.)

Mr. Hayne states that the stevedores of the Merchants and Miners' Transportation Company are paid by the hour at prices varying from 15 to 30 cents at the various ports. The company finds a regular rate prevailing at the several ports, which he presumes grows out of an understanding among the men, and that rate is paid.

The rates at various ports are: Boston, regular time 20 cents an hour, overtime 30; Baltimore, regular time 20, overtime 20; Providence, 16½ to 18½ for regular time, overtime 20 to 25; Norfolk, regular time 15, overtime 15; Newport News, regular time 15, overtime 15; Savannah, 17½ to 22 regular time, overtime 17½ to 22; Philadelphia, regular time 20, overtime 20. (415-417.)

Mr. GUILLAUDER, of the Old Dominion Line, says that at New York stevedores are paid at 25 cents per hour week days and 30 cents an hour on Sundays and holidays. At the Chesapeake ports in Virginia the rate runs from 15 to 20 cents an hour. This difference is found fairly to reflect the differences in the value of labor and the living conditions between the North and the South. This company does all its own work at all the ports. The sea force will not engage in loading and unloading vessels. (443-449.)

B. Labor on vessels on the Great Lakes.—1. *Lake Seamen's Union.*—Mr. WILLIAM PENJE, Secretary of the Lake Seamen's Union, says that this organization numbers about 3,000 seamen on the lakes, or a little more than one-third of the number employed there. In the winter time there are four local unions—at Milwaukee, Buffalo, Cleveland, and Chicago. In the summer months there are local organizations at other points, there being no occasion to keep the summer office open during the winter time, because the men look out for other employment at that time.

The dues of the organization are 50 cents per month the year round, and the initiation fee \$3. There is a death benefit of \$75, payable to representatives of a 6 months' member in good standing, and a shipwreck benefit of \$30. This organization is connected with the American Federation of Labor through the International Seamen's Union, which includes seamen on the Atlantic and Pacific oceans and on the lakes. The Lake Seamen's Union paid a per capita tax of 3 cents a month to the International Seamen's Union. The organization had no strike fund.

The union has not been recognized by the employers in general, but has been recognized by the schooner owners. The Lake Carriers' Association, an organization of the vessel owners, never recognized the union. The union has no voice and but little influence in fixing the rate of wages. (400, 401.)

2. *General character and condition of seamen employed on the lakes.*—Mr. PENJE states that the seamen on the lakes 10 years ago were more skillful than those of to-day. Ten years ago about 90 per cent of the men sailing vessels on the lakes could pass the examination for the Navy; now he does not suppose over one-fourth of them could do so. Many have gone into other callings, such as bridge building, architectural ironwork, or have become gripmen on street railroads, or farmers; this is partly on account of the hard conditions on the lakes and the invasion of the steamboats, but principally because wages have gone down. About 60 per cent of the men employed on the sailing vessels are Scandinavians, the others Americans, Irish, English, and German, only about 10 per cent being American. He attributes the fact that the Scandinavian race predominates to their love of the sea. Some of the Scandinavians have also drifted into the United States Navy, where the conditions are more attractive.

The condition of the deck hands has retrograded tremendously in the last 10 years. A self-respecting sailor would not under any circumstances make a passage as a deck hand on one of those steamers to-day. The deck hands are so abused and their wages are so low that it is only the worst class of unskilled people who are hard up that will take these places. They never stay at it, but when they find what the conditions are they often get off at the next port, forfeiting their wages. On some of the principal lines, for instance, the Western, Erie, and Anchor lines, conditions are somewhat better than described. Quite a number of these men belong to the Lake Seamen's Union, but the majority of the union men are wheelmen and watchmen; they do not usually take deck hands in. The union is not trying hard to organize these men, but it realizes that that is the only way in which to better their condition. Legislation could not help it. If the calling was respectable they could get a better class of men to go into it, and the deck hand would seek to advance to watchman and wheelman. (401, 402, 403, 411.)

3. *Sailors' food.*—Mr. PENNE states that on the lake boats very poor provision is made for the food of the sailors, 7 cents per meal being allowed for all hands. A contract is made with a supply agent, and he puts just enough aboard to make the scheduled trip. If a vessel happens to be out longer than her schedule, everybody goes hungry. The food consists of meat, potatoes, vegetables, and coffee and tea. For the deck hands the food is put in a bowl and handed to them, and "the first come is the first served." The coastwise trade in that respect is every bit as good as the lakes. Although there is a law providing for a specified amount of food for the men on ocean vessels, it is not always complied with. (409.)

4. *Sailors' accommodations.*—This witness states that the accommodations for the deck hands on the lakes are of the very poorest. The men are not clean themselves, and it would be impossible to keep their quarters clean even if they desired to do so, as they have no time for such work. Their condition is horrible from all points of view. On some of the old vessels they have not the required space, but there is space enough in the more modern vessels, though even in them the deck hands' and firemen's quarters are away down in the fore part of the vessel and are very poor. The lake boats provide mattresses and cotton or calico quilts, but they become unfit for a human being to use.

In the coastwise trade the sailor provides his own bedding, and in that respect fares poorer than the lake sailors, but the quarters are clean, because the boats are inspected and because there is a different class of men. On the lake vessels the deck hands' quarters are nearly always full of vermin. No self-respecting man would be a deck hand on the lakes. The master knows that the deck hand will not remain longer than he has to, and of course will not clean up any more than is absolutely required. The improvement of the sailors' quarters would depend upon reasonable hours and better wages. (409, 410, 411.)

5. *Wages of seamen on the lakes.*—Mr. PENNE states that the wages paid to the skilled seamen on the lakes in 1900 started at about \$1.50 and wound up at \$2.75 per day. Ten years ago wages were better, sometimes winding up at \$4.50 per day at the end of the season. A year ago the wages on schooners on Lake Michigan were \$3 per day. The men are employed between 7 and 8 months in the year, and in manning a schooner they would make about \$300 for the season. The wages on the lakes last summer for wheelmen and watchmen were \$45 per month, an increase of \$10 over the previous year. The wages of the deck hands have increased from an average of \$15 to about \$20 per month. The deck hand has really taken the place of the sailor of 10 years before and the wheelmen and watchmen now are really petty officers. (401, 402.)

6. *Hours of labor.*—This witness states that where the Lake Seamen's Union has control, that is, on the schooners, the men labor 12 hours, but on the steamboats the men work as much as 30 hours on a stretch—24 hours at all kinds of labor on the deck and steering 6 hours after that. After the 30 hours they get 6 hours' rest and again 6 hours at the wheel. While loading, in most of the lake ports, the deck hands work the longshoreman's day, which in most cases is 10 and 11 hours. Then they have to move the vessel and make her fast and pump her out if she leaks. They do all of the loading of the schooners and all the shifting of the cargo, in many cases. The witness believes there is a pressing necessity for regulation in this matter. (403, 404.)

7. *Overloading of lake vessels.*—Mr. PENNE states that it is a well-known fact that the smaller vessels on the lakes are nearly always overloaded. He gave many instances of this, among others submitting a letter from Capt. Henry Leisk, master of the steamer *P. J. Ralph*, in which he charged that there was reckless overloading in the iron-ore trade. The complaints about overloading are usually in the iron-ore trade,

because of the weight of that sort of cargo. The larger vessels can not be overloaded, because the depth of the channels between the lakes is not sufficient. There is no law at present in regard to overloading vessels. The insurance companies insure under a "free-board law," but he does not think it is a United States statute. The competition among insurance companies is so keen that they are glad enough to get the risk and say nothing against overloading. (404, 405.)

8. *Undermanning of vessels.*—Mr. PENJE asserts that practically all of the vessels, both sail and steam, on the lakes, are undermanned, and gives many instances in support of his statement. He analyzes the carrying capacity of these several vessels, stating how many men they carry, and declares that in practically every instance at least twice the number of men should be employed. The undermanning results in especially hard conditions for the men employed. It is also very unsafe, especially in case of a storm. In no other country are the men required to stand at the wheel more than 2 hours, while on the lakes they are required to stand 6 hours, and that, very often, after being continuously at work for 24 hours preceding. The custom elsewhere is 2 hours on and 4 off. He attributes this condition largely to the greed of the owners of the vessels. Two of the "fancy" passenger steamers running between Buffalo and Superior, carrying from 300 to 400 passengers, have 1 captain, 3 mates, and only 12 men that are called seamen. Last year these seamen were paid \$35 per month, and the year before \$25, which is only \$5 more than the deck hands get; they are not competent men and are called seamen only because they have a uniform on. Half of them could not save themselves, much less save a passenger, in times of distress. Many of the disasters on the lakes could be attributed to the failure of the vessels to be properly manned. The majority of the disasters are collisions in the Detroit River, where the passage is in some places only 80 feet wide, and they could be avoided many times if an additional steering man was on the vessel. (405-408.)

9. *Proposed regulations.*—Mr. PENJE states that it is the desire of the Lake Seamen's Union to get some legislation that a vessel should carry a certain number of efficient seamen, and then give the seamen a certificate of efficiency, as every other country does. The certificate might be issued by a Government official, in connection with the custom-house, and the men should be examined before the certificate was issued. All the members of the union are examined by the officer in charge of the union where the men join, and if found sufficient are given a certificate for the capacity in which they can serve. (404.)

10. *Great Lake vessels.*—Mr. PENJE stated that there are very few vessels on the Great Lakes that are square-rigged, most of them being square-rigged on the foremast only, three-masted schooners and barges being used. In the modern barges there is a steam steering gear, and some of them have an electric motor and furnish their own electric light, but the number is small. In some of the more modern vessels there is a steam power in the shape of a "donkey," but that very often gets out of order. (410.)

C. Longshore work—Great Lakes.—1. *International Longshoremen's Association.*—Mr. BARTER, secretary-treasurer of the International Longshoremen's Association, says that this organization was formed in 1892, and was then made up of locals of lumber handlers only. In 1893 its purpose was enlarged to include every dock worker at all ports in the United States and Canada, on the seacoast, the lakes, and the rivers. He estimates the aggregate membership at 40,000, and the membership on the Great Lakes at from 20,000 to 25,000. The chief attention of the organization has been given to the lakes. Mr. Barter mentions among the workmen that are members there the loaders and unloaders of coal, ore, grain, salt, and package freight, dock hoisters and engineers, dock firemen and marine firemen, and all men employed in lumber yards. He does not think that there are more than 1,500 non-union men working at these occupations on the Great Lakes. Such as there are are chiefly at Chicago, Milwaukee, Buffalo, and Duluth.

The association holds an annual convention, at which each local organization is entitled to two delegates, but the delegates cast votes according to the membership they represent. The per capita tax paid to the national organization is 5 cents a month. Local dues are generally about 50 cents a month, but they are collected in most ports only for 10 months in the year, and in some cases only for 8 or 9. In some locals, where there are sick and death benefits, the dues are collected for 12 months. The international organization pays no sick or death benefits, but about 20 per cent of the locals do. In some cases the weekly sick benefit is \$5 and the death benefit \$100. Greater amounts are paid in cases of special need. The 5 cents a month paid to the international organization goes to its expenses, including the salaries of officers and the expenses of attending conferences and conventions. These are considerable, as there are a large number of conferences with employers every year. (307, 314.)

2. *Effect of labor organization.*—Mr. BARTER thinks that wages have risen 50 per cent since his organization was formed; but, besides that, it has effected a great improvement in the character of the men. It has done away with the compulsory patronage of saloons, which existed under the old stevedore system, and it does not permit drunkenness. The saloon evil now exists only in Buffalo, Chicago, and Milwaukee, where the organization has not yet been able to abolish it. In many ports the union fines a man if he gets drunk, and does not let him work until the fine is paid. In many ports the union forbids taking liquor on board a vessel during working hours. The enforcement of these rules gives no trouble. The majority of the men are determined that temperance rules shall prevail. This is partly from the desire to make it an occupation for respectable men to follow, and it is partly a matter of business prudence. The men work in gangs, and if one shirks either the work of the gang is interfered with or his work has to be done by his mates. If a man is incapable of working properly because of the influence of liquor, his mates want him removed and another man put in his place. There has been a very marked change in the character of the longshoremen under the influence of the organization. Under the stevedore system competition between contracting stevedores was often carried on by physical force. A stevedore backed by a strapping band of fighters would drive away the stevedore with weaker followers, and ultimately secure a monopoly of the business. The men were forced to become brutes or be kicked off the docks and kicked to pieces. With the growth of the organization and closer touch with the employers "our brains have taken hold instead of muscle, and the conservative man, the man who had some business ideas, has been forced to the front." (310-312, 316.)

3. *Strikes of longshoremen.*—Mr. BARTER says that this organization has no defense or strike fund, and that none of its locals has ever had to ask financial assistance during a strike except in one case. That case was that of the Buffalo freight handlers in 1900. In the Buffalo strike of 1899 there was no appeal for funds. The organization does not have many strikes, and has never made an assessment. (307.)

Mr. Barter says that there used to be perhaps a strike a day at the docks of the large cities on the lakes. The effect of the policy of the organization has been practically to do away with strikes. The international officers always prevent strikes if possible. (316.)

Mr. Barter gives an account of the Buffalo freight handlers' strike of 1899. He says that the handling of freight was done there under contract, and in January, 1899, there was a change of contractors. The old contractor had paid the men a certain sum for unloading the boats, which was supposed to be equally divided among the men. The new contractor tried to introduce a system of time work. The men struck and demanded the abolition of the contract system, and the giving of the work directly to the men. The strongest reason for demanding the abolition of contractors was the saloon system. Most of the stevedores, or freight-handling contractors on the lakes, used to own saloons. The men complained that unless they patronized the saloons freely they could not get employment. The strike was conducted in an honorable way by the men, with no attempts at violence. Some violence was attempted, but not by members of the organization. Mr. Barter thinks that no union man was arrested for violence. The Lake Carriers' Association proposed to become a party to the agreement between the freight handlers and the contractors, and see that it was carried out to the letter. Mr. Barter thinks that they even agreed to pay 5 cents more than the men had received the year before. The men still refused, demanding that the contract be let directly to them. This the lake carriers could not do because of their existing agreement with the contractors. In the end, however, the men got all they contended for except the direct contract with the lake carriers. (308.)

4. *Agreements with employers—Arbitration.*—Mr. BARTER says that the Longshoremen's Association has a general agreement with the Dock Managers' Association, representing men interested in unloading iron ore at the ports of Sandusky, Lorain, Huron, Cleveland, Fairport, Conneaut, Ashtabula, Toledo, Buffalo, and Erie. The first agreement with them was made on March 15, 1900. In December, 1900, an agreement was made for the loading on cars during the winter of ore piled on the docks. This agreement provides that if any work comes up which is not specifically provided for in the contract, the men shall perform it, and the pay for it shall be determined between the representatives of the local organization and the dock managers, and in the event of disagreement shall be arbitrated. In case of any controversy there is a provision for settlement, first, if possible, by representatives of the dock managers and the representatives of the local organization. If they can not agree, they are to choose a disinterested man, who, with them, shall form a board of arbitration. If they can not agree on a third man, each of them is to choose a disinterested man, and the two so chosen are to choose a third, and, with him, to form the board of arbitration.

It has been necessary actually to resort to the arbitration clause only once. In all other cases every question has been settled by negotiation between representatives of the two sides.

The agreement provides that the men shall continue to work under all circumstances pending arbitration. This has always been strictly adhered to, except in one case. In that case the men had not yet become thoroughly acquainted with the contract. It was not possible to educate 10,000 men on all these points at once. A disagreement arose at Conneaut and the superintendent telegraphed Mr. Barter. Mr. Barter went there and explained the conditions of the agreement to the men and they immediately went to work.

Mr. Barter has found the operation of these agreements most satisfactory. The employers are always ready to meet a committee of the men and listen to any grievance or complaint. The relations between the two sides are entirely satisfactory, and Mr. Barter thinks that these agreements are the solution of the labor question. (312-316.)

5. *Direct contracts of lake-freight handlers.*—Mr. BARTER says that his organization deals directly with the various persons who have freight to load and unload, the transportation agencies, and the dock managers. In some ports the men work in gangs, and the gangs take turns in employment, one taking one boat and another the next. When a boat is loaded or unloaded, the foremen and some members of the gang see the bills of lading, figure out what is coming to them, collect the money, and divide it among all the men who have done the work. (310.)

The Lake Carriers' Association has never taken up the question of any particular contract except the Buffalo contract. The Longshoremen's Association has done business since 1898 with members of the Lake Carriers' Union as dock managers, and this means practically the lake carriers. The contracts are always signed on the part of the men by representatives of the international organization. The local union is, of course, also a party to the contracts, and is directly interested in the making and enforcement of them. The other parties to the contracts are sometimes the dock managers, sometimes the local carriers, sometimes, as to package freight, the superintendents of the freight docks of the different railroads.

Mr. Connors, the man who has the freight-handling contract in Buffalo, still operates to some extent in Milwaukee and Chicago. In those cities there is competition in the stevedore system, and he does not have all the docks. There is no organization of freight handlers in Chicago. There is an organization in Milwaukee, and Mr. Barter understands that Mr. Connors pays the same wages that are demanded by the organization. The contracts are let annually. (309.)

Mr. Barter says that his organization practically controls all the unloading of iron-ore boats, and the loading and unloading of coal and of lumber. He believes that all fair-minded employers on the lakes would prefer to deal with the organization rather than to return to the old system. He has lived on the water all his life and he has never seen boats given the dispatch they have had the last season. This is of great importance, especially in view of the competition of the railroads. Under the present system every individual workman is practically a contractor and is interested in the loading and unloading of boats, and is also interested both in the question of dispatch and in the question of freight rates. Freight rates regulate the wage rate to a very large extent. The men are learning that they must not try to lift their wage rate excessively or it will drive the traffic to the railroads. (313, 314.)

6. *Wages of longshoremen.*—Mr. BARTER gives in considerable detail the wages paid to different classes of workers on the Great Lakes. Among them are the following: Coal trimming—that is, loading—60 cents an hour for a 12-hour workday; fueling, 40 cents an hour for any number of hours; lumber loading and unloading, 50 cents an hour; grain scoopers—that is, unloaders—60 cents an hour; grain trimmers—that is, loaders—60 cents and upward; marine package freight handlers, 30 cents an hour, working 10 and 12 hours, and sometimes 24 hours at a stretch; hoisters, \$80 a month, and engineers \$85 a month, from May 1 to December 15; marine firemen, \$45 a month during the navigation season. In some cases time and a half is paid for Sunday work. Several of these rates are average rates from which there is considerable variation. Mr. Barter thinks wages are 50 per cent higher than they were before his organization obtained control of the ports.

Mr. Barter explains that the grain trimmer or loader has rather more dusty work than the scooper or unloader, but either kind of work is one which a man can not stand many years. These men do not live to be old. (310, 311.)

Mr. Barter says that the introduction of a uniform wage rate for the unloading of ore boats at the several lake ports has been advantageous to the business. "One dock manager is not in sharp competition with another dock manager, because the wage rate now is the same in all the Lake Erie ports." An effort is now on foot to secure a uniform scale for unloading lumber. Such a scale is likely to be established—perhaps a sliding scale based on the freight rate. (315.)

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The question of a sliding scale for the handling of lumber, to depend upon the freight rate, is under discussion, and he thinks his organization will be willing to consent to it. (315.)

7. *Nationality of longshoremen.*—Mr. BARTER says that the Irish-Americans were formerly predominant in longshoremen's work on the Great Lakes, but that many of them became disgusted during the troubles in the lake ports and looked for other occupations. In the younger element that is coming in Americans are a factor, though very few young Americans worked on the lakes under the old system. In ore-receiving ports there are many nationalities, such as Italians, Finns, Hunns, Slavonians, Poles, and Germans. (310, 311.)

8. *Winter occupations of longshoremen.*—Mr. BARTER says that the closed season of navigation on the Great Lakes usually covers December, January, February, and March, but sometimes begins in the middle of November and sometimes does not end till May. The organization has now got an agreement covering the iron-ore ports whereby about 10,000 members will be kept at work in the winter, in the Minnesota, Wisconsin, and upper Michigan ports. Many of the men go into the woods and work at lumbering. In the cities, however, the men have become accustomed to save enough during the summer to live on during the winter without doing anything. Often they buy coal and flour and other provisions for the winter at wholesale. In the summer they often do not have much time to see their homes. In the winter they can see their families. Ten years ago not 20 per cent were married, but now 90 per cent are married and are raising families. (317.)

D. Labor in Mississippi River traffic.—Mr. BRYANT states that the officers on the Mississippi River boats are white men, but the laborers usually negroes. Whites could not stand the work, especially as the weather is usually very hot. The negro has to be paid pretty high for it. On the upper rivers, where the traffic is somewhat different, there are some mixed crews, but mostly negro crews. On the lower river in the packet trade the pay is from \$40 to \$110 per month and board. The labor is not steady and very few boats ever go out with the same crew twice. The "roustabout" cares nothing about saving money or having a home or family, and has no moral obligations. The most of them lose much of their wages in gambling. The steamboat men are very anxious to improve the condition of these laborers, but find they can not do it. The roustabouts are all strong, vigorous young fellows.

The steamboats provide mess rooms to eat in, and tin pans, knives, forks, and cups, but the men would much rather have the food brought on in a dish pan and put on deck, and take it in their hands and eat it. Places are provided for them to sleep, but they never go there, because they want to hide from the mate when they make a landing and dodge the work. In cold or rainy weather they sometimes go down underneath the boilers and sleep there. These roustabouts, when on shore, mostly go to what are called "barrel houses," where liquor is sold, and where there are dance halls, crap games, etc. The officers often go to these barrel houses to find a crew.

Attempts have been made to organize these laborers into a union, but they were only partially successful. The negroes, however, seem to stand together, and when a boat is ready to ship their demands for wages must be met before they will join the crew. (395-397.)

Mr. Bryant states also that Italian laborers have been tried on the Mississippi River boats in two instances, but they were not found to be equal to the heavy work; moreover, they could not speak the English language. The wages paid the Italians were \$60 per month and board. The Italian fruit men employ none but Italian labor on boats. (397.)

Labor in New Orleans.—Mr. Bryant stated that the stevedore labor in New Orleans up to recently had been mostly white, but now the negro is making inroads into that employment, and they work cheaper; that that is steady labor, and the men work in the same gangs and form a very close corporation. (397.)

XVIII.—CORPORATIONS AND COMBINATIONS GENERALLY.

A. Capitalization and promotion of corporations (see also *Capitalization of Railroads*, p. LVIX.)—1. *Capitalization of corporations.*—Mr. GREENE, of the Audit Company of New York, thinks that the overcapitalization of railroads and industrial corporations has many incidental evils, but he doubts whether it is possible to check them by legislation. He thinks that if it were possible to require more satisfactory statements as to the value of assets, etc., in the inauguration of corporations, the motive for overcapitalization would largely be removed. (See summary of Mr. Greene's evidence as to promotion and publicity, p. CCLXXIV.)

Mr. Greene does not think, however, that industrial combinations and other cor-

porations are overcapitalized to as great an extent as is commonly believed. He says it is the universal opinion of manufacturers and business men engaged in enterprises involving risk that they must hope for a profit of 12 or 13 per cent on the actual investment, in view of the risks. Otherwise it would be better for them to lend out their money on bonds or mortgages. Consequently, when the owner of a plant proposes to put it into a corporation, he finds that he must capitalize it at more than the value of the tangible assets. For example, a man owns a mill worth \$100,000, tangible property. A normal rate of profit on the business is \$12,000. Bonds can be issued to the amount of \$100,000, bearing 6 per cent interest. This leaves a balance of \$8,000 of annual earnings, which can be capitalized in stocks. This half of the earnings is, of course, less certain than the first half. There are some people who prefer to invest at low interest with a certainty of return. They will buy the bonds. Others are willing to take more risk, and will buy stocks. The stocks issued in such an instance as this are frequently called water, but this is scarcely a correct description of them.

Mr. Greene says further that the extra \$100,000 of stock in a case of this sort may be properly treated as a capitalization of good will, while the first \$100,000, represented by bonds or preferred stock, stands for the tangible value of the plant. The witness believes that it is perfectly proper to treat good will as an asset of the company if it is accurately valued. At the same time it would be proper accounting and proper policy to distinguish clearly between tangible assets and good will. The easiest way in the inauguration of a corporation would be to have the property appraised by expert accountants. This would show so much for the plant, so much for accounts receivable, cash, material on hand, etc. The total of the tangible assets could properly enough be represented by bonds and stocks, or the plant proper might be represented by bonds and the current assets by preferred stocks. The difference between this amount and the total capitalization would be good will, in the form of common stock.

Mr. Greene says that the value of good will is very frequently estimated on the basis of the profits which have been made from the business during a series of years and also on the basis of future expected profits. Capitalizing it really amounts to a capitalization of earning capacity. The cost of promotion of a corporation is ordinarily added to the common stock, not being distinguished in the accounts from the cost of property. (476, 486, 490, 491.)

Mr. Greene declares that, in his judgment, it would be better business for a corporation having a high earning capacity to increase its dividends, rather than to water its stock. This would certainly be to the interest of the public; but since the people are jealous of high dividends, the owners of corporations have thought that they were compelled to increase capitalization in case of higher earnings, so that the rate of dividend should be about the same as before. The fact that people think that they are swindled if a corporation pays more than 6 per cent dividends is too powerful for the theory of proper accounting.

Still another reason leading to increase of capitalization of corporations is the psychological fact that people will pay more proportionately for a stock bearing low dividends than for one bearing high dividends. If a company pays 10 per cent on its stock, shares of the par value of \$100 will probably be worth about \$150 in the market. If the number of shares is doubled, so that they pay 5 per cent, the shares will probably sell for \$90 each, or at the rate of \$180 for the former one share which sold for \$150. The same attitude toward the value of securities is found in Great Britain as in the United States. (486, 489.)

2. *Basis of capitalization—Stocks v. bonds.*—Mr. Rice, an officer of various corporations, says that it seems to him a matter of indifference how large the capital of a corporation is, provided it is not in the form of bonds. If a corporation issues \$16,000,000 of stock in \$100 shares which sell at \$10 a share, it is practically the same as if it has issued 160,000 shares at a par value of \$10 each. So long as there is no question of public policy or the protection of the public against excessive charges, it makes no difference about the capitalization. The value of railroad properties, for example, continually fluctuates, although their capitalization remains unchanged.

On the other hand, Mr. Rice asserts, the undue increase of bonds is a danger to corporations and to the general financial condition of the country. Stock has no claim on earnings which can be forced. If a company has a large bond issue it gets on well so long as business is prosperous and interest can be paid, but if there is a setback in business the corporation goes into bankruptcy and the country may get into a chaotic state such as existed in 1893 and 1894. The dangers of panics would be much less if the bonded indebtedness of railroads and industrial companies were small. (735, 740.)

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3. *Publicity in connection with promotion of corporations.*—Mr. GREENE says that somewhat more than at present should be done, by legislation or otherwise, to protect investors in corporations, especially in connection with prospectuses and promotion at the outset. Some such regulations would do much to prevent overcapitalization. He thinks, however, that the requirement of greater publicity in these directions should be accompanied by liberal provisions in behalf of corporations. On the whole, the witness is inclined to favor the adoption of such regulations as are found in the English law, which make the persons who issue prospectuses responsible as to any misrepresentations in the statements made.

The difficulty of requiring such statements by legislation is that the information which is necessary varies in each case, and the establishment of definite rules is very difficult. The need of publicity is especially great in the case of the newer and larger companies.

Mr. Greene thinks, however, that the necessity for legislation in this direction is greatly reduced by the precautions which business men themselves have been forced to take against reckless investments. Wall Street has had some bitter experiences lately. This was particularly true as regards some of the industrial combinations whose stocks were floated in 1899, and which now are quoted at very low prices. It is difficult now to float a combination in Wall Street except on the most conservative basis. Moreover, the various banking houses which are connected with the promoting of corporations are becoming more and more careful regarding the nature of the enterprises. A reputable banking house has so many business interests to safeguard that it can not afford to promote a corporation which is not on a sound basis. Banking houses must protect their own reputations if they wish to continue a successful business.

The rules of the New York Stock Exchange, and of other exchanges, also require a certain amount of information at the time when corporations are listed for stock dealings. An audit by a responsible auditing company is usually required.

The result of these methods is that the problem of fraudulent promotions is gradually being solved in Wall street without legislation. At the same time, legislation crystallizing business customs, and the rules of the companies and stock exchanges, might prove advantageous. (476, 477, 482, 483, 491.)

4. *Expenses of promotion.*—Mr. GREENE is disposed to favor greater publicity in connection with the promotion of enterprises. He does not think it imperative that the cost of promotion itself and the expenses of organization should be stated in detail in the accounts of the corporation. It is the practice to include cost of promotion with the total cost of the property. Over against the cost of property are then set the tangible assets and intangible assets, including good will. Cost of promotion would be represented by the stocks issued for good will. As a matter of fact, capitalization is usually based on the supposed earning power and the cost of promotion is taken out of that. The ordinary method of promotion is for the promoter to buy the property for whatever price he can, and then to recapitalize it on the supposed basis of earning power and sell the stock for whatever investors will give, the difference being his profits. The expense of underwriting is often treated separately as part of organization expenses. It is not especially necessary to divide the item of good will as a part of the assets so as to show the pay of promoters. If a property is bought for \$50 and sold for \$100 it makes little difference how much the promoter made if the property is really worth \$100. Often the combination itself so increases the value of property that there is no connection between the new value and the total value of the previous plants. It is true, however, that in certain cases people are deceived into believing that properties were originally worth more than was actually the case, and they would know better if the profits of promoters and underwriters were stated. (491, 494.)

Mr. Rice, who has been connected with the promotion of various companies based on patents, declares that it is very difficult to ascertain the actual cost of promotion, or to judge as to the fairness of the payments for promotion. Most men who obtain stock for promotion are expected also to render services for a long time after the starting of the corporation. In the case of the development of a patent there are great differences in the quality of the inventions, the difficulty of raising money, the risk involved, etc. The owner of the patent in proposing to a capitalist or promoter to furnish money to develop it would be willing to pay comparatively little if the article were already securely established and paying a large profit, while if a considerable amount of capital had to be secured, with much effort in obtaining it, he would be willing to pay more to the promoter. (736.)

B. Exploitation of patents.—1. *General methods—Capitalization.*—Mr. I. L. Rice states that he is president of a number of companies engaged in developing inventions based on patents, such as the Electric Boating Company; the Consolidated

Equipment Company, which produces electricity for lighting trains from the motion of the wheels; the Consolidated Rubber Tire Company, and the Casein Company of America. The witness declares that he is not a promoter in the technical sense, but that he takes up these inventions with the intention of developing them, and not of manipulating stock or making profits by selling out. The new invention, as a rule, is taken up before any tangible plant exists, and the plant has to be created out of the capital which is subscribed. The witness has a number of friends who have confidence in his judgment and who will subscribe for preferred stock, the witness usually making the largest subscription. The working capital is obtained by the cash paid for preferred stock, while the value of the patents themselves is capitalized in common stock. The capitalization of the patent is based on the profits which it is expected to pay. There is very great uncertainty in developing patents. Out of more than 673,000 patents which have been issued the witness does not suppose that 10,000 have ever made any money. Investing in such an enterprise is like investing in a mine—the investor does not know what it is worth, but he capitalizes it at what he thinks it will probably be worth. There are always some classes of people who prefer only safe investments, but others are willing to risk their money in an enterprise of this sort, and the only thing that makes progress is the risking of money in pushing new inventions. Most inventions with which the witness has been connected have proved of very great value. (732, 733.)

2. *Patent monopolies.*—Mr. Rice, president of the Consolidated Rubber Tire Company, says that the stockholders of that company hope that it is a monopoly, and that its patents will be sustained by the United States courts. An enormous price was paid for them on the understanding that they already constituted a monopoly. "Monopoly has a dreadful sound," but this species of monopoly is guaranteed by the United States Constitution, and it brings millions of dollars to the people of the entire country. The invention of rubber tires for carriages has stimulated the carriage industry. The justification for a temporary monopoly is the great hazard of developing the inventions. It not only requires a great deal of effort and money to start the business successfully, but the moment the article is put on the market many others begin to make the same thing, either claiming that it is not patentable, or changing the details in some minor fashion and claiming there is no infringement. (734.)

3. *Consolidated Rubber Tire Company.*—Mr. Rice, who is president of the Consolidated Rubber Tire Company, says that this company controls the patents for the Kelly or Grant tires, which are used chiefly on carriages and other vehicles. The company is somewhat different from others organized by Mr. Rice for the development of patented articles, because at the time it was formed the tires were already being very widely used, and the patent had an enormous value. The company was capitalized at \$8,000,000, which was supposed to cover the value of the patents and of the existing business. Of this \$4,000,000 was in preferred stock and \$4,000,000 in common. There had been litigation regarding the validity of the patents, and it had been sustained in various places, so that a large number of other companies, which had been started, went out of business, and the Rubber Tire Company fell heir to their business. It was not a consolidation of companies in the ordinary sense. At the time the corporation was started the preferred stock was issued at about par, and the common stock at about 50. Soon after there was further litigation regarding the patents, and the stock has now fallen so that the preferred stands about 30, although it paid 6 per cent dividends in 1900, while the common is quoted at about 5. There is no doubt that the stock could not have been sold in the first place if people had imagined that there would be such a decline. The company hopes that its patents will be generally sustained, and in that case it will have almost entire control of the manufacture of tires. It owns a plant at Akron, Ohio, and there are a large number of licensees who pay royalty. (733, 734.)

Mr. Rice says that there is no monopoly of the supply of raw rubber, although there may, perhaps, in the future be an attempt to corner it. The largest supply of rubber comes from South America, and this is of the best quality. The output of Para and Manaoas for 1900 was 61,022,585 pounds, of which the United States took 27,413,469 pounds. (735.)

C. Publicity of corporations.—1. *General desirability.*—Mr. GREENE, of the Audit Company of New York, does not favor undue regulations of the methods of business of corporations. For example, such a provision as exists in Germany, requiring that if the accounts show that some of the company's capital will be lost, a meeting of the shareholders shall be called immediately, or that if the liabilities appear to exceed the assets, bankruptcy proceedings shall at once be instituted, would not be suited to American conditions. It would be unwise to hamper the great captains of industry to any unreasonable extent. (492.)

Mr. Greene thinks, however, that a greater degree of publicity of the accounts of corporations than now exists is desirable within proper limits. In his judgment most merchants, manufacturers, and corporation officers in this country are honest. In some instances, however, through ignorance, they make statements which are not, commercially speaking, correct, although they may show the actual figures. There could be no harm, for the protection of investors and of the general public, in requiring publicity of the essential facts. One essential fact which should be demonstrated would be the real profits made. In the case of industrial combinations the existence of large profits would then tend to promote competition. If the corporations are guilty of any erroneous practices the people will find it out by such publicity. The witness believes that the American people will deal justly with the corporations if they know the facts regarding them.

Mr. Woodcock, railroad editor of the Wall Street Journal, believes that if legislation could be enacted requiring certain reports at the inauguration of corporations, and annually thereafter, it would be desirable. Railroads are no longer much at fault in this regard, but the industrial combinations ought to be compelled to report as fully as the railroads do. (466.)

Mr. Rick, president of the Consolidated Rubber Tire Company, says that on general principles a corporation should furnish accounts to the stockholders and the public as soon as it is once on an earning basis. In the case of companies still struggling in the developing stage, publication of accounts would be misleading and would frighten stockholders and investors. The witness does not know that the laws of any State require publicity as to the cost of promotion of corporations, and seems to question whether it would be wise to do so, because the costs of promotion must necessarily differ so greatly, according to the companies. (736.)

2. *Limitations—Expert audit.*—On the other hand, says Mr. GREENE, in the case of some classes of corporations, undue publicity would be undesirable. When a business formerly conducted by a partnership is turned into a corporation its real character is not changed. No one asks a partnership to give information which will help its competitors, and a corporation should not be asked to do so. Even the shareholders in some instances ought not to be given all the information as to the operations of the company. If this were done competitors could become shareholders and get inside information which would result in serious injury. Shareholders are continually changing and have little knowledge as to what information can properly be made public.

As a protection to shareholders and investors in the case of corporations whose accounts, for the reasons suggested, ought not to be published in detail, Mr. Greene suggests that expert professional auditors should be employed from time to time to examine the affairs of the corporations, audit their accounts, and certify officially whether apparent earnings were real earnings and whether the corporation was in a sound condition. The general results of such examinations should be stated without details. The Audit Company of New York, with which Mr. Greene is connected, is frequently called upon to make such examinations as he suggests. It examined the Pressed Steel Car Company, which has recently been issuing mortgage notes to the amount of \$500. This company guarantees that it will have on hand at all times certain things as a safeguard to investors, and it has appointed the audit company to ascertain from time to time whether this requirement is carried out.

The witness implies that some legal requirement of a proper amount of publicity on the part of industrial corporations as well as railroad corporations might be advantageous. He does not think that at present the Federal Government should undertake to regulate the accounts of any but transportation companies.

Mr. Greene explains the difference between an audit and an examination of a corporation. An audit has to do with the books of the corporation as they stand. An examination goes into the affairs of the corporation to find out whether the figures on the books represent commercial facts. "The most dangerous set of books I ever saw in my life were absolutely correct, but they did not represent the facts." Thus in the case of a railroad company it is not customary to keep maintenance and depreciation accounts. If the railroad company wishes to make its earnings appear large it can stop repairing cars and keeping up its system. The books would read all right, but only an examination of the affairs of the company would show its true condition. (479, 482, 492.)

3. *Proper items of public accounts.*—Mr. GREENE discusses the general items which should be stated in the reports of corporations given to the public, especially such as should be prepared by expert auditors in accordance with his suggestions above summarized. The leading items would be as follows:

(1) Cost of property, including or not including good will, as the custom of the company might be. (For Mr. Greene's discussion of good will see p. —.)

(2) Tangible assets, either in one lump or subdivided. There are times in the history of industrial companies when it would be a serious drawback to have to give information as to tangible assets. For instance, it would be undesirable at times to state the amount of raw material in stock or the finished product on hand.

(3) The capitalization of the company, subdivided according to different classes.

(4) Debts of the company, either in one sum or subdivided. It would not be desirable in some cases to show the different elements of indebtedness. The company may borrow large amounts of money from banks while it owes only small amounts for material. It might create discussion as to the credit of the corporation if this fact were known. At another time in the same year a large part of the company's indebtedness might be for goods purchased, and its indebtedness to the bank small. Such matters would affect the investors and should be stated or not as circumstances directed.

(5) Surplus of the company, profits and losses, etc.

(6) Depreciation of plant. In the judgment of Mr. Greene this should be as much a charge on the business as money paid for labor. The difficulty is to determine what should be a proper amount to charge for depreciation. In some instances the amount should be accumulated as a reserve fund actually set aside. In other instances it would be better to reinvest the reserve fund in the plant directly. It would be foolish for a company to set aside a reserve fund, receiving 2 per cent interest, while it is borrowing money at a higher rate of interest for construction purposes. (492, 493.)

4. *Stock exchange control of accounts.*—Mr. GREENE, of the Audit Company of New York, says that the New York Stock Exchange requires a reasonably thorough examination of the affairs of corporations at the time when they seek to be listed on the exchange. It has been often suggested that the stock exchange should also require annual reports from listed corporations, with proper auditing of their accounts. The objection is that the stock exchange is not intended to pass on the solvency of corporations or to determine the value of their stocks. (479, 483.)

D. Rights of minority stockholders and of stockholders generally.—Mr. GREENE, of the Audit Company of New York, does not think that the rights of minority stockholders are likely to be abused. The courts are more and more disposed to protect them. In general the interests of the majority stockholders do not differ from those of the minority. The directors are supposed to be really representative. That theory is not always carried out, however.

Mr. Greene thinks that there is great advantage in the American principle of giving the directors of corporations, especially the president and 2 or 3 leading officers, the main governing power. It would be unwise to have dividends declared and business transacted by actual meetings of the stockholders, as is common in Great Britain. In this country business men are so much occupied that they can not give time as directors to manage the details of business, so that much must be left to the few officers. In foreign countries there are more men who are at liberty to attend numerous meetings of directors. American business men are willing to take individual responsibility, even to take action without the approval of directors in the expectation of future approval, while English and German business men hesitate to take such responsibility. The American policy is more advantageous.

Lists of stockholders.—Mr. GREENE thinks that it is the custom of all large corporations just before the annual election to send out blank proxies all over the country. Only in this way could elections be carried on. The witness does not think that in general there is any injustice to minority stockholders or any difficulty on the part of stockholders in ascertaining who are the other stockholders. It is not often possible for a few persons managing a corporation to continue in control without holding or having the support of a majority of the stock. The stockholder can generally get all the information he needs if he takes the right way about it, although the witness declines to express an opinion as to whether the law is always sufficient, since he is not a lawyer himself. The objection which the corporations have to granting undue access to their books arises from the fact that competitors and others sometimes buy a small number of shares of stock for the sake of getting information, and take advantage of it in one way or another. There are many people who make a business of trying to obstruct something in order that they may be bought off. At the same time, if there were some safeguards in this direction, and especially to prevent outsiders getting information as to financial matters, there would be little objection on the part of corporations to a requirement of greater publicity of their stock books, or to a requirement that the names and addresses of all shareholders should be furnished to all shareholders before each annual election.

Mr. Greene does not think that the New Jersey laws regarding stock books are violated or that it is impossible for a stockholder to get the names of other stockholders. There may be cases where the books of corporations organized in New Jersey are not kept there, but in New York or elsewhere. As a general thing, however, the corporations, particularly the larger ones, are law-abiding and have all the books at their New Jersey offices which the law requires. (477, 478.)

Mr. Woodlock, of the Wall Street Journal, thinks especially that every stockholder ought to have the right to inspect the list of all the stockholders. In New York and New Jersey this right is given by law, but it is difficult to enforce it, while in some States there is no such provision in law. As a rule no one cares to see the lists of stockholders unless there is a struggle between different parties among them. In that case the dominant party naturally does not wish the others to see the list of stockholders. Under present conditions a group of persons may continue to control a corporation, though without owning a majority of the shares, which would be much less possible if the other stockholders knew who the shareholders were.

Mr. Woodlock does not think that the giving of such information regarding stockholders would result in any injury to a corporation. He does not believe that stockholders ought to have the right to see all of the accounts of corporations. Under such a rule competitors might buy a small number of shares and obtain knowledge of the business of a corporation. In some instances it may be justifiable for a corporation in its annual reports to withhold such information, for example, as the actual profit on manufacturing. A statement might show net profits only. In such a case, however, there ought to be a proper auditing of the books by experts to see that real profits have been earned. (466, 467.)

E. Corporation laws.—1. *Liberty desirable.*—Mr. GREENE thinks that if additional restrictions are placed upon corporations the corporation laws should also be modified so as to give them additional privileges, at least in some of the States. The witness understands that in New York and Pennsylvania one corporation is prohibited from holding the stock of another, which is permitted in New Jersey. Greater liberality is desirable in this and other regards. (477, 478.)

2. *Federal incorporation laws.*—Mr. GREENE, of the Audit Company of New York, doubts the advisability of a Federal law for the incorporation of industrial companies. He thinks the first thing to do is to straighten out the State laws. Uniformity would certainly be desirable. It is a constitutional question whether it would be within the power of the Federal Government to charter companies doing business inside of individual States, and whether this would be consistent with proper home rule. Mr. Greene admits, however, that corporations organized in individual States, like New York, do business through different States. He adds that some persons advocate incorporation under Federal laws in order to escape State laws which are unreasonably severe. (482.)

F. Trusts and combinations.—1. *Generally.*—Professor PARSONS states that the results of the private ownership and management of the railways has been that they go into partnership with some of the great industrial enterprises of the country, and thus create what is commonly known as the trust. He instances the case of the beef combine and the Standard Oil trust as created by railroad favoritism. He does not believe, however, that public ownership of the railroads of the country would abolish the trusts. As a general principle he is not opposed to consolidation of capital so long as it is in the public interest. He does not believe in destroying the trusts, because they represent a movement in the line of progress; each trust being a brotherhood or cooperation on the inside, in that it dispenses with much antagonism and lessens expenses of management and operation. The proper solution of the trust problem would be to extend the limits of it "in some way so that it shall cooperate not only internally but externally—on the lines of cooperative industry—so that great capital will voluntarily, of its own motion, tend to organize along cooperative lines instead of antipublic lines." (157-158.)

Mr. SCHIFF, of Kuhn, Loeb & Co., bankers, testifies that personally he has had no experience in industrial finances. Community of interest, however, exists among bankers as well as among railroads, and they combine their capital when they have large financial transactions, so as to handle a great concern under one management. He says his firm may have been invited to participate in the financing of the United States Steel Corporation and other industrial corporations, and may have accepted the invitation to a moderate amount, but that it had nothing to do with the details of the management. The combination of large resources constitutes what is commonly termed to-day a syndicate. (775.)

2. *Concentration of wealth—Effect on opportunities for advancement.*—Mr. ANDERSON, secretary of the chamber of commerce of Pittsburg, does not think the modern concentration of corporate wealth does away with the opportunities for intelligent mechanics to rise. The managers of the Carnegie Works, from Mr. Schwab down,

have all been taken from the ranks of the workmen. So was Mr. Carnegie himself. (649.)

3. *United States Steel Corporation.*—Mr. WOODLOCK, railroad editor of the *Wall Street Journal*, believes that the formation of the United States Steel Corporation was chiefly occasioned by Mr. Carnegie's careful plan to compel some one to buy him out at a high price. (464.)

4. *Fruit trust in New Orleans.*—Mr. BRYANT states that there is a company called the United Fruit Company of New Orleans, which last year bought out all the other companies there, some 13 in number, and put them under one management. This trust controls all the fruit trade on the foreign plantations, and not only raises the fruit, but owns the vessels in which it is transported and shipped directly to New Orleans and to other points in the United States. It does not own the cars, but deals directly with the railroads. Fruit is handled very rapidly and economically at New Orleans. This combination claims that it has not raised the prices of fruit to the consumer, but makes profit from the lessened expenses of management, and the witness believes that the prices have not been increased. (397-398.)

6. *Export prices.*—Mr. GREENE, of the Audit Company of New York, believes that the practice of making low export prices is justifiable in order to relieve the country of its surplus products. His argument is the same as that in favor of low export rates on railroads. (See page —.) Mr. Greene adds that the practice of making prices lower abroad than at home is common among the manufacturers of all the leading industrial countries. We find a similar practice also within our own country. The manufacturers in a given section, having a local market, frequently sell goods in more distant sections at lower prices in order to get rid of a surplus. Thus a manufacturer in New England, finding that he is getting overstocked, is likely to continue production, maintaining prices in New England and selling the surplus in Kansas City or some other distant market at prices which, while they may render the Kansas City producer a profit, yield practically no profit to the New England manufacturer.

Because of the advantage in keeping up production and preventing depression, which results from this practice of making low export prices, Mr. Greene believes that ultimately domestic prices as well will be reduced by this policy. (484, 487, 494.)

Mr. HOWES, of the Boston Chamber of Commerce, testifies that no doubt a part of the trade with Canada has been obtained by the American manufacturers selling goods in Canada at less than they were selling the same goods in the United States. All nations do this every day. The American manufacturers are not discriminating any more in Canada than in Germany, France, or any other country. No matter what conditions of tariff exist, that is a method of their trade, the practice of making slaughter sales in the foreign markets is one that the manufacturers of all countries employ. Whether the tariff is on or off, trade of this kind will go on just the same. (716.)

H. *Concentration of wealth.*—Mr. SCHIFF, banker, testifies that in his opinion there are more wealthy people in proportion to population now than there ever was before, and that the present condition of affairs will contribute to a larger distribution of wealth than has ever before existed. (777.)

XIX. MISCELLANEOUS EVIDENCE NOT RELATING TO TRANSPORTATION.

A. *Reciprocity with Canada.*—1. *General necessity of trade treaty with Canada.*—Mr. OSBORNE HOWES, a member of the Boston Chamber of Commerce, declares that in order to maintain and increase our trade with Canada it will be necessary to enter into a reciprocity treaty regarding tariffs. The Canadians are the largest purchasers, man for man, that the United States has. The Canadians resemble the people of the United States more than any other people, and they may be termed a "corresponding people." It is a mistake to think that trade relations can be established with a dissimilar people as readily as with a corresponding people. The business of the United States must be carried on to a large extent with those countries that are producing much the same goods that the United States produces, under different conditions. This is proven by the fact that internal or interstate trade between the States of New York, Pennsylvania, Ohio, and Massachusetts is probably more than equal in volume to the entire export and import trade of the United States. When the witness was in the Pacific Mail Service, the steamer on which he ran carried all the imports for Colima, in Mexico, a city of 100,000 inhabitants, and it only amounted

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to about one freight-car load a month. In Canada the market is already established, and the people are willing to purchase of the United States rather than of anybody else. The people of the United States do not realize that this trade with Canada gives employment to every department of American industry from the time of taking the materials from the mines and the fields to the time when they leave the workshop in a finished state, ready for consumption. This trade is infinitely better than mere mining and agriculture, because it represents vastly more employment to American labor and capital.

The trade conditions with Canada are eminently satisfactory, but the difficulty is that they are not likely to continue so, unless we are prepared to do something toward meeting the wishes of Canada in the way of giving her a market for what she has to sell. If we make a treaty with Canada which is satisfactory to her, and which gives her a market here, we shall have a clutch on the Canadian people which they will not care to break. The United States must make concessions in the duties on fish, lumber, and coal. Agricultural products are relatively a small matter. We sell Canada \$19,000,000 worth, while Canada sells the United States only \$2,000,000 or \$3,000,000 worth of them. A proper reciprocity treaty would increase the trade on both sides, and would be very desirable. The United States would have more to gain than Canada, and should make overtures to Canada for reciprocity. This is one of those arrangements which should be made while the opportunity exists. (713, 715, 718.)

2. *Unwise American policy toward Canada.*—Mr. Howes declares that the United States made a very fatal diplomatic error and raised a resentment against them when, by the high duties on foreign goods, they practically shut out Canadian products. We thereby forced the Canadian prime minister to adopt a national policy and to endeavor to build up manufacturing industries in Canada. Canada is now independent of the United States, so far as the market for her products is concerned. The United States see in Canada their best market. Canada sees nothing here that is seriously necessary to her welfare. The tendency has been, and is, to drive Canada away from us, and it may be that by the "federated Empire of England and her colonial dependencies" the tariff on goods entering Canada from all British territory will be swept away entirely, and the United States will have practically no market at all in Canada. The United States can not afford to lose this market. (716-717.)

3. *Extent of Canadian trade.*—Mr. Howes says that last year (1900) the Canadians purchased of the United States \$17.50 per capita, which was much more than the people of any other country bought. The United Kingdom came next, with per capita purchases of \$13.25. With Germany, the per capita trade was about \$5; with Argentina, \$3; Mexico, \$2.65; France, \$2.15; Italy, \$1.10; Japan, 70 cents; Brazil, 60 cents. The 6,000,000 people in Canada purchased more of the United States last year than the 60,000,000 people who live on the American continent south of the Rio Grande. Moreover, the Canadians purchased the goods that the United States most desired to sell. An itemized statement, showing the relative balance of trade of the United States with Canada, shows a very large balance in favor of the United States on a large list of manufactured mining and agricultural products. Taking the Canadian classification of the trade for the year 1896, the net result is as follows:

Products of—	Purchases	Sales.
Mines.....	\$7,438,000	\$9,222,000
Fisheries.....	3,302,000	322,000
Forests.....	13,528,000	2,732,000
Animals.....	3,341,000	2,308,000
Agriculture.....	3,233,000	10,124,000
Manufactures.....	2,531,000	28,184,000
Total.....	34,373,000	52,892,000

For the year 1900 the trade was as follows, viz:

Products of—	Purchases.	Sales.
Mines.....	\$23,700,000	\$11,600,000
Fisheries.....	3,089,000	454,000
Forests.....	12,805,000	5,200,000
Animals.....	5,326,000	3,420,000
Agriculture.....	2,041,000	19,080,000
Manufactures.....	4,857,000	61,362,000
Total.....	52,418,000	101,146,000

In other words, the sales to Canada by the United States of manufactured wares for the year 1900 were more than \$10 per capita of her people, and were as much of the manufactures as the United States sold to the entire world in 1870, and about one-sixth as much as they sold to the entire world in 1800. (713-715.)

4. *Coal trade with Canada.*—Mr. Howes says that the trade in bituminous coal between Canada and the United States is about an even exchange. It is largely a question of geographical location. The Canadians have not developed coal mines to any extent in the interior regions, but have excellent coal mines in Nova Scotia in the extreme east and British Columbia in the extreme west. The United States have no bituminous coal mines at either extreme, but have them very largely in the center of the country. The United States supplies Canada with bituminous coal from a point about 150 miles west of Montreal, nearly to the Rocky Mountains. On the Pacific coast of the United States the coal supply comes from Canada or New South Wales. In New England the bituminous coal now, under the protective duty, comes chiefly from western Maryland and West Virginia. The cost of mining the coal in those two States is substantially the same as in Nova Scotia, but the railroad haul from there to tide water is about \$1.25 a ton, and this advances the price of the coal just that much. The mines in Nova Scotia are practically on the seaboard. The natural source of supply of New England is Nova Scotia, and inasmuch as the United States supplies the deficiencies in central Canada, and Canada supplies the deficiencies in the eastern and western extremes of the United States, reciprocal relations should be established for the benefit of both countries. When the United States places a duty on bituminous coal Canada does the same, and when the United States takes this duty off Canada likewise removes it. The coal interests of Maryland and West Virginia are exceedingly strong, however, and they naturally object to the removal of the duty, which would have the effect of threatening their New England market. (714-717.)

5. *The lumber interest.*—Mr. Howes says that the lumber interest in the United States is one of the strongest in opposition to reciprocal trade relations with Canada. The market for lumber is largely in the New England and Middle States. It is a long haul from Minnesota and Wisconsin and is a short haul from Canada. The hard pine lumber from the Southern States also requires a long haul. The New England interests naturally turn toward Canada as the place to buy lumber. She thinks she should have the right to go to Canada for her lumber supply. If Canada is ever to be made a part of the United States, it must be by drawing the Canadians to the United States through trade relations. The witness does not believe there would be any difficulty in making a treaty on the ground of equivalent concessions without regard to the special products if it were not for the lumber interests. (717-718.)

6. *Differential tariff of Canada with Great Britain.*—Mr. Howes says that about 4 years ago Canada proposed, by act of Parliament, to grant to any other country that would give to Canadian products what Canada considered equivalent tariff conditions, a concession of 12½ per cent in the duty then existing, to be increased the next year to 25 per cent. At that time there was no country prepared to take advantage of this offer, except Great Britain, for the reason that Great Britain charges practically no duty on any Canadian product, except whisky. In consequence of treaties with England, Belgium and Germany received this benefit for a short time, but at present England is the only country which enjoys it. The differential has been increased to 33½ per cent, so that American goods entering Canada pay 50 per cent higher duty than is paid by corresponding English goods. In spite of this differential, however, which amounts to about \$10 on a shipment of \$100 worth of goods, American manufactures have entered Canada and in very many departments of trade have driven out the English manufactures. England, however, still has the bulk of the trade in cotton manufactures. It is so much easier for the Canadians to get to the American markets than to the English market. Orders can be transmitted in 24 hours, and executed in 48 or 56 hours, and if there is any question about the goods, the differences can be easily settled. Moreover, the goods manufactured in the United States are more to the Canadian taste than the English goods. The Canadians are more nearly like the people of the United States than they are like the English, and they favor the American styles more generally than they do the English.

This differential tariff was very likely initiated for the purpose of forcing a reciprocity treaty with the United States, but it has now obtained such headway that it is working out its results on its own ground. Under this differential tariff policy, Canada has a tremendous market in England. Their sales there last year amounted to \$107,000,000 in value, and will increase greatly in the future. (716-718.)

7. *Fisheries.*—Mr. Howes testifies that the Gloucester fisheries have been held up as the "nursery of the Navy." The fact is, however, they have ceased to be an American industry. American capital is invested in these fisheries and certain American officers are employed on the fishing vessels. The larger part of those

engaged in the fishing industry are from Nova Scotia, New Brunswick, and Portugal, and are not American citizens. None of them, with the possible exception of some of the Portuguese, will ever become American citizens. Out of 50 or 60 men who lost their lives in the fishing industry last year, not more than 3, possibly only 2, were American, and they were captains of American vessels. During the Spanish war the United States Government sent down 2 battle ships or cruisers to Gloucester to get as many enlistments as possible. They stayed there nearly all the time of the war and enlisted a little over 300 men, or about one-half as many as would be necessary to arm one battle ship. Boston is not the "nursery of the Navy" and never claimed to be, and yet she enlisted some 1,700 men during the same time. The American does not like the fishing business. (717.)

B. Grain elevators and inspection.—Speculation.—1. *Minnesota law as to elevators and grain inspection.*—Mr. TEISBERG, secretary of the State railroad and warehouse commission of Minnesota, says that the legislature of 1885 passed an elevator law applying to the terminal points St. Paul, Minneapolis, and Duluth. It was based largely upon the Illinois law, but contained an improvement in that it put the weighing of grain as well as the inspection of it under State control. It was soon found that it was more profitable to do business as a private elevator than as a public elevator, especially at Minneapolis. A public elevator must take out a license from the commission and furnish a bond. They evade the law by not mixing, as they claim, the grain of different owners. In a public house the grain of different owners, of the same grade, may be mixed; in the private elevators at these terminal points it can not be. So the elevator owners themselves buy the grain, or grain dealers have their own bins in certain elevators. There are about 30 elevators in Minneapolis and only 6 are licensed public elevators. At Duluth, and also, by an arrangement with the authorities of Wisconsin, at Superior, all the large elevators are public licensed elevators, doing business under the laws of Minnesota.

The State railroad and warehouse commission appoints a chief grain inspector who has charge of all inspection. He appoints a chief deputy at each terminal point, and as many deputy inspectors as necessity requires. The chief inspector's salary is \$3,000 a year; the salary of the deputy inspectors is \$115 a month, and they are employed the year round. From 1889 to 1899 the place of chief grain inspector was held by one man, who managed the department admirably on a civil-service examination basis. During that period grain shipped from Duluth by vessel to Buffalo or New York was sold on the Duluth certificate without being seen by the buyer at all. In 1899, as the result of a political revolution, a new chief inspector was appointed, and he made an almost complete change of subordinates. For the time being, at least, the confidence of grain dealers in other States in the accuracy of the Duluth inspection was diminished.

When an inspector grades wheat his sample is generally kept for the office. The commission man's representative also looks at the car and takes a sample. If, in his judgment, the grain has not been graded high enough, he makes an appeal to the chief deputy inspector. The chief deputy passes on the samples taken by both parties and either sustains or changes the grade. If either party is dissatisfied, there is a further appeal to a board of appeals, consisting of three practical grain men at Minneapolis and three others at Duluth. From their decision there is no appeal.

There is a fee of 25 cents a carload for inspection and another 25 cents a carload for weighing. For inspecting and weighing out to vessels, 50 cents a thousand bushels is charged. These fees give revenue enough to pay the employees of the department. (367, 369.)

2. *Mixing of grain.*—Mr. TEISBERG says that at Duluth all the large elevators are public licensed elevators, in which the mixing of grain of different grades is prohibited. All the grain of a given grade—good, poor, and medium—goes in together, and the result is a fair average of the grade. In Minneapolis, on the other hand, the elevators are mostly private elevators, and the owner can buy a car of good No. 2 and a car of good No. 1, or possibly two cars of good No. 1 to one car of fair No. 2, and mix them together and possibly make the mixture No. 1. There is often trouble when grain goes from Minneapolis, out of these mixing houses, to Duluth. A carload of grain, which in Minneapolis has been graded out as No. 1, is often called No. 2 at Duluth. The Minneapolis grades are likely to be the very least that can be brought within the classification, because of this mixing process. A great deal of the mixing, however, is done for millers for local consumption. The millers, in order to get the best results, want a certain mixture, which is, perhaps, a secret with them. They instruct their men what to mix and how to mix it. At Minneapolis, in consequence of the use of private elevators and the mixing system, grain is very largely sold by sample. Mr. Teisberg believes that this is rather advantageous to the producer. The farmer who has an off-grade grain that could not come into a public elevator has a chance to dispose of it. A farmer who raises gilt-edge grain

gets a premium above the regular grade price. At Duluth he would get the grade price and no more. The mixing system and the sample system are not really advantageous to an elevator man. Duluth grades are held in the world's markets much higher than Minneapolis grades. Indeed, Mr. Teisberg thinks that Eastern buyers, as a rule, will not take Minneapolis grades, because they are mixed to the lowest possible point. (367, 369.)

3. *Elevator combination in Minnesota.*—Mr. TEISBERG, secretary of the State Railroad and Warehouse Commission of Minnesota, has no knowledge of an elevator combine nor of any consultation to fix the price of grain. At the close of the business day the quotations of the last sales are noted, and the line elevators send that information to their agents. If an independent elevator wants that quotation he must make arrangements with a commission man to send it to him by wire or mail. The price paid to the farmer each day is doubtless based on the market price of the preceding day. (370, 371.)

4. *Relation of elevators and railroads.*—Mr. TEISBERG, secretary of the State Railroad and Warehouse Commission of Minnesota, has no knowledge of any combination between railroads and elevator companies, but he sometimes suspects a community of interest between them. He does not know, however, of any rebates being given by railroads to elevator companies. He has heard rumors of such things, but he has never been able to verify them during his 15 years of official experience. (371, 372.)

5. *Independent elevators in the Northwest.*—Mr. TEISBERG says that before the establishment of the Railroad and Warehouse Commission, in 1885 or 1887, the country elevator business was done almost exclusively by what are called line elevators—that is, companies having offices at Minneapolis or Duluth had a line of elevators on one or two railroads. The farmer could not get a car to ship his own grain. The railway companies put every obstacle in the way of such a movement and in the way of independent buyers. But Minnesota has passed laws which give any person who wants to put up an elevator a right to obtain a place for it on the railroad right of way, if there is room for it, under the power of eminent domain, in just the same way that the railroad can obtain its right of way. A law passed in 1885 gave every applicant a right to a site on payment of an annual rental of \$1, but that was thrown out by the State supreme court on the ground that it did not provide for due compensation. The present law was passed in 1893. The legislature of 1893 also passed a law requiring railroads to build side tracks or spur tracks to elevators of a certain capacity, and to mills on sites adjacent to the right of way if the railroad company has refused the applicant room for an elevator at its way station. The applicant must pay the cost of grading and constructing the road, and if the terms can not be agreed on an appeal may be made to the commission.

The law of the State also prohibits the pooling of the business of country elevators. Of course, as a matter of fact, they generally pay the same prices, and the amount of business done by each depends largely upon the character of the man in charge, his standing in the community, and his reputation for honesty and fair dealing.

The producer has also a right to demand a car on the side track of the railroad and to have 24 hours in which to load it without demurrage. That makes the producer independent of the local elevator combine, if there is such a thing. He can ship his own grain and save handling charges, which are usually about 2 cents a bushel at a local elevator.

Mr. Teisberg asserts, however, that the former policy of the railroads, of permitting only line elevators upon their roads, has been wholly reversed. There is a farmers' cooperative elevator or some independent elevator of that character at almost every station in Minnesota. Mr. Teisberg believes that the railroads are not disposed to embarrass producers and independent shippers by denying them cars or otherwise. It is true that it is sometimes impossible to obtain cars, but that is not through the desire of the railroads. The grain is marketed within about 3 months, and when the crop is large the capacity of the railroads and of the terminal elevators is overtaxed. Mr. Teisberg believes that if a producer himself desires to ship his grain the railroad company would stretch a point and give him a car in preference to the elevator man. He believes that the farmers' elevators receive the same treatment from railroad companies as line elevators. (367, 370-372.)

6. *Speculation, effect on farmers.*—Mr. TEISBERG, secretary of the State Railroad and Warehouse Commission of Minnesota, has no opinion to express on the effect of speculation on the prices paid to farmers. At the time of the Leiter wheat deal he knew of one man who had three years' crops in his granary and sold the whole for \$1.45 a bushel at the local station. It ought not to have been worth over 85 cents. That was a good speculation. Ordinarily, Mr. Teisberg is assured by men who are intelligent and who farm on a large scale, it does not pay a farmer to hold his grain. The large farmers usually sell at once, even if they buy futures. (372.)

C. Industrial and agricultural conditions of the Pacific coast

(see also *Nicaragua Canal*, p. CLXXXII; *Oriental trade*, p. CLXXXII).—1. *Generally*.—Mr. WHEELER, of the San Francisco Board of Trade, thinks that the industrial condition of California and the Pacific coast is generally good. Attention has been drawn to the resources of the country through the Spanish-American war. The passage of troops through San Francisco has been an education to them as to the possibilities of the coast, while the newspaper reports of the movement of troops have also advertised California. The effect of this advertising has been shown through the winter of 1900-1901 by a great increase in tourist traveling, which has been further facilitated by the prosperity of the country. People going about the State as tourists go back and talk about the country and many of them afterwards return or make investments. The Southern Pacific Company has also made an effort to bring in settlers and has introduced a special colonist rate of \$25 from the Missouri River to any point in California. (754.)

2. *Manufactures on the Pacific coast*.—Mr. WHEELER says that the local manufactures in San Francisco and other California cities are chiefly those of clothing and woolen goods, boots and shoes, cigars, shot, cartridges, lead pipe, sheet lead, mining and milling machinery, harvesting and agricultural implements, wagons and carriages. Bar iron and steel are also manufactured, as well as wire and wire cables and nails. At present, however, the iron and steel business is not in an altogether healthy condition. Formerly a good many nails were manufactured on the coast, but the plants were bought up by the American Steel and Wire Company and the nail part of the works was closed, because goods could be produced more cheaply in the East.

Hitherto, continues the witness, manufactures on the Pacific coast have been greatly hampered by the expensiveness of fuel. But this difficulty is being avoided in large measure by the development of electrical power and of oil wells. There is an inexhaustible supply of oil, and it is now being introduced into the factories and furnaces. Three and a half barrels of petroleum are said to be equal to one ton of coal. Ultimately the oil from southern California will be piped to San Francisco and the northern part of the State. Electrical power is also being generated by the streams of the Sierra Nevada and conveyed thence by wire at a low cost. This will become an important factor in running small factories. There is also good coal on the Pacific coast, though it is expensive. The Southern Pacific Company gets its supply of coal near Tacoma at Carbonado, and it has coal vessels running regularly from Tacoma to San Francisco and Los Angeles carrying coal for use on the railroads. (752, 753.)

3. *Fruit, wine, and raisin industries on the Pacific coast*.—Mr. WHEELER looks upon the canning of fruit as a form of manufacture. He says that the canning industry in California is a very large one. The season for fruit canning is short, but occurs fortunately at a time when the labor of boys and girls can be obtained in the school vacation. Canned goods for export are sent around from San Francisco in clipper sailing vessels, while the Eastern markets are supplied chiefly by rail, the railroads making rates which recognize the possibility of water competition.

Mr. Wheeler says also that the manufacture of wine is an important industry in California and that wineries are quite general throughout the grape growing districts. The industry is now quite profitable, though it was not until recently. The witness understands that a great deal of wine is shipped from California to France and thence sent back to this country again.

Mr. Wheeler says also that the raisin industry has become a very important one. Recently there has been established a form of cooperative distribution of the raisin crop, and the same is true as regards prunes. The farmers, instead of competing with one another to a ruinous extent, have established one central agency for marketing their product and are very generally satisfied with the results. Whether there is an export trade in raisins, the witness is not familiar, but he says that the trade in Eastern markets is good, the railroads making rates which recognize the possibility of competition by water. (754, 755.)

4. *Cooperation among California fruit shippers*.—Mr. STUBBS, of the Southern Pacific Company, thinks that the efforts of the California fruit growers and others to cooperate in the marketing of their product have been very beneficial to them. The system has worked well in the raisin business. There has been less accomplished in the case of other deciduous fruits. It is difficult to get several thousand farmers to agree together and to trust any individual with their business. There is an organization among orange growers, and the witness thinks that even more effective organization in handling oranges and green fruit generally is desirable. The distribution of fruit ought to be under one head, so that no more will be sent to a given market than there is demand for. When everybody ships as he pleases, markets are often overstocked and prices ruined. (768.)

5. *Condition of agriculture in California.*—Mr. WHEELER says that generally speaking the farmers of California are prosperous; as prosperous as those in any other section. They are very largely dependent upon the rains, and during 1901 they have been well favored in that respect. (755.)

D. Manufactures and agriculture in Colorado.—Mr. GRIFFITH, representing the Denver Chamber of Commerce, says that manufactures have not developed much in Colorado, partly because of the high rates of freight on raw materials from the East, and partly because of the high cost of labor and other expenses. There are cotton mills in operation at Denver. The witness believes that they failed once, but whether on account of bad management or of unsatisfactory freight rates he does not know. He thinks they are now operating successfully. (857.)

Irrigation in Colorado.—Mr. GRIFFITH says that irrigation by private initiative in Colorado has proved very advantageous, and has resulted in the production of splendid crops. He believes that the State or the nation should take up the subject, and says there is a general feeling in favor of such action in Colorado. The witness refers especially to the Rocky Ford district, where a great sugar-beet industry has been developed. It is claimed that the beets contain more saccharine than those raised anywhere else. There are now 3 beet-sugar factories running and another is being constructed. It is said that if reservoirs were created in the mountains, by blocking up the gulleys, a very considerable proportion of the arid lands of the State could be irrigated. A great deal of wheat, potatoes, hay, and fruit is being raised under irrigation. (858.)

E. Export and domestic trade in coal.—Mr. FLEMING, of the Anthracite Coal Operator's Association says that there is practically no anthracite coal exported to Europe. The Canadian market for anthracite is large. Soft coal has been going abroad to a considerable extent; during the year 1900 the amount exported being nearly 100,000,000 tons. There was practically no export trade before. The witness believes that there is going to be a great future for the export trade through southern Europe, Spain and Italy producing no coal. They have hitherto imported chiefly from England, with small quantities from Belgium and Germany. (540, 541.)

Mr. McLEON says that while he was president of the Reading Railroad he had a thorough investigation made as to the possibility of foreign trade in anthracite coal. He believes that the cost of mining with the added freight will entirely prohibit such trade abroad. We have a considerable trade with Canada. (567.)

Mr. MARKHAM says that there is very little export of coal from the Southern States, the only development being in the consumption of coal by the Southern towns. There has been a little export from Pensacola and Mobile to the West Indies, but none from New Orleans. A few years ago coal could be shipped into Mexico from Wales cheaper than it could be from the Southern States, but since that time, with the development of the railway system of the Southern States, the cost per unit of traffic has been greatly decreased. (433-434.)

Mr. ANDERSON, secretary of the Chamber of Commerce of Pittsburg, says that he knows of a firm that sent 2 cargoes of coal to London in 1900, sent special agents to look after it, gave away many tons to introduce it, and yet after all the extraordinary expense netted 25 cents a ton more than they could have got for the coal in this country. (643.)

Coal trade of New Orleans and the South (see also *Mississippi River Transportation*, p. CLXXXIV).—Mr. BRYANT states that nearly all the coal used at New Orleans comes down from Pittsburg on barges. The freight rate is 75 cents per ton. Coal can only be brought down from Pittsburg when there is a rise in the Upper Ohio. Sometimes during low water New Orleans runs out of coal. Coal consumption has very largely increased at New Orleans on account of the war with the Boers, which has increased the number of steamships coming to New Orleans.

F. Commission and jobbing business—Elimination of jobber.—Mr. LANGLEY, of the Merchants' Association of New York, says that the commission man is a third party that does not invest his capital directly in the business, nor does he carry an extensive stock of goods. He has accounts with certain mills and to a certain extent is their selling agent. The jobber, on the other hand, buys his goods outright, assumes whatever loss there may be in conducting ordinary business, and is under the expense of maintaining a store and having his capital tied up. In the commission business it is possible to ship from the mill to the buyer in Central or Western territory direct, there being only one haul and one expense of freight rates. With the jobber there are two hauls. The witness does not think it would be to the interest of the railroads to foster the jobbing trade, although it might look so on the

surface, because the railroads favor large shipments and large shippers. The railroads are assisting the industrial combinations which manufacture and ship direct to the consumer, and are thus working against the interest of the jobbers. The increase in the Southern classification in respect of carload and less than carload lots is directly in line with this tendency, and the effect on New York as a distributing center has been to reduce the number of jobbing houses from 28 to 4.

The ultimate effect will likely be to eliminate the jobber as a factor in commercial affairs and to lessen the importance commercially of many of the large centers of trade. It means a closer connection between the producer and the consumer, and tends toward economy. The department store, the introduction of trolley lines, the maintenance by the department stores of their free-delivery system, and the mail-order system have had a great effect in eliminating the jobber. The elimination of the jobber from business has been caused somewhat, perhaps, by the tariff shutting out foreign importations. The jobber formerly represented foreign houses in this country. Some of the large department stores, as Siegel Cooper & Co., Wanamaker, and others, take the entire product of mills and dispose of it without the interposition of either the jobber or the commission man. (871-872.)

G. Alleged discrimination in Government contracts.—Mr. WHEELER says that the jobbers of San Francisco consider that they have a grievance as to the action of the Government in buying supplies for the army in the Philippines. He understands that practically all clothing is purchased and stored in Philadelphia. Campaign equipment is stored at Jeffersonville, Ind. Contracts are advertised for the delivery of goods to these places and other similar Eastern points. These goods are thence shipped through San Francisco to the Philippines, and the San Francisco bidders are barred from any opportunity for competing for the contracts, even though they are at the very gateway of the Philippine traffic. The San Francisco dealers do not ask for a monopoly, but desire that the Government shall call for bids for the delivery of goods at San Francisco. This will give the jobbers there a chance to make bids without barring out those from Chicago and other Eastern cities. The Government could establish storehouses at San Francisco and maintain stocks of supplies there. The witness thinks it would be a proper subject of Congressional inquiry to ascertain why one section of the United States is discriminated against in the letting of these contracts. (756.)

H. Panics.—Mr. GREENE, of the Audit Company of New York, points out that panics do not affect manufacturers and general business as soon as they do speculators. Panics are financial in the first case. The manufacturers of the country suffered most in 1896 and 1897, not in 1893. The witness thinks that industrial combinations, by preventing overproduction and by building up export trade, especially through the aid of low export freight rates, will do much to check panics in the future. (482, 487.)

I. Discriminating tariff on goods carried in bond.—Professor RIPLEY says that a discriminating tariff against all goods carried in bond would have the result of prostrating practically every industry in New England. It would be one of the greatest disasters for New England which could happen if its shippers should be deprived of the advantage which they now have of shipment over Canadian lines, as they now suffer from the disadvantage of being far from raw materials and distant from the great centers of population and wealth. (290.)

J. Southern Pacific Company in politics.—Mr. WHEELER says that heretofore the Southern Pacific Company has been exceedingly active in California politics. There has been no State or local features which it has not tried to grab. The company states that the new administration under the presidency of Mr. Hayes will abandon this policy. (754.)

K. San Francisco Board of Trade.—Mr. WHEELER, a member of the San Francisco Board of Trade, says that this body is an association of wholesale merchants who make use of it exclusively for the purpose of economies in the settlement of bankrupt estates. By joining together more is saved in the administration of an estate for the benefit of creditors than would otherwise be the case. (743.)

L. Michigan Alkali Company.—Mr. BACON, freight manager of the Michigan Alkali Company, says that this is a strictly "family corporation." The manufacture of its principal products is based on salt, of which there is a stratum over 300 feet thick on its property. The company employs about 2,000 men, and over 80 per cent of the cost of its product goes for labor. About an eighth or a tenth of the labor employed is skilled. The wages of common labor are \$1.50 per day and of skilled labor from 25 cents to 50 cents an hour.

The company consumes daily 700 tons of coal, 100 tons of coke, and 700 tons of limestone; 500 tons of finished material are produced, consisting of soda ash, bicarbonate of soda (baking soda), caustic soda, and Portland cement. The principal buyers of heavy soda ash are the glass factories of Pennsylvania and Indiana, and of light soda ash soap factories. There are only 3 other establishments engaged in this industry—at Syracuse, N. Y., Saltville, Va., and Delray, near Detroit.

The manufacture of these products is protected by the tariff. Formerly in the absence of protection there was a very narrow margin of profit. English ash was laid down in the interior of this country at about what was considered the actual cost of manufacture here. The competition between the factories in this country is active, but not ruinous. (72, 79, 80, 85.)

M. American money.—Mr. SCHIFF, banker, says that the large amount of American money in existence to-day has been partly taken out of the earth in gold and silver. Partly it has been created by the creation of wealth. The bank note represents wealth, and for this reason the Government circulation is not justified, because the Government does not produce anything and should not be the maker of the vehicle of wealth circulation. That function belongs to the banks. (777.)

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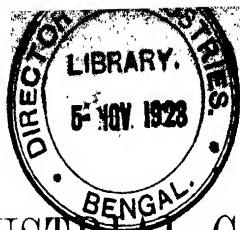
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TESTIMONY.



INDUSTRIAL COMMISSION.

TRANSPORTATION.

ATLANTA, GA., March 21, 1900.

TESTIMONY OF MR. SAMUEL C. DUNLAP.

General manager, Cornelia and Tallulah Falls Railroad, Gainesville, Ga.

The subcommission of the United States Industrial Commission met at the Kimball House at 9 a. m., Senator Kyle presiding. Mr. Samuel C. Dunlap, general manager of the Cornelia and Tallulah Falls Railroad, Gainesville, Ga., was introduced as a witness at 10.40 a. m., and, being duly sworn, testified as follows:

Q. (By Senator KYLE.) You may give your name, post-office address, and vocation.—A. Samuel C. Dunlap, Gainesville, Ga.

Q. (By Representative LIVINGSTON.) You are connected with railroad enterprises of the State?—A. For the present I have some connection, sir. I have two local roads under my supervision.

Q. (Interrupting.) What is the condition of the railroads in Georgia and the South generally, financially?—A. I want to state first that I have two small roads under my management. One is 65 miles and the other is 20 miles long. I am receiver for the first road, running from Gainesville to Social Circle—the Gainesville, Jefferson and Southern—appointed by the superior court, and though I am general manager of the Tallulah Falls Railway, running from Cornelia to Tallulah Falls, I am not an original railroad man. I have been a lawyer most of my life, up to about 1893, when I was appointed United States marshal. I went from that to the receivership of that road, and I have been managing it since. As far as I know about the financial conditions of the roads, one of my roads is insolvent, and the other has not got any money. As to the larger systems, I think they are all prosperous.

Q. (By Senator KYLE.) You do not think that represents the condition of all roads in the South?—A. No, sir; I think the railroads are making money now, all of them.

Q. (By Representative LIVINGSTON.) How are the railroads controlled in this country, simply by the board of directors, or by railroad commissions, or jointly?—A. I did not catch that question.

Q. How are passenger rates and everything fixed; by railroad commission?—A. Well, the railroad commission make rates, and I believe the roads conform to the particular commission. The railroads have an association, the Southern Freight Association, of which Mr. Parrott is the chairman. They regulate this through it to some extent. I am not a member of that association.

Q. Your roads are not included?—A. I conform generally to the rules, but I am not a member. Being a court officer I did not care to hamper myself with any outside regulations. I have a connection with the Southern Railroad at Gainesville, with the Seaboard Air Line at Winder, and with the Georgia at Social Circle, which is leased now to the Louisville and Nashville and the Coast Line. All those systems are friendly with me. I give them business and get business from them. On the little Tallulah road here I depended entirely upon the Southern for all my through business.

Q. The reason why you were subpoenaed is that you are controlling independent lines that were supposed to be entirely outside of these associations and combinations. We hear complaints of the roads giving advantages to terminal points, and we will be pleased to have you say to the commission what there is in this complaint about long

and short hauls.—A. Well, I do not do much interstate business, and my business is mostly local. While I am independent in one sense, I am dependent in another. The little local roads would not do much without the friendship and assistance of the big lines. They could crush them out, if they had a mind to, without any effort, so I get along the best I can and do all the business I can. As to the long and short haul business here, that question could be better answered by some of these long lines.

Q. What is the discrimination on your line between two points, Social Circle and Gainesville, suppose you stop off for some freight at Monroe from Social Circle, and the rest of the freight you haul from Social Circle to Gainesville. How do you prorate your freights in that way, on your line?—A. We have local schedules, and Social Circle is a common point; Winder is a common point, and Gainesville is a common point. There we have competition, and the rate is a little lower than at the intermediate points. At these common points I get all I can.

Q. Now, provided that freight was going to Augusta, you really compete with the Southern Railroad, and if you can, you cut the freight rate there and take it across to Social Circle? Do you make any trade about or anything of that kind?—A. No, sir; I do not cut the rates. There is a law against cutting rates, and I am a court officer and a law-abiding man, and I don't cut rates. I try to get it by various other arguments, but I do not cut rates. I can not cut the rate without the support of one of the main lines.

Q. Well, then, the independent roads in the State are pretty much like yours, if there are others; they are dependent largely for favors on the main trunk line?—A. Yes; the day, it seems to me, for short lines has gone. There isn't one of them in the State, which I know anything about, that can live without the assistance and friendship and support of one or the other of the large systems.

Q. That practically, then, shuts out railroad building except by trunk lines?—A. Well, when we first passed the Georgia commission law I think that that killed the little roads. The 10-mile road was forced to haul passengers and freight at the same rates as the big trunk lines, and it could not live.

Q. Did they make no discrimination in your favor?—A. Well, the Tallulah Falls road is so short and so poor that they do. I get 5 cents a mile up there for passengers, and a little more for freight, but on the Gainesville, Jefferson and Southern road I charge the same that is charged by the Southern, 3 cents a mile for passengers, and the same rates of freight, and there isn't enough business. The population is too sparse, and freight is too little. There isn't business enough, unless you have a mineral road or some road that has an extraordinary advantage.

Q. You think the commission, then, works a hardship on independent short lines?—A. I think it forced them to combine with the long lines.

Q. In other words, it gives the main trunk lines the advantage, and consequently they usually absorb them?—A. All the advantages; yes.

Q. (By Mr. RATCHFORD.) You say you charge the same rate of freight on one of your roads that the Southern charges. What is that rate?—A. I have got no rate sheets here, and I am not an expert on rates. Any freight agent can give you that.

Q. You can not say whether it is 10 mills per ton per mile, or 15 or 20?—A. I would rather not undertake to answer questions about detailed rates.

Q. (By Mr. SMYTH.) You said just now that you thought the main lines were making money and were prosperous?—A. Yes; I think they are.

Q. More so than a year ago at this time?—A. Yes. All the railroads now, that I know anything about, are filled up with business, and there has been a great scarcity of cars this season.

Q. If that is so, what is the reason for the increase in freight rates that went into operation on the 10th of this month on the Southern system, Atlantic Coast Line, and Seaboard Air Line?—A. Well, I suppose that the railroads thought they ought to get a little advantage of the prosperity of the times. They were doing more business.

Q. Making more money, and therefore thought they ought to make a little more?—A. Well, the railroads have been cutting down, down, down for 20 years, and have had to cut a great many things down to a point where there was nothing in it.

Q. At the same time they are making much more money than a year ago?—A. A year ago they were pretty well broke. They have just got out of bankruptcy and started up, and I suppose now they want to make some money, and want to be in position—

Q. (By Senator KYLE, interrupting.) That is, they have not been able to pay dividends on stocks, bonds, etc.?—A. Yes.

Q. How are the roads stocked in proportion to the cost of the roads?—A. I can not very well answer that question. As you know, all these roads that have gone into reorganization—the Central, Southern, and the various lines—the stock has not been considered as worth anything.

Q. A great many roads over the country have complained in past years that they have not been able to make any money at all, but the roads have cost in many sections of the country about \$7,000 a mile, and they are bonded at about \$42,000 or \$43,000 a mile. It is pretty hard to make good dividends on stock, including the water?—A. Well, I do not know about that.

Q. (By Mr. SMYTH.) Do you know what the Southern system is capitalized at per mile in Georgia?—A. I do not.

Q. Do you think there was a necessity for an increase of 5 per cent in freight rates?—A. Well, I think the business would bear it. I do not see why the railroads should not make something in profit out of the business.

Q. You said just now there was great scarcity of cars to haul the business.—A. Yes.

Q. So there is no lack of business being offered?—A. None at all.

Q. The tonnage was a great deal greater than a year ago?—A. Yes.

Q. Profits were a great deal greater than a year ago, as shown by the published receipts?—A. Yes.

Q. What excuse is there for the increase in the rate of freight?—A. Well, I have increased my rate; I am not connected with the interstate lines. That would be a question more for Mr. Culp, Mr. Scott, or Spencer, or somebody else to answer. I do not belong to that freight association.

Q. (By Senator KYLE.) What governs you in determining the freight and passenger rates?—A. Well, I am governed largely—

Q. (Interrupting.) By what the business will bear?—A. No; the State of Georgia fixes the passenger rate and freight rate.

Q. You used that expression—what the business will bear?—A. They were far below commission rates, and I think they were probably trying to get up. I give that as an excuse for it. Now, take the cotton factory companies; you know we all want to build anything in the way of factories, and it was said for a long time that the railroads had helped the factories because they were all infants and weak, and had to be fed and nursed by the railroad and every other interest. They kept at that until the factories have put down all the cotton, and in all this vast section here we can not get any cotton to haul to the ports. I suppose the railroads, maybe, want to get something back out of the cotton companies—don't know.

Q. (By Mr. SMYTH.) They get that same cotton in the shape of goods, do they not?—A. No; they don't get nearly as much freight as out of cotton.

Q. It is a better class of freight, not so inflammable?—A. Yes; cotton is easier lighted than anything.

Q. There is danger from fire in cotton, is there not?—A. The insurance companies pay that.

Q. (By Mr. RATCHFORD.) Don't you think the finished article, including the shipment of machinery and materials for the construction of mills, will amount to about as much freight as raw material would?—A. I am in favor of it, but we give them reduced rates on machinery and material and everything else, and then they get a very low rate on their manufactured stuff, and they get advantages everywhere.

Q. Is there increased passenger traffic as a result of the building of those cotton mills in different communities?—A. Well, we all want cotton mills built. I was trying to give an excuse for raising rates.

Q. (By Mr. SMYTH.) That is, that you think the traffic would bear it?—A. I said I supposed the railroads thought so. I will give you an instance: On my road over there at Monroe there is a little cotton mill, and last year they sold 1,200 bales of goods—cloth—to be exported to Shanghai, China. Those goods went out from Monroe to Shanghai for \$1 a hundred. Mr. Johnson, general freight agent of the Georgia Railroad, made the rate and fixed it, and when I found out what it was going at, I found I was only getting 3 cents a hundred out of that business.

Q. (By Mr. RATCHFORD.) Out of that dollar?—A. Out of that dollar.

Q. (By Mr. SMYTH.) For how long a distance?—A. I do not know how far it is to Shanghai.

Q. About 3 cents?—A. I hauled it about 10 miles; but it came to Atlanta for 6 cents. I got 3 and the Georgia Railroad got 3. That is all we got out of it.

Q. How much did the Southern get?—A. The Southern did not get it. As I understood, the railroads divided the 93 cents to San Francisco, and the balance, 7 cents, went across the Pacific, and that is what took cotton goods out of the country. I objected to it. I did not want all my cotton business ruined. I would get out of cotton 12 cents, and I was only getting 3 out of manufactured stuff. I wrote Mr. Johnson and protested that he should not have made such a price as that without consulting me; and he wrote back and said that if I wanted to deprive the Walton mill of the privilege that all other mills were enjoying, I could do it; but he thought as a matter of policy I ought to let a little mill make some money, too.

Q. Do you suppose that mill paid freight to China?—A. No; sold goods.

Q. They are not interested in the rate of freight to China, are they?—A. No.

Q. That rate was made in competition with the Suez Canal and tonnage across the Atlantic?—A. I can not speak as to that.

Q. Don't you suppose there are two ways to ship goods to China—over through the Suez Canal or across the continent to the Pacific—and the railroad made the rate in competition with them?—A. Well, I do not get enough out of the manufactured stuff to pay for handling it.

Q. How many shipments of that kind have you made?—A. I shipped 1,200 bales in that lot.

Q. You do not know of any other shipments?—A. No; I do not know any others.

Q. Only the one case?—A. Yes. I just mentioned that case as an illustration.

Q. How do you quote shipments from that mill to New York?—A. I get my local rate—about 6 cents.

Q. (By Mr. RATCHFORD.) In receiving 3 cents for a 10-mile haul, is it not a fact that you are paid proportionately higher than those other roads that handle goods?—A. Yes.

Q. You admit you were paid proportionately higher than others, according to the distance hauled?—A. Yes.

Q. (By Mr. SMYTH.) You hauled 10 miles for 3 cents, and the Pacific Steamship Company hauled it 4,000 miles for 7 cents?

Q. (By Senator KYLE.) It was hauled from the mill across the continent here to the Pacific for 87 cents?—A. That is what I understood.

Q. (By Representative LIVINGSTON.) What is the freight rate per hundred from Atlanta to New York on the manufactured stuff?—A. I think it is about 50 or 60 cents. I can not quote the rates.

Q. Nearly as much as across the continent?—A. Yes.

Q. (By Mr. SMYTH.) Don't you think that mill allowed the exporter the New York rate of freight, 50 or 60 cents?—A. I do not know how it was based or divided.

Q. Were not those goods sold at that mill based on New York delivery, and the buyer received a bonus of 50 or 60 cents?—A. I can not answer that.

Q. (By Senator KYLE.) You say you give very low rates on machinery brought into the country here. Do you ever grant rebates?—A. Well, I do not know what the main lines do. On my road we have built two cotton factories, and we have given the manufacturer a two-thirds rate on the machinery and material for the mill. I think that has been pretty generally followed in the State. I can not speak with certainty.

Q. So you act in harmony with the main lines in doing that?—A. Yes.

Q. Mutual understanding?—A. Yes. Well, I did that.

Q. (By Representative LIVINGSTON.) Does the practice of granting rebates obtain in Georgia over these roads or not?—A. I think not, sir; no, sir.

Q. Is there any discrimination between shippers that you know of?—A. None.

Q. Large and small shippers?—A. No, sir; I think not; none that I have knowledge of. Of course I have seen something in the papers about these things, but I do not know anything about them.

Q. (By Senator KYLE.) No violation of the interstate-commerce act?—A. No, sir; I do not suppose there is any of any consequence.

Q. (By Mr. SMYTH.) You talk about special rates on machinery. Do you know what the rates are?—A. I do not; I think the rate on machinery has been about 55 cents a hundred.

Q. That is the rule, is it not?—A. I think so.

Q. That is the charge of the minimum car rate, is it not, of 20,000 or 24,000 pounds?—A. Yes; I can not speak of that because I can not quote through rates accurately.

Q. If a car contains 12,000 pounds they have to pay on 24,000 pounds, do they not, and if the car contains 30,000 pounds they have to pay the excess over 24,000 pounds. Do you call those special rates of any great advantage or convenience to the manufacturer or mill owner?—A. I do not know. I only answered the question about mill machinery, and I said we built two mills on my little road.

Q. I understood that you said that the cotton mills were receiving special advantages and specially low rates. I want to find out if things are being done differently in Georgia from what they are in other States.—A. I can not quote rates. I think we ship cotton goods—manufactured goods—cheaper than we do anything else.

Q. Is it not considered about the best class of freight you can carry?—A. Yes.

Q. Easiest handled?—A. Yes.

Q. No danger of breakage? A. No.

(Testimony closed.)

MEMPHIS, TENN., March 23, 1900.

TESTIMONY OF MR. JAMES S. DAVANT,

Commissioner of the Memphis Freight Bureau, Memphis, Tenn.

The subcommission of the United States Industrial Commission met at the Peabody Hotel at 9.15 a. m., Senator Kyle presiding. Mr. James S. Davant, commissioner of the Memphis Freight Bureau, Memphis, Tenn., was introduced as a witness at 11.07 a. m., and, being duly sworn, testified as follows:

Q. (By Senator KYLE.) Please give your name, post-office address, and vocation.—A. James S. Davant, Memphis, Tenn., commissioner of the Memphis Freight Bureau.

Q. (By Mr. SMITH.) Will you explain to the commission what that Memphis Freight Bureau is, its objects, and how long it has been in existence?—A. It is an organization of the merchants and manufacturers of Memphis for the purpose of adjusting inequalities in freight rates at Memphis as compared with other competing points.

Q. The object is to advance the business interests of the city of Memphis by making this a point where cotton and other commodities can be bought and transported as cheaply as at other cities?—A. Yes.

Q. Have you met with much success?—A. Yes, we have accomplished a good deal. Our efforts are mainly directed to the adjustment of the rates to and from local territory.

Q. We had before us yesterday Mr. Porter as a witness to give us some information with reference to freight rates on cotton from Memphis to points east and southwest and southeast—that is, to the Carolina mill points, as compared with New England mill points. Can you give us information as to these competing rates?—A. Yes. The rates to the eastern spinning points are based on 55½ cents to Boston.

Q. That is, all points that take the Boston rate, 55½ cents?—A. Yes.

Q. What is the rate to New York?—A. Fifty and one-half cents.

Q. What is the rate to Cohoes, N. Y.?—A. I am not quite sure whether that takes the New York or the Boston rate. I think it takes the New York rate.

Q. Fifty-five and one-half cents?—A. Possibly so; I do not know.

Q. Do you know the rates to Carolina mill points?—A. Fifty-nine cents.

Q. Can you give me the rate to Pinners Point?—A. Forty-two cents.

Q. Then cotton going, say, to Charlotte, N. C., or Greenville, S. C., some 300 or 400 miles this side of Pinners Point, would take the rate of the 59-cent point, whereas cotton passing through those points and going to Norfolk would take a rate of 42 cents?—A. Yes, that is true.

Q. Does not that difference in the freight rate tend to prevent any cotton from being shipped from this territory to the Carolina mills?—A. It has that effect to a certain extent. The high rate from Memphis as compared with near-by points is against it.

Q. You mean points near to the Carolina mills?—A. Yes, but the rates are relatively adjusted from all territory on the Mississippi River, so that we are in line with those points in the distribution of our cotton.

Q. What excuse does the railroad make for charging a rate so much higher to a point so much nearer Memphis than to a point farther on?—A. The rates to the coast points are made arbitrarily, or rather by river competition and other influences that they can not control.

Q. The effect, however, is to give an advantage to the foreign spinner, is it not, in his cotton?—A. Yes. The rates to Liverpool are sometimes lower than to Carolina points.

Q. And so the Carolina mills, instead of having an advantage by their nearness to cotton, are really at a disadvantage?—A. Yes; that is true with reference to Memphis and adjacent territory. I understand the objection urged to reducing the rates to the Carolina mills is that it would result ultimately in the reduction of local rates from near-by points.

Q. Has any effort been made to secure a reduction of rates to the Carolina mills?—A. Yes; we have had it under correspondence for a number of months.

Q. It has been stated as a fact that the mills, particularly in upper South Carolina, consume very much more cotton than is raised within any reasonable distance, and they are obliged to go away for cotton. Is there any reason, if that is the case, why they should not enjoy at least the same rates as the New England mills on their cotton?—A. I do not know of any. My contention has been that the rates from Memphis should be the same to the Carolina mills as to Norfolk and other Virginia ports.

Q. (By Senator KYLE.) What about water transportation to New York and Boston as regards rates?—A. We have the river from here to New Orleans, and the steamers thence to the East on the one side, and then we have the river from here to Cincinnati and rail thence.

Q. What are the rates to New York and Boston by way of New Orleans, by water?—A. I think they publish the same rates as all rail.

Q. No advantage then in water transportation at all?—A. The present rail rates are fixed by that water transportation. They have adjusted themselves to these conditions.

Q. What about insurance for water and land transportation?—A. There is an additional cost of insurance. The water rate from here to the East by the way of Cincinnati is 5 cents lower than the railroad rate, which is supposed to cover the difference of insurance, and make provision for slow time.

Q. (By Mr. RATCHFORD.) What are the rates on a bale of cotton from here to the New England mill?—A. To Boston points a rate of 55½ cents per 100 pounds, estimating 500 pounds to the bale.

Q. Are you acquainted with the rates from here to Liverpool?—A. I have them in the office. They are changing all the time.

Q. Can you state approximately? Is it higher?—A. I think they are about 72 cents. I have not noticed it for a day or two.

Q. (By Mr. SMYTH.) The Southern Railroad, from recent statements published, shows a degree of prosperity?—A. I think so.

Q. They share in the general prosperity of the country?—A. I think so.

Q. Apparently there is no excuse for advancing rates and maintaining these exceedingly high rates to local points on their road?—A. I do not understand that they have ever earned anything on their stock, and I suppose it would be reasonable to accord them the privilege of doing so.

Q. Is it not a fact that the Southern Railroad paid a dividend on their stock last year, and possibly another the 1st of April?—A. On preferred stock I think they did. I understand that under the old conditions, when these rates were in effect, they did not make anything on their stock. That is the rule with a great many of the roads, and especially so with reference to the Memphis division of the Southern.

Q. (By Senator KYLE.) Do you know anything about the capitalization of the Southern road?—A. No, I do not.

Q. (By Mr. SMYTH.) Is not the fact that these rates to local mills in the Carolinas are so high due entirely to their being local points on the Southern Railroad, noncompetitive points, which other roads can not reach?—A. That is quite probable; I presume so.

Q. Therefore they make a fixed arbitrary of 17 points above the rate to Norfolk, about the same distance from here?—A. I assume the fact that these are local points accounts for their being able to hold a higher rate.

Q. They have power to make the rate?—A. No doubt about that.

Q. You are familiar with the interstate-commerce law?—A. Yes, sir; more or less.

Q. Under the present law, as we have seen, the railroads initiate the rate of freight and submit it to the commission, and it remains in force, even if the commission objects to it, until the question is decided in the courts as to its being a fair rate. Do you think that is the fair and proper way in which it should be handled by the Interstate Commerce Commission, or would it be better to clothe the Interstate Commerce Commission with power to inaugurate the rates and let them be in force at once and await the decision of the court as to their being reasonable?—A. We think that would be preferable, of course, from the shippers' standpoint, and our bureau has petitioned our members of Congress to clothe the commission with powers to adjust rates in correction of what they deem to be discrimination.

Q. Would your bureau be willing to go further and clothe the commission with power to audit and examine the books of all railroads doing interstate business, under competent inspectors, as in the national bank system?—A. Yes. Is that incorporated in Mr. Cullom's amendment to the bill which is now pending?

Q. It is covered in the report which has been made by this commission to Congress, which was submitted early in February.—A. The reason I ask is, we have asked our representatives to advocate the adoption of Mr. Cullom's amended bill.

Q. You are in favor, then, of the Cullom bill?—A. With a few changes. We recommended that the fourth section should carry the present provision as to different circumstances and conditions not requiring the strict observance of the long and short haul clause.

Q. (By Senator KYLE, interrupting.) You do not want to make the long and short haul clause mandatory?—A. No; we do not think that would be fair, and I think it would work great hardship not only to the railroads but to trade centers.

Q. (By Mr. SMYTH.) Before you accepted this position with the Memphis Freight Bureau, were you not connected with railroads?—A. Yes, sir.

Q. What road?—A. I was connected with the freight department of the Memphis and Charleston Railroad.

Q. That is part of the Southern system?—A. It is now. I was assistant general freight agent.

Q. Is there a physical division or pooling system among the railroads here?—A. I understand there is.

Q. So no road can do more than its quota, or if it does it gets no more revenue?—A. I think the system is to divide the cotton business, and if a road gets more than its proportion, and the shipper insists on its taking more, a transfer is made to some other road.

Q. (By Senator KYLE.) And a road gets its proportion if it does not haul any?—A. No; I think they have no revenue pool; it is a physical pool, and unless the roads are able to control their proportions the deficit is turned over to them by some road in excess.

Q. (By Mr. SMYTH.) The effect is, if the railroad has received its full quota of cotton or other commodities, the shipper is powerless to insist on his shipments going by that road; it will transfer it to another road?—A. That is the way we understand it.

Q. (By Mr. RATCHFORD.) What is the standard or basis upon which it is made?—

A. The agreement as to proportion is based on the movement of past years.

Q. On the carrying capacity of the road?—A. The strength of the lines is considered.

Q. As Captain Smyth has stated, the ultimate effect is what is commonly known as a pooling system?—A. I think so.

Q. Do you believe that such a pooling system is a good thing for the shipper?—

A. I do not. I think it works rather to his detriment.

Q. The public service would be best served by each road's having its own rates and affording to shippers the opportunity of having his goods go over the line he prefers?—A. I think so. There is one thing they claim that is worthy of consideration; that is that under the present system the rates are stable and are alike to all parties.

Q. I understand you said at the beginning that the rates were based on the cost of the water transportation?—A. Yes, sir.

Q. With reference to water transportation of cotton, for instance to Boston and New York, has there at any time been a barge line from here to these points or to the Gulf?—A. There has been no business of late; a number of years ago it was handled by barge to New Orleans.

Q. (By Senator KYLE.) Would that materially decrease the expense?—A. Under the present rates, I think not.

Q. (By Mr. RATCHFORD.) The insurance is higher when shipped by water?—A. Yes. I do not think it is feasible to ship that way under present rates. That would be done if they should advance the rates from Memphis.

Q. (By Senator KYLE.) What is the insurance from here to Norfolk and Pinners Point—the insurance rates?—A. I really do not know. I do not think they insure by rail, unless it is under the general policy that covers all liability by rail and water transportation. I think they accept the railroad's bill of lading as sufficient insurance.

Q. The insurance rate on cotton is as great by water as it is for land transportation?—A. Yes; it would be greater.

Q. (By Mr. SMYTH.) How are your local rates on cotton to Memphis from points around? Are they as high as they were several years ago? Any reduction in the last 25 years?—A. Yes; a considerable reduction in the last 5 years.

Q. How is that fixed; 10 miles, 20 miles, and so on?—A. No. I think it is controlled by outside competition almost entirely.

Q. Have you a railroad commission in Tennessee?—A. Yes.

Q. It has established these local rates on cotton?—A. It has taken no action on the rate question at all. The law provides they shall make a tariff of all freights throughout the State, but they have never done so.

Q. You consider the local rates on cotton to Memphis as fair?—A. No; we have some contention. Some of them we think are fair; others are too high.

Q. I suppose you are kept busy looking after these inequalities?—A. Yes; thoroughly so.

Q. And you will touch upon the question of rates to the Carolina mills?—A. Yes; we hope to get that adjusted, although we have not had very much encouragement.

Q. (By Mr. RATCHFORD.) You have made some allusion to the long and short haul clause. As an experienced railroad man, I should like to have your opinion on that subject more fully. Upon what basis do you believe that matter should be adjusted?—A. It is a very intricate question. I do not know that I could outline any general principles that would govern the matter. The conditions are so different at different points that it is hard to establish any rule.

Q. Do you know of any good reasons why it will cost more to ship a bale of cotton from Memphis, for instance, to Charlotte, N. C., than to ship the same bale to a New England mill?—A. No; it would not cost the railroad as much to handle the bale of cotton to Charlotte.

Q. It taxes the shipper more, we understand?—A. Yes.

Q. Do you know of any good reason why it should?—A. No; I do not. It seems to me these rates should be adjusted.

Q. (By Mr. SMYTH.) They simply have the power to do it?—A. I think they should be adjusted more nearly in relation to the rates to the Southern seaboard.

Q. (By Mr. RATCHFORD.) The causes that operate in that instance operate in all other instances where the distance is about equal, do they not?—A. I do not understand your question.

Q. The causes that operate in that instance operate in all other instances where the intermediate points bear the same relation to the initial point and the New England point we speak of?—A. Not in all cases. Many of the lines undertake to apply the long and short haul clause strictly. The situation with reference to these mills I can explain in this way: Very frequently we have had here what you might call a war of rates; that is, under competition between the various roads, cotton rates to the Eastern points have been reduced below a paying basis. Under these conditions it does not seem to me that the railroads should be forced to carry that competition to their local territory, where they have to get the principal part of their earnings. Therefore it seems to me that the application of the fourth section of the long and short haul clause would be oppressive. We have a case in point which I can illustrate by, and that is in the rates from the East to Memphis. We hold these rates are entirely too high as compared with the rates from the East to St. Louis. We are in competition actively with St. Louis to all points on and west of the Mississippi River, and our contention is that the rates from the East to Memphis should be the same as to St. Louis. The railroads say that they can not make that adjustment, to do justice to Memphis, without destroying their whole rate structure between Eastern points and Memphis. That line of reasoning deprives us of being put on a competitive basis with the people we are competing with.

Q. The practice of the railroad companies, we understand, is to meet competition at great shipping centers, and to impose the same rate generally on intermediate points along their own road, even if the haul is shorter. If that be the purpose, and I do not think it will be disputed, does it not operate against the building of factories and other industries at these intermediate points along its own line of railroad?—A. I should think it would.

Q. In the end what interest is served by the the company? Is their own interest served particularly if they prevent the building of factories and mills and industries of all kinds by reason of this discrimination in freights?—A. Of course the lower the rates to and from their local points the greater will be the development of those points. There is no question about that. The only question is whether they can afford it.

Q. (By Mr. SMYTH.) Would not the increase of business coming from those points more than reimburse them for any loss?—A. It might and it might not.

Q. (By Mr. RATCHFORD.) Is there any distance basis that might be adopted that would minimize the discrimination against intermediate points? I ask you that question as an experienced railroad man—in general terms?—A. I do not think I could answer it.

Q. You do not know of any?—A. No.

(Testimony closed.)

WASHINGTON, D. C., May 11, 1900.

TESTIMONY OF MR. H. R. FULLER,

Representative of the national brotherhoods of railroad employees at Washington during the sessions of the Fifty-sixth Congress, in matters pertaining to national legislation.

The commission met at 11 a. m., Mr. Phillips presiding. Mr. H. R. Fuller, legislative representative of the Brotherhood of Locomotive Engineers, Brotherhood of Locomotive Firemen, Order of Railway Conductors, Brotherhood of Railroad Trainmen, and the Order of Railroad Telegraphers, was introduced as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. PHILLIPS.) Will you state your name, residence, and occupation, please?—A. H. R. Fuller, 1836 Sixth avenue, Beaverfalls, Pa.; legislative represen-

tative Brotherhood of Locomotive Engineers, Brotherhood of Locomotive Firemen, Order of Railway Conductors, Brotherhood of Railroad Trainmen, and the Order of Railroad Telegraphers.

Q. Representative?—A. Yes.

Q. In what capacity?—A. Looking after matters in which they are interested in the way of national legislation.

Q. (By Mr. FARQUHAR). How long have you been representative of the brotherhoods here?—A. Well, over a year now. I was here at the session last winter, and came here a little while after the opening of the present session this winter.

Q. Your credential as representative then comes from all of those separate bodies?—A. It might be well to submit my credential; I have it right here. It is signed by the executive officers of these organizations.

Mr. PHILLIPS. Will the secretary please read it for the information of the commission?

(The secretary read the paper submitted by the witness, as follows:)

WASHINGTON, D. C., December 6, 1899.

To whom these presents may concern, greeting:

This is to certify that at a meeting of the chief executive officers of the following-named railroad labor organizations, the Brotherhood of Locomotive Engineers, the Brotherhood of Locomotive Firemen, the Order of Railway Conductors, the Brotherhood of Railroad Trainmen, and the Order of Railroad Telegraphers, held at Washington, D. C., December 6, 1899, the bearer hereof, Mr. H. R. Fuller, whose signature appears below, was duly chosen to serve as the representative of the said organizations at Washington, D. C., during the sessions of the Fifty-sixth Congress, in matters pertaining to national legislation.

P. M. ARTHUR,
Grand Chief Engineer, B. of L. E.
E. E. CLARK,
Grand Chief Conductor, O. of R. C.
F. P. SARGENT,
Grand Master, B. of L. E.
P. H. MORRISSEY,
Grand Master, B. of R. T.
W. V. POWELL,
President, O. of R. T.

H. R. FULLER, *Representative*.

Q. (By Mr. KENNEDY.) When not representing the brotherhoods now, are you employed as a railroad worker?—A. Yes.

Q. In what capacity?—A. It might be well to give you a statement of my services and the fact that I am an employee in actual service when not engaged here. Here is a statement from my general superintendent of the Pittsburg and Lake Erie Railroad Company.

(The secretary read the statement as follows:)

(The Pittsburg and Lake Erie Railroad Company, J. B. Yohe, general superintendent.)

PITTSBURG, PA., December 27, 1899.

To whom it may concern:

This is to certify that Mr. H. R. Fuller is a passenger conductor at present in the employ of the Pittsburg and Lake Erie Railroad Company, and is granted leave of absence at his own request.

His term of service is as follows: From April 1, 1887, to May 17, 1889, freight brakeman; from May 17, 1889, to October 25, 1898, freight conductor; from October 25, 1898, to date, passenger conductor.

Yours, truly,

J. B. YOHE, *General Superintendent*.

Mr. PHILLIPS. If there are no further questions the statement of Mr. Fuller will now be read.

(The statement was read, as follows:)

Mr. Chairman and members of the Commission: Having received a copy of your topical plan of inquiry on the conditions of labor and capital employed in transportation, with an invitation to make answer thereto, I desire to give you such information on questions 1 to 24 as I have been able to collect, my answers being mostly confined to the conditions of those classes of railroad employees which comprise the membership of the five railroad labor organizations, i. e., Brotherhood of Locomotive Engineers, Brotherhood of Locomotive Firemen, Order of Railway Conductors, Brotherhood of Railroad Trainmen, and Order of Railroad Telegraphers.

Terms and conditions of employment.—Where employees are organized on protective lines the terms and conditions of employment are, as a rule, made the subjects of a mutual written agreement between them and their employers. This is generally done through committees representing the employees and the chief operating officer of the road. These agreements generally stipulate the rates of wages to be paid, hours of labor, pay for overtime, conditions of advancement in the service, and also make provisions for fair and impartial trials for employees before they are suspended or dismissed from the service, and many other matters which are of much interest to the employees. This plan has been brought about through the influence of the organizations of the employees, and it gives greater satisfaction than where the men work under conditions wholly prescribed by their employers. Where the employees are unorganized they do not enjoy these privileges, and are compelled to work under conditions laid down by the employers, which experience has shown are not so favorable. A fair comparison of the conditions of organized and unorganized labor will, I believe, prove to the unbiased mind that labor organizations are a great assistance to the laboring classes.

In addition to the rules and conditions of employment mutually agreed to and made by the employees and the companies, the companies have many rules and conditions that must be complied with by the men. The enginemen are required to pass examinations on the rules, machinery, and the workings of the air brake and steam-heating apparatuses. Trainmen are required to pass examinations on the rules and the workings of the air brake and steam-heating apparatuses; and in addition to this, passenger conductors are required to pass examinations on their duties, such as the handling of coupon tickets, mileage books, and other forms of transportation.

These requirements are right and fair; indeed, they are essential to the safe and successful management of a railroad, and they are so considered by the employees; but there are many other conditions under which men are required to work that they think are very unfair, and great objections are made to them. For instance, some companies have required as a condition of employment that employees should not hold membership in any labor organization. The employees think this is an encroachment upon their liberties, and many protests have been made; and as a result of such protests some States have passed laws forbidding the practice; but in some cases such laws have been declared by the courts to be unconstitutional. An act passed by Congress, and approved June 1, 1898, forbids this practice, but it is known that the spirit of the law is being violated.

Some companies require as a condition of employment that the employees become members of the relief associations conducted by such companies. This the men also consider unfair. Section 10 of the act approved June 1, 1898, also forbids this practice, but nevertheless men who do not signify a desire to join them are not given employment.

New employees are required to pass a physical examination, and only those who are sound in body and limb are given employment. This rule has worked great injury to many good, competent, and experienced employees who have received a slight injury while in the service of one company when they seek employment with another. This rule would not seem so unjust if the physical defect rendered the man unfit to perform the service sought. But this is not the case, for in many instances men are refused employment on account of the loss of a finger or a small part of a hand or foot, which, I might say, would not in the least interfere with their performing their duties. I have given some thought to this question, and I have been unable to find a good reason why the companies should adopt such a stringent rule.

Many companies have also adopted an age limit—that is, they will not give employment to men who are over a certain age. The limit varies; some roads make it as low as 25 years while others have placed it as high as 40 years. There is one thing sure to result from the physical examination and the age limit, and that is the overstocking of the railroad labor market, for it must be remembered that thousands of railroad employees are injured every year, and many who lose employment with one company will find themselves debarred by the age limit when they seek employment with another. The report of the Interstate Commerce Commission for the year 1898 (page 63) gives the ratio of trainmen injured to those employed as 1 to 11, and it is fair to assume that a great many of these were not injured to the extent of being incapacitated from performing the duties of trainmen. I can not give you any figures as to the number of men who are thrown on the market on account of the age limit, but when we look around and see the great army of employees who are over the age of 30 or 40 years, it is not hard to predict the result of a rule which denies them employment by other companies when they lose their present situations.

I believe there should be legislation requiring railroad companies to keep their rates of wages and rules governing the conditions of employment posted in conspicuous places where they can be seen by their employees. This would enable the employees to at all times know just what compensation to expect for the various kinds of service. It would prevent much controversy and give greater satisfaction.

Rates of wages.—The rates of wages of the different classes of employees vary considerably, the engineers being paid the highest rate, conductors the next highest; then follow the firemen, brakemen, and telegraphers, the telegraphers receiving the lowest rate of all. I understand that the executive officers of our organizations have furnished the commission with figures showing the amounts paid to each class, so it will not be necessary to furnish any further data; but if the commission desires it, I would be glad to furnish it with some of the schedules of wages now in force on some of the roads.

Q. (By Mr. CLARKE.) I would like to know right there why it is that telegraphers are paid the lowest wages?—A. Well, I think the greatest reason for it is that they have been the last to organize, and the consequence is that they work longer hours for a day and get less pay than the other classes.

Q. Obviously, they are skilled employees?—A. There is no question about it.

Q. And must have a very large responsibility for human life?—A. Yes.

Q. And property?—A. Yes.

Q. (By Mr. A. L. HARRIS.) Are not many of them quite young men, also?—A. Well, there are quite a number of young men, but there are not as many boys employed nowadays as there used to be as telegraph operators.

Q. (By Mr. FARQUHAR.) Is there an overplus of telegraph operators on the market now?—A. Well, I do not know that there is just at the present time.

Q. Do the business colleges of the country still turn out telegraph operators?—A. Well, I believe there are some places that do.

Q. In the telegraph business do they apprentice the learners? Are they connected with the railroads and with the telegraph work of the railroads where they learn, or do they learn outside and go into the roads?—A. Well, there are some who learn with the agents and operators along the roads, and then, as I have said, I believe there are colleges—telegraph schools—which educate them.

Q. You can't give a definite idea as to the number of telegraphers compared to the needs of the service?—A. No; I can not give you any figures on that point.

Q. In the matter of strikes here on this Southern railway system, was it much of a difficulty for the railroad there to fill the places of those men who went out?—A. Well, I have not been able to get hold of the proper information in regard to that strike to give an opinion in regard to it.

Q. Do you as a member of the order think that any one of your brotherhoods can successfully strike without the cooperation of one or more of the brotherhoods?—A. Well, I think they can successfully to some degree. Circumstances in each particular case would govern more or less. We must, however, agree that the more compact the employees are in an organization, whether it be one organization or several federated together, they are in a better position to cope with the employer. In other words, my opinion of the matter is that if the men in one certain class of employment can benefit by a trades union of their own, it is just as logical to carry it further, so that all can benefit by several trades unions coming together, when they are all interested in the questions at issue.

Q. In case of a strike, for instance, with the telegraphers on a railroad system there, do the striking parties usually ask for the cooperation of the other orders?—A. Well, we had a federation a short time ago, but it was dissolved. According to the laws of that federation one organization could not strike without they all did. It is not so now, however. Each organization is by itself, and it does not have to have the sanction of the other organizations before its members can strike.

(Continuing to read.)

Basis and stability of wages.—Numerous reasons are offered by railroad companies why wages should not be raised, and why wages should be reduced. A falling off in the volume of business is generally the reason offered for a reduction. Requests for advances are generally met with many arguments against an increase. As a rule wages are not advanced voluntarily, and generally where reductions have been made on account of a decrease in business the wages are not voluntarily restored when business increases, restorations being generally made on the request of the employees through their organizations.

The stability of wages depends to some extent upon the volume of business done, but the one great essential to the receiving and maintaining of fair wages is a thorough organization of the employees, led by fearless yet conscientious men, men who are capable of knowing right from wrong and who will unceasingly contend for

the former, but shrink from resorting to the latter to gain any end. Experience has shown that those employees who are unorganized suffer the most from wage reductions.

Discharge and suspension, and the reason therefor.—The reasons for discharge and suspension are numerous, and it would be almost impossible for me to name all of them. The plans of discipline in use on some roads differ somewhat from the plans in vogue on others, and an act that would be considered a serious offense on one road might be treated lightly on another. This is due to the differences of opinion of different officers as to the best way to handle men, some of them thinking that severe discipline, even for small offenses, is the best, while others believe that a better feeling exists between the company and the men where the employees are not severely disciplined for trivial offenses, which have caused no accidents and little inconvenience.

The general reasons for discharge and suspension are violation of rules, negligence, responsibility for accidents, oversleeping, and intemperance.

There are many instances where men have been discharged and suspended unjustly by subordinate officers, and have appealed their cases to their organizations, which, through their committees, have taken their cases to the higher officers of the road and established their innocence, and the men have been reinstated in the service and paid for all time lost on account of such discharge or suspension. This, however, is only accomplished through the labor organizations, for if the men were not organized, they would hardly dream of getting such consideration at the hands of a general manager. It is the strength and influence of the organization that gets the general manager's ear and causes him to notify his subordinate officers that the employees have rights that must be respected.

Employees have been discharged, and threatened with discharge, for being members of labor organizations, and for being active in the work of the same. They have also been discharged for taking part in political and legislative matters looking to their best interests; but this is covered up by assigning other causes for such discharges.

In addition to the increase in work put upon employees by the adoption of heavier engines and longer trains, many roads have introduced new systems of reporting. These new forms of reports are for the purpose of giving more detailed information, and in many cases it requires almost twice as much time to fill them out as it did to fill out the ones formerly in use. Then, too, employees are required to report many matters that formerly no note was made of. This greatly increased mental strain upon employees has, I believe, caused many of them to overlook some important part of their work, for which they were discharged or suspended.

I believe this tendency to pile so much clerical work upon employees is wrong, and the overtaxed minds of trainmen, actually engaged in the movement of trains, should be relieved by taking from them all clerical work which can be done just as well by office clerks whose minds are not burdened with the responsibility of the safe handling of our freight and passenger trains.

I believe there should be legislation requiring railroad companies to allow employees accused of any offense to see and hear all evidence against them; and, if discharged, to give them in writing the specific reasons therefor.

Blacklisting.—The present plan of blacklisting is carried on by private correspondence between the company from which the man seeks employment and his former employers. While this plan is somewhat different from that in use some years ago, I believe it is quite as effective, if not more so. It is generally done in this way: The man seeking employment is required to fill out a blank form prescribed by the employer, on which he gives his name, age, and, in detail, his personal description, and in some cases must give his photograph. He must also give the names of all roads he has worked on for a certain number of years, and the cause for leaving the same. With this information at hand, the employer writes to the former employers, and if their reference is not satisfactory, he is not given employment. On these blank applications for employment men are required to answer many other questions, to which they must make oath; and I know of one road on which the trainmaster's chief clerk is a notary public, and administers the oath to the applicant, and charges him 50 cents therefor. This same company also requires the applicant to pay a fee of \$1 for a medical examination, providing he is accepted as an employee. I submit a copy of the above-described form:

[Form 488 C. T.]

The ———— Railroad Company.

Instructions.—All applications for employment as agents, operators, engineers, firemen, engine dispatchers, conductors, brakemen, train baggage men, yard masters, assistant yard masters, switch tenders, signal men, tower men, crossing flagmen, gate-men, and such other employees as may be designated by the general superintendent,

must be made by the applicant himself in duplicate on this blank and sworn to before a notary public. The applicant will then report to the company's surgeon to have his sight and hearing tested, and when position applied for is in the engine, train, or switching service, for a physical examination also. Surgeons making such tests and examinations will report result of same in proper place on this blank, sending one report to the employing officer and the other to be retained by examining surgeon. A fee of \$1 will be charged for making such examinations, and the same will be paid by the company, unless the applicant is accepted as an employee, in which case the amount of the fee will be deducted from his wages.

NOTE.—When this application blank is properly filled out and sworn to, the applicant may be allowed to enter the service *on probation*, provided there is need for his services and he has passed a satisfactory examination, but it must be distinctly understood that before he can be considered an *accepted* employee the written approval of the employing officer must be obtained.

APPLICATION FOR SITUATION AS ———.

1. Name in full, ———. Age, ———. Railroad experience, ———.
2. Date of birth, ———. Place of birth, ———.
3. Height, ——— ft. ——— inches; form, ———; weight, ——— lbs.; complexion, ———; hair, ———; eyes, ———; nose, ———; hair on face, ———; color, ———; color of eyes, ———; size of eyes, ———. Remarks: ———.
4. Name of wife, if living (if unmarried, so state), ———; residence (city, street, and number), ———.
5. Name of father and mother, if living, ———, ———; residence (city, street, and number), ———.
6. If unmarried and parents are not living, name and address of nearest relative, ———.
7. Names and addresses of any persons dependent on you for support or to whose support you are contributing, ———.
8. By whom employed at present? ———; where? ———; No. ———, street, ———; town or city, ———; State of ———.
9. In what capacity are you employed? ———.
9. Why did you leave your last place? ———.
10. State what railroad experience you have had, giving names of roads, in what capacity employed, length of service on each road. If you have not previously been employed by a railroad company, state by whom and when and where you were employed. (Applicant must here give his history for last 5 years, beginning with his position of 5 years ago and giving each year in regular order down to date.)

Dates		Employed at		In service of firm or company.	Under manager or superintendent.	Reason for leaving.
From—	To—	As—	Address.			

11. Whom do you wish notified in case of injury? ———.
12. Have you ever been injured? If so, when? ———. Where? ———. How? ———. And extent of injuries? ———.
13. Have you now or did you ever have any litigation with any railroad company? ———.
14. Have you ever been in the employ of the ——— Railroad Company before? If so, state when, in what capacity, on what division, and cause of leaving. ———.
15. Do you use intoxicating liquors? ———.
16. Have you ever before made application for employment and been subjected to a physical examination? If so, when? ———. Where? ———. And by what physician was examination made? ———. And were you accepted or rejected? ———.
17. My hearing is ——— and eyesight ———, and I ——— able to distinguish colors.

(Sign here) ———.

My present address is ———.

Date at ——— this ——— day of ———, 1——.

STATE OF ———, County of ———, ss:

———, being first duly sworn, says that he is the applicant named in the foregoing application; that said application is signed by him, and that the answers

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to questions in said application are made in his own handwriting, and that each and all of the answers contained in said application are true.

Subscribed and sworn to before me this ____ day of ____, 1____.
_____, *Notary Public.*

I hereby acknowledge receipt of a copy of the rules and regulations for the government of employees of the operating department of the ____ Railroad Company and all amendments thereto, and also a copy of the current time-table, and agree to familiarize myself with and observe all the same and to keep advised of such amendments to said rules as may be hereafter made, and have had explained to me the dangerous nature of the service in which I am about to engage.

Dated ____ this ____ day of ____, 1____.

Surgeon's certificate.

[To be filled out and signed after a *personal* examination by the company's surgeon at ____ and approved by company's oculist.]

The following is the result of my examination of Mr. ____.

[To be signed by applicant in presence of examiner.]

1. When placed at a distance of (20) feet from the test types, the last (5) letters read correctly by the applicant are right eye ____ (20) ____ left eye ____ (20) ____ both eyes ____.

2. A. The applicant selects skeins numbered as follows, as being of the same color as test skein A. ____.

B. The following as being of the same color as test skein B. ____.

C. The following as being of the same color as test skein C. ____.

3. The applicant hears the tick of a watch with the right ear at ____ inches; with the left ear at ____ inches. For ordinary conversation at a distance of twenty (20) feet, the hearing is ____ (expressed in fractions).

I find that there is evidence of his having been successfully vaccinated; that he is not suffering from any disease or disability other than noted, and that he does not manifest any evidence of an abuse of intoxicating liquors.

I hereby certify that, having examined him for defects of vision, color, perception, and hearing, and for other physical defects, I find him { qualified } to fill the position of ____.

Disqualifying defects ____.

Defects that do not disqualify ____.

Remarks: ____.

Examined by ____.

_____, *Surgeon at* ____.

Date of examination ____.

[To be signed by surgeon making the examination.]

Approved:

_____, *Oculist.*

(Reverse side:) Form 483 C. T. The ____ Railroad Co. ____ application of ____ for position as ____; dated ____, 1____; employed ____ 1____; approved _____. This indorsement to be filled out and signed by employing officer. Memoranda ____.

I might add here, this is the form used by the road on which the train master's chief clerk is a notary public and administers the oath to the applicant for employment. This road has no "relief" or "hospital" department, but still it requires its employees in engine, train, and switching service to pass a physical examination.

I have been told, too, by men who sought employment from this company that this physical examination is so rigid and searching that when they go before the surgeon they are required to strip themselves stark naked.

I desire to call the commission's attention to the note in the instructions at the top of this application. You will see that it allows the applicant to enter the service "on

probation" after he has sworn to the application blank. This is for the purpose of putting a man to work immediately when they are badly in need of his service, without waiting to hear from his former employer. Now I call your attention to the following remarkable words in this same "note:" "But it must be distinctly understood that before he can be considered an accepted employee the written approval of the employing officer must be obtained." It is by these words, injected into this paper that the employee signs, that they get the authority to dismiss a man after they have heard from the former employer. If the reference is not suitable, the "employing officer" simply withholds his "written approval" from the "application blank," and the employee is therefore dropped from the service.

By this plan men are sometimes given work and permitted to remain in the service sometimes as long as two months, and are then discharged.

You will see by this that although this paper says they are not "accepted" employees, men have been hired into the service and performed actual work for quite a period of time, and, to put it in its true light, were discharged for no other reason than that the letters written by their former employers were not satisfactory.

The greatest objection to this application is the reference feature, which enables the former employer, if he is so disposed (and a great many of them are), to keep a former employee from obtaining employment elsewhere by carrying on private correspondence with the officers of the road on which the man tries to get work. If the employee was permitted to see the charges made against him by the former employer and allowed to combat them, the objection would not be so great; but he is denied this privilege and is only told that "his references were not good and he can not be accepted as an employee;" and he goes to some other road for employment, gives the same references, and in a short period is told the same story. In some cases they are not told that their references are not good, but are told that they are dismissed for some other reason. I know of one instance where a man got new employment with a company which operated a relief department in which employees were compelled, as a condition of employment, to participate, and which required the employee to pass a medical examination, and, although the physician who examined him told him that he had passed a good examination, after his former employer had been heard from he was told by the yard master that his medical examination was not satisfactory and he could not be retained in the service. This statement made by the yard master was untrue, and further proof of its falsity was shown by the fact that this same man afterwards entered the employ of this same company and passed a satisfactory examination for its relief department, the only difference being that he went to work on another division of the road. Men have traveled from one part of the country to another, but still the former employer has by this secret plan kept them from obtaining employment in railroad service, although it may be that these men have been guilty of no wrong, have not broken any rules of the company, have not caused any accident or the loss of any property, but have only exercised their right to leave the service rather than submit to some wrong that was being imposed upon them by some officer.

The second objection to this application is the requiring of an applicant to say whether or not he has ever had any litigation with any railroad company. The reason, apparent to me, why a railroad company should ask this question is to create a fear in the minds of employees that if they institute damage suits against their employers it will act as a hindrance to their obtaining employment on other roads. The laws of the land give the people the right to seek redress through the courts, and surely a railroad employee who has been injured through the negligence of a railroad company should be no exception to the rule. I think such a question in an application for employment is entirely out of place.

The third objection is the requiring of an applicant to make oath to his application. This is objected to on moral grounds. There are times and circumstances which make it necessary to place men under oath to get the truth, and I am a firm believer in its use on extraordinary occasions, but I believe the more limited we are in its use the more solemnity attaches to its taking, and therefore good results can be expected; but if it is to be made common use of, the reverence now shown it will gradually grow less, and thereby its usefulness will be impaired. And I can conceive of no one influence that would contribute more to this result than these actions of our railroad companies in using the oath as an instrument to keep bread and butter out of the mouths of the families of the unfortunate employees who are looking for employment, for they have, through their secret plan of blacklisting, deprived men of the chance to earn a living, and I might say almost compelled them to first make false statements and then make oath to their truthfulness in order to secure employment. The moral effect of such a system is to be deplored. I say this with all respect to the honor and integrity of the railroad employees of the country. There is no

class more faithful than they, and none upon whom more dependence can be placed; but they are only human, and they must either see their families want or meet this condition by swearing to a false statement.

When this plan of reference was first put into use by the railroad companies, the officers of the roads said it was only to be used to get rid of that class of employees who would work only a short time in one place and would become intoxicated every pay day and quit their jobs and go to some other road, leaving their debts unpaid.

As this class of men was as unfavorable to these organizations as it was to the railroad companies, no great objection was made by them at first, although it was suspected that the plan was never intended to stop where its originators said it would; and it was only a short time until these predictions were verified. It was soon used against good men, simply to gratify the minds of unscrupulous officers, and so unrelenting have they been in applying this system that they have driven men to desperation. As an evidence of this fact I submit to you the following editorial, taken from the Railroad Trainmen's Journal for April, 1895, which contains a short story which must be appalling to anyone who will meditate for one moment:

"THE BLACKLIST.

"To stigmatize a person as untrustworthy, to place his name on record for the general information of those seeking a knowledge of his reputation as a workman, or as anything else, for the purpose of branding him as an untrustworthy or even dangerous person, is to blacklist him. In the past few months the force of this most potent weapon of capitalism has been felt as never before. While it may be an easy way to dispose of the matter, for many of those who are in a position to know something of its workings, to dismiss it with a laugh and the statement 'There is nothing in it,' the stubborn fact remains there is something in the blacklist, and it is preventing many good, reliable men (whose only fault is they struck, as they believed, for what was right) from obtaining work at any employment. To discover and to prove a discovery of the existence of this gigantic system of blackmail as it is being enforced at this time are two different things. While there is no room for doubt in the minds of workmen (who have sinned) of the existence of such a plan to drive them off the earth, they seldom if ever secure the necessary evidence to prove what they know to be true. Since the strike of last summer the man looking for railroad work who can not satisfactorily account for his whereabouts and actions during that time by proof positive, furnished by a railroad company, had better have stood still and waited for something to come to him, for he has not been able to find it in looking for it. His previous record discharged him at every point he was able to get to work (few enough in number), and made of him a tramp and an outcast because he had violated a corporation commandment for which there could be no forgiveness granted. There is no crime so black, no criminal so far beyond pardon as the man who has brought himself under the displeasure of united capital by being a participant in a strike. It seems peculiar that this offense is punishable by a penalty almost as harsh as death itself. It condemns a man to wander over the earth in a hopeless, discouraging effort to obtain employment which he can not be given because of a damnable agreement between the managers of capital, until finally, in desperation, he takes his own life rather than prolong it under the detestable conditions of living as a tramp. To bear out this statement we quote this news item:

"*Denver, March 7.*—J. A. Hamilton, conductor on the Atlantic and Pacific until the strike of last year, put a ball through his head this afternoon at the American House, where he had registered from Cheyenne, Wyo. He had been out of work ever since the strike. He ran a train out of Williams, Ariz. Since that time he had traveled over the entire West, but almost everywhere he had found the dread blacklist ahead of him, and where he did get work it was only for a day or two until employers found out, and then he would receive his letters of dismissal with the statement that he did not give satisfaction. As a last hope he wrote to his old train master, and yesterday received a letter that he could not promise anything to a man who had taken part in the strike."

"This is one instance wherein one fugitive from corporation wrath has in desperation taken his life to escape the persecution of his relentless enemies. How many more unfortunates have fallen in their attempts to make a living can not be known, but it is safe to say the case of Hamilton is not an isolated one. By what right, legal or moral, can a corporation or combination of corporations hound a man to his grave for the awful offense of quitting his employment? Managers of corporations wage war against one another, yet they do not presume to refuse to do business when it is necessary. There is no stern refusal on their part because some one of their own clique has given them the worst of a bargain. Men make mistakes and are generally

the better for the experience. Railroad men are human, impulsive, and perhaps often in error, but that gives no employer a right to prevent them from earning a living somewhere else. A most commendable law has been introduced in the Minnesota legislature looking to a correction of this growing evil. It reads: "The term 'blacklisting' shall be construed to mean the entry, private or otherwise, on a book or books of record, official or otherwise, or upon a private or public bulletin of any nature whatsoever, by any person or persons, corporations, firms, organizations, associations, societies being organized, of the names of any person or persons, corporations, firms, organizations, associations, or societies, which may operate in any manner to debar, hinder, or restrain any workingman, laborer, or mechanic from procuring employment, or seek to require or compel any workingman, laborer, or mechanic not to be or become a member of any labor organization within this State." Provision is also made against watermarks and other cipher or secret writing. The bill makes penalty for blacklisting a fine of not to exceed \$1,000 and confinement in the State prison for a term of not to exceed 1 year. The measure is all right and its intents are unquestionable, but the great obstacle in the way of its effectiveness rests in the fact that proof can not be obtained sufficient to secure conviction. Men may be reasonably certain their surmises are correct and still lack the necessary evidence to substantiate their beliefs. The question of record is a broad one in its own way. No man can ask for a recommendation unless he has it honestly coming him, and for him to get behind the scenes and explore private matters is impossible. If companies persist in following up the practice of blacklisting, a law effectually prohibiting its use will be very difficult to enforce. We wish it were otherwise and the infamous system of blackmail laid away forever."

The Journal has truthfully said, "The case of Hamilton is not an isolated one." While I am not able to give the commission any data as to cases exactly like this one, I know of cases where men had been hounded over the country by their former employers and kept out of employment until they became desperate, and traveled miles back to their old superintendents and threatened their lives if they did not cease.

It is not my desire to be sensational in this matter, and I hope I will be correctly understood. As I understand it, the commission wants the facts, and I believe it is my duty to give them to you, and let you know how the employees feel about this question.

As to the feeling of the employees, I can express it no better than does the following resolution, which was passed by a large union meeting of the organized railroad employees at San Antonio, Tex., September 9, 1896:

"Whereas the system of blacklisting discharged employees is in direct conflict with the spirit and intent of the principles upon which this Government is founded, and is glaringly unjust: Therefore, be it

"Resolved, That we demand such legislation as will forever prohibit blacklisting." (Railway Conductor for October, 1896, p. 612.)

To say this practice has become unbearable is only to put it fairly, and I hope this commission will be able to suggest some legislation that will stop it. Many States have passed laws against blacklisting, and the national law passed by Congress, approved June 1, 1896, makes it a misdemeanor for any employer to attempt or conspire to prevent a former employee from obtaining employment; but these laws are all evaded by this system of private correspondence between the officers of the roads.

As a suggestion for legislation on this question, I would say I believe there should be State and national laws forbidding any railroad company from furnishing any record of any employee to any other railroad company, either by private letter, telegram, or by express, or any other way.

I would also recommend that the postal laws be so amended as to prohibit the use of the mails for carrying on such correspondence. Then I think Congress should pass a law prohibiting the transportation of such records from one State or Territory into another. When we stop to think how effectual such laws were in breaking up the Louisiana Lottery, they are worthy of a trial in attempting to break up such an unjust system as this one.

Injunctions.—Some years ago, during a strike on the Toledo, Ann Arbor and North Michigan Railroad, Federal Judges Ricks and Taft issued injunctions against employees, requiring them to do certain work against their will.

Some time after this Judge Jenkins, of the Federal court of Wisconsin, enjoined employees of the Northern Pacific Railroad from quitting the service in a way that would hinder the operation of the road. This was practically compelling them to work against their will, for it must be understood that no considerable number of men could quit the service together without such action hindering the operation of the road.

This restraining order was, however, modified by a higher court so as to allow the employees to quit if they desired to do so, but it, like those of Judges Ricks and Taft, was so radical and sweeping that great protests were made by the railroad employees all over this country, and much adverse criticism was indulged in; and from that time up until the present day there has been a growing sentiment, among not only railroad employees but other classes of labor, that their liberties are being encroached upon and gradually taken away by our courts. This feeling has not grown up without a good reason, for the Ricks decision seemed to furnish a precedent, and from that time on there has hardly been a strike of any importance in which the judicial hand has not been felt by the workingmen. This has not been confined to any one class of judges, for we find the judges, from the Federal courts down to the county courts, issuing injunctions restraining employees from holding meetings or assembling on the public highways, and forbidding them from going to the homes of the employees who have taken their places to induce them to quit work, and many other things that might be mentioned.

THE WITNESS. I would like to say right there that a judge of the supreme court of the State of New York the other day issued an injunction restraining the cigar-makers' union from paying strike funds to certain members who are on a strike. I got that from the New York papers; two or three of them.

Q. (By Mr. A. L. HARRIS.) And restraining them from picketing?—**A.** That was included in the restraining order. There were several things they were restrained from doing. I mentioned that because it is another step further on the liberties of workingmen.

Q. (By Mr. CLARKE.) Do you know whether or not any members of the union who had contributed to that fund were petitioners for the injunction?—**A.** No; I do not. The papers that I saw this in did not contain any such information as that.

(The reading of the paper was continued as follows:)

There is no one question that has received more attention and caused more protestations by the railroad employees than has this glaring abuse of power by the judicial branch of our Government. It has been the subject of discussion in their meetings, secret and public, and the various magazines of these organizations contain many articles condemning it. That the commission may know how the railroad employees feel on this question, I submit the following resolutions passed by them in their conventions and union meetings; also a few editorials from their official organs:

[Resolution of union meeting of organized railroad employees of America, held at New York, May 28, 1894.]

We strongly condemn the action of Judge Jenkins in issuing the aggressive and un-American writs which have emanated from his court, and applaud and approve the straightforward and fearless manner in which the Committee on the Judiciary of the House of Representatives have laid bare such flagrant abuses of the powers and privileges of a court of equity.

We view with intense satisfaction the consistent manner in which Judges Caldwell and Reiner have given labor organizations just and proper recognition in the courts. We assert that the time has come when organized labor should apply a power which it possesses, and which has long lain dormant, by discarding entirely political affiliation, and by united action and the ballot box, and upon legislative lines, exert an influence that will be heeded. (Railroad Trainmen's Journal for July, 1894, p. 585.)

[Resolution of the second biennial convention of the Brotherhood of Railroad Trainmen, passed at Galesburg, Ill., June 4, 1895.]

Whereas we deem this a fitting time to express our opinions on some of the decisions of our judiciary in respect to the relations of capital and labor, and as it appears to us that there is something radically wrong when the laws of our country can be so construed by one man that a thousand may be oppressed to the benefit of a few: Therefore, be it

Resolved, That the Brotherhood of Railroad Trainmen, in convention assembled, do denounce in unmeasured terms the infamous decisions of Judges Ricks, Jenkins, and Dallas, and in contrast to these commend the one crumb of justice awarded to us by a man whom all fair-minded men admire, namely, Judge Caldwell, of the eighth judicial circuit, Arkansas; and be it further

Resolved, That we, the representatives of 30,000 trainmen, do hereby pledge ourselves to support for office only such men as will pledge themselves to administer the laws in keeping with their construction; and be it further

Resolved, That these resolutions be spread upon the minutes of this convention and a copy sent to the Associated Press. (Proceedings of the second biennial convention, Brotherhood of Railroad Trainmen, p. 85.)

[Resolution of union meeting of organized railroad employees held at San Antonio, Tex., September 9, 1896.]

Whereas there are three bills now pending in Congress—viz, the contempt bill, the arbitration bill, and the Phillips bill—which are intended to promote the best interests of railroad employees engaged in interstate traffic: Therefore, be it

Resolved, That we, the railroad employees of Texas, in union meeting assembled, do most heartily indorse the said bills, and request that the Senators and Congressmen from the Lone Star State give their influence and support to the aforesaid measures. (Railway Conductor for October, 1896, p. 612.)

[Resolution adopted at union meeting of organized railroad employees at McKees Rocks, Pa., September 9, 1897.]

Whereas the present condition of political and industrial affairs of our country are such as to command an expression from the wage-workers of the land: Therefore, be it

Resolved, That we, the members of the Brotherhood of Locomotive Engineers, Brotherhood of Locomotive Firemen, Order of Railway Conductors, Order of Railroad Telegraphers, and Brotherhood of Railroad Trainmen of western Pennsylvania, in joint meeting here assembled, denounce government by injunction and believe that by it our liberties are being gradually taken away from us, and we demand of Congress that some limit be placed on the power of Federal judges.

[Resolution of State legislative board of railroad employees of Pennsylvania, passed at Scranton, Pa., September 23, 1897.]

Whereas we view with alarm the arbitrary interference of Federal judicial authorities in local affairs, and denounce it as a violation of the Constitution of the United States and a crime against free institutions, and we especially object to government by injunction as a new and highly dangerous form of oppression by which Federal judges, in contempt of the laws of the States and rights of citizens, become at once legislators, judges, and executioners; and

Whereas a bill passed at the last regular session of the United States Senate relative to contempt in Federal courts and providing for trials by jury in certain cases of contempt: Therefore, be it

Resolved, In convention assembled of the State legislative board of railroad employees of Pennsylvania, held in the city of Scranton, Pa., September 23, 1897, we do respectfully urge and pray the speedy passage, at the next regular session of Congress, of the above referred to bill, or a bill similar in character, so as to restrict the Federal judges in cases of contempt; that the spirit, as well as the letter of the Constitution of the United States shall be fully preserved to the people, and that the greatest liberty and freedom consistent with the common good of all shall be enjoyed as was intended by our forefathers, and by them bequeathed to us, their descendants; and be it further

Resolved, That this board recommend each lodge and division of railroad employees in the State to appoint a committee to obtain the names and signatures of each citizen who loves liberty and a republic above a selfish greed of gain to a petition to the next Congress of the United States pertaining to this subject; and be it further

Resolved, That the honorable president, the honorable vice-president, and the honorable secretary of this board be hereby constituted a committee to confer with the railroad legislative boards of sister States and Territories and urge them to like action in the premises, and also to solicit the cooperation of all organized labor bodies to unite with us in petition, to the end that a uniformity of action may be taken throughout the United States in this matter; and be it further

Resolved, That the president appoint a committee of five to prepare a suitable form or head to a petition to be sent each lodge and division in this State. (Proceedings of Biennial Convention of State Legislative Board, p. 45.)

[Resolution of the second biennial convention of the Order of Railroad Telegraphers, passed at Peoria, Ill., May 28, 1899.]

Whereas we view with alarm the arbitrary interference of Federal judicial authorities in local affairs, and denounce it as a violation of the Constitution of the United States and a crime against free institutions, and we especially object to government by injunction as a new and highly dangerous form of oppression by which Federal judges, in contempt of the laws of the States and rights of citizens, become at once legislators, judges, and executioners: Therefore be it

Resolved, That the Order of Railroad Telegraphers, in convention assembled in the city of Peoria, Ill., May 23, 1899, do respectfully urge and pray that Congress

pass a law so as to restrict the Federal judges in cases of contempt; that the spirit as well as the letter of the Constitution of the United States shall be fully preserved to the people, and that the greatest liberty and freedom consistent with the common good of all shall be enjoyed, as was intended by our forefathers, and by them bequeathed to us, their descendants. (Supplement to the Railroad Telegrapher, July, 1899, p. 135.)

[Editorial from Railroad Trainmen's Journal for July, 1899, p. 561.]

* * * The most dangerous question which confronts the country and the people of to-day is the one question of the encroachment of capital on the rights of labor and the assistance given capital by an ever-willing judiciary, eager to construe the statutes in favor of corporations and against labor. This is a question which our next Congress will have to give all the consideration which the gravity of the situation demands. If the fault is in the laws, then let them be modified or repealed altogether, and if the fault is in the misinterpretation of them, then let the interpreters be removed. Laboring men would rest easier under a decision founded upon the true intent of a law, even though the decision were against them, than they ever could under a distorted one, though the conditions were more favorable. It is not the intention to have decided as right or legal the placing or leaving of trains or engines where the lives and property of the public would be jeopardized, but the right to quit when proper precautions have been taken to avoid all danger—without being held and punished as a deserter from the Army or Navy—is the right of every man, and he should be given that right legally, or the right of discharge should be taken from corporations unless the employee sees fit to quit. Let one law be made to govern both sides of the question; let each receive the same advantages or reverses. It is true that the decisions have placed the employees on the same level with their employers, but of what use would it be to them should they seek redress under the same law.

Labor has been the unwilling witness of many object lessons the past year. It has been the disgusted spectator at courts where prejudice overcame justice, until patience has ceased, and it demands that wrongs be righted and that laws placing men on the same level be enacted.

[Editorial from Railroad Trainmen's Journal for October, 1894, p. 884.]

* * * Experience has brought the opinion that the power of the courts is too far-reaching in this respect—that it is too arbitrary. It is against the American idea of fair play and not in keeping with the personal freedom of action which is one of the attributes of free government. The trial of the A. R. U. officers under the charge of contempt of court furnishes an idea of what power the court can assume. Trial by jury was denied on the same grounds that the bench has taken in regard to injunctions and strikes, and which is far from popular with the great body of the people. The courts have taken to themselves power and jurisdiction that threaten the personal liberty of every inhabitant of the United States. There is crying need of legislation taking from the courts the power of judging arbitrarily the limit of personal action. Government by injunction is not good government, and must, in the interest of general safety, give way to government by law. There is great dissatisfaction of the people, and there will continue to be as long as they know there are defects in the law and its administration. * * *

[Editorial from the Railroad Trainmen's Journal for September, 1897, p. 830.]

The injunctions issued by the judges of West Virginia have aroused the indignation of men the country over, and the expression coming from them is anything but complimentary to the jurists who have disgraced their profession at the mandates of the coal-mine owners. The right of free speech as guaranteed by the Constitution has been taken away by the bench, and the action has been so high-handed and utterly outrageous that every sense of decency rebels at the ruling of the tools of the corporations. The people of the United States are about on the point of protesting against the sweeping assumption of authority by the bench. * * *

[Editorial from the Railway Conductor for September, 1896, p. 544.]

* * * The courts are working the injunction overtime, and if they do not moderate their devotion to this latest discovery in the science of legalized tyranny they may be made to suffer for some portion at least of the crimes they have committed in its name.

[Editorial from the Railway Conductor for November, 1896, p. 766.]

The Hammond injunction.—If the reports given by the daily papers are to be accepted as accurate, the American Steel and Wire Company, of Cleveland, Ohio, is the beneficiary of the most drastic injunction yet issued by the Federal courts. This company is a member of the wire-nail trust, and when its employees went on a strike the whole force of the combination was brought to bear to secure the aid of the courts in keeping the strikers in subjection. In response to the demand thus made, Judge Hammond, of the United States circuit court, issued an injunction which virtually makes it unlawful for the employees to talk to each other about strikes. According to the published synopsis of this document the striker must not interfere with, obstruct, or stop any of the business of the company or its agents, servants, or employees in any of its works anywhere; he must not enter upon the company's grounds for the purpose of interfering therewith in any manner; he must not compel or induce or attempt to compel or induce by threat, intimidation or persuasion, force or violence, any of the employees to refuse or fail to perform their duties; he must not congregate for the purpose of intimidation; he must not post pickets or establish a patrol; he must not go "singly or collectively" to the homes of company employees for the purpose of intimidation; he must not threaten in any manner the wives and families of the employees at their homes. When taken by themselves some of these prohibitions would be accepted without question, but when persuasion is included in the general inhibition it at once becomes apparent that the purpose of the court was to leave the employees in the hands of their employers with no recourse save in abject submission. It is true the injunction very carefully adds "for purposes of intimidation," when it forbids the congregating of the strikers, but, since it is left for a hostile court to determine in every case what that purpose is, the right of peaceful assembly must be a dead letter to those men. This despotic invasion of the constitutional rights of freedom should open the eyes of honest men everywhere to the dangers which must attend every invasion of those rights, no matter how specious the reasons given for that invasion may be. All who believe in our form of government and hope for its perpetuity have a vital interest in this great wrong and should make common cause against it. The injunction in question should be challenged in the courts as was the one issued by Judge Jenkins against the Northern Pacific employees and the officers of the railroad brotherhood, and it should not be allowed to rest until the last court of resort has been reached. The right of free speech is not yet dead. The courts are growing constantly bolder in their invasions of the domain supposed to have been set apart for the legislative departments of our Government, and not another session of Congress should be allowed to pass without the enactment of such legislation as will forever restrict them to their proper sphere of action.

[Editorial from the Brotherhood of Locomotive Engineers Journal, September, 1896, p. 789.]

* * * We do not understand that "curbing" means taking away any rightful authority, in the light of the present age of moral and intellectual thought, which understands so much better where the right of one factor of our social organization ends and the other begins than was conceived in the past. The ninth Blue Law of the New Haven Colony says "the judges shall determine controversies without a jury," but out of abuse of this authority has come "curbing" of authority. The most exalted opinion of a citizen cloaked with judicial authority, with life tenure as the means of purification of character and unselfish purpose to follow lines of absolute justice without bias, has been shaken to the very foundation by decisions that convey to the mind of all that the judge rendering the decision was not impervious to favoritism, bias, and passion that moved them out of the correct line of the judicial functions into that of personal spleen and demagogery; and the restrictions wanted by those who would preserve order and give to every factor of society equality under the law, which guarantees that they shall not be deprived of liberty without trial by jury, is to restrict the possibility of snap judgments, which are the products of passion, spleen, and favoritism, backed by authority, that should be restricted until this abuse of authority finds a cure. * * *

The misuse of judicial authority of Judge Jenkins and others demonstrated the necessity for some legislation restricting the scope of their authority. * * * That it is necessary for some action in this direction there is no question, nor can there be any question that laboring men should use every influence they possess to assist in securing suitable legislation to maintain liberty and preserve the dignity of the court, which on several occasions has been dwarfed and warped into a powerful means of fostering personal ends and selfish purposes. * * *

These are the expressions of the laboring classes themselves, and having personally talked with thousands of them and heard their individual opinions on this question, I am safe in saying that the papers as here quoted are not exaggeration. If it is thought these criticisms are too severe, I would invite a comparison of them with the expressions made by some of our great public men on this subject, including judges, attorneys-general, Congressmen, United States Senators, and the governors of several of our States; and when it is considered that in one case the expressions come from the men who have suffered, and in the other from those who are not so directly interested, I believe the expressions of the employees will be considered comparatively moderate.

Chief Justice McCabe, of the supreme court of Indiana, in writing on the subject of injunctions in the Chicago Times-Herald of September 19, 1897, said: "* * * Yes; I am inclined to believe that the use of the power interferes with the constitutional right of trial by jury, and in so far as it does this it endangers the highest and most sacred safeguard of the people * * *."

Judge John Gibbons, of the circuit court of Illinois, in the same paper, said: "* * * I desire to say that in my opinion there is a danger to-day threatening the very existence of the Republic, as gigantic as that which precipitated the rebellion and well-nigh wrought the ruin of our Union. Now it comes, as ever, in the seductive guise of the law and under the solemn authority of the court. * * * In their efforts to regulate or restrain strikes by injunction, they are sowing dragon's teeth and blazing the path of revolution * * *."

Judge M. F. Tuley, of the appellate court of Illinois, in the same paper, gave expression to these words: "* * * Such use of the writ of injunction by the courts is judicial tyranny, which endangers not only the right of trial by jury, but all the rights and liberties of the citizens. * * * If Congress has the power it should promptly put an end to 'government by injunction' by defining and limiting the power of the Federal courts in the use of the writ * * *."

During the coal miners' strike in 1897, on the question of injunctions, Governor Sadler, of Nevada, expressed himself as follows:

"* * * The tendency at present is to have committees make the laws, and to have the courts enforce them by injunction, both of which methods, in my opinion, are subversive of good government and the liberties of the people * * *." (Railroad Trainmen's Journal for September, 1897, p. 833.)

On the same question, Governor Jones, of Arkansas, said:

"* * * Freedom of speech and of the press is inviolable in this Government, and we should not tolerate for a moment any encroachment upon this sacred right. Judge Jackson's order is revolutionary, and if upheld by the Federal Supreme Court and submitted to by the people will overturn our system of Government and destroy our liberties. It is not only illegal and inadvisable, but is such an act as calls for his impeachment and removal from his office." (Railroad Trainmen's Journal for September, 1897, p. 833.)

Governor Pingree, of Michigan, expressed himself in these words:

"* * * I consider government by injunction, unless stopped, the beginning of the end of liberty. Tyranny on the bench is as objectionable as tyranny on the throne. It is even more dangerous, because judges claim immunity from criticism, and foolish people acquiesce in their claims. To enjoin people from assembling peaceably to discuss their wrongs is a violation of first principles * * *." (Railroad Trainmen's Journal for September, 1897, p. 832.)

The House Committee on Judiciary of the Fifty-third Congress, which was directed to make an investigation of the Jenkins injunction, and report to the House what action should be taken by the House or Congress, reported as follows:

"The power to punish for contempt is limited by the laws of most of the States, and we can see no reason why a like limitation should not be placed upon the powers of Federal judges. Your committee therefore recommends the adoption of the following resolution:

"*Resolved*, That the action of Judge James G. Jenkins in issuing said order of December 19, 1893, being an order and writ of injunction, at the instance of the receivers of the Northern Pacific Railroad Company, directed against the employees of said railroad company, and in effect forbidding the employees of said Northern Pacific Railroad Company from quitting its service under the limitations therein stated, and in issuing a similar order of December 22, 1893, in effect forbidding the officers of labor organizations with which said employees were affiliated from exercising the lawful functions of their office and position, was an oppressive exercise of the process of his court, an abuse of judicial power, and a wrongful restraint upon said employees and the officers of said labor organizations; that said orders have no sanction in legal precedent, were an invasion of the rights of American citizens, and

contrary to the genius and freedom of American institutions, and therefore deserving of the condemnation of the Representatives of the American people." (House Report 1049, Fifty-third Congress, second session.)

I have quoted these resolutions and editorials to show the commission the way the employees view the recent actions of our courts; but, Mr. Chairman, the railroad employees of this country did not pass these resolutions and then not endeavor to put them into effect. For the last 5 or 6 years they have kept a man here at this Capitol urging upon the members of Congress to pass some kind of a law that would limit and define the power of courts in issuing injunctions. In addition to this, the lodges and individual members have, I might say, stormed Congressmen with petitions, memorials, letters, and telegrams, earnestly praying for the passage of the various measures that have been before Congress from time to time. They plead for this legislation for so long, and it did not come, and they came to the conclusion that a more effective plan should be adopted to impress upon Congressmen the necessity for such legislation; so on March 20, 1898, a large union meeting of members of these organizations in the State of Pennsylvania was held at Pittsburg, Pa., for the sole purpose of urging the passage of the bills then pending before Congress, and to prepare plans to put the various candidates for the next Congress on record in regard to such legislation; and a committee was appointed to carry out the work of the meeting. I hand you a copy of the circular prepared by that committee, which was sent to each candidate for the United States Senate and House:

BEAVERFALLS, PA., _____, 1898.

Mr. _____,
Candidate for Congress, _____.

DEAR SIR: At a union meeting of 500 delegates from various parts of Pennsylvania, representing the Brotherhood of Locomotive Engineers, Brotherhood of Locomotive Firemen, Order of Railway Conductors, Brotherhood of Railroad Trainmen, and Order of Railroad Telegraphers, held in Pittsburg, Pa., March 20, 1898, for the purpose of taking action regarding injunctions and other questions which vitally affect labor, the following resolution was unanimously adopted:

"Whereas, our experience of the past few years with some of our courts in their actions in cases of injunctions and contempts has convinced us of the wisdom of the expressions and actions of our forefathers when they said, 'The liberties of the people were endangered by the aggressions of the courts,' and when they declared to the world that 'one of their reasons for severing their allegiance to the British throne was because they were deprived of the benefit of trial by jury,' and when they placed a clause in our Constitution which says that 'trials of all crimes shall be by jury,' and as there was a bill introduced in the first session of the Fifty-fifth Congress which provides for trial by jury in certain cases of contempt: Therefore, be it

"Resolved, That we believe the right of trial by jury is just as sacred to-day as it ever has been and that we view with alarm the aggressive tendency of some of our judges in their attempts to serve corporate interests through the guise of equity proceedings whereby both the spirit and letter of the Constitution are violated, and we denounce such actions as judicial tyranny, and we urge our two United States Senators and Congressmen to use their influence and vote in behalf of the referred-to bill; and be it further

"Resolved, That a committee composed of one member from each organization here represented be appointed by the chairman of this meeting, and if the above bill or a similar one is not passed at this session of Congress, said committee shall interview, or cause to be interviewed, each candidate for United States Senator and Congressmen and ascertain their views, and whether or not if elected they will use their efforts in behalf of such legislation, and said committee shall publish the result of such interview in all labor and industrial journals in Pennsylvania and also in the public press; that a copy of this resolution be sent to the President, the United States Senate, and the House of Representatives."

As the bill referred to in this resolution was not enacted into law at the last session of Congress, therefore we the committee, appointed by that meeting to interview each candidate for Congress and United States Senator, do respectfully submit to you the following questions:

What are your views on the power and practice of courts in issuing injunctions in labor disputes?

How is such power derived, and is it misused?

Do injunctions interfere with the constitutional guarantee of trial by jury?

Should Congress specifically define and limit the power of courts in issuing injunctions?

If you are elected will you vote for a law which will define and limit the power of courts in issuing injunctions?

A copy of this letter has also been given to the press.

Respectfully, yours,

CLARE L. HINSDALE, B. of L. F., Chairman.

H. R. FULLER, B. of R. T., Secretary.

C. H. LANGHURST, B. of L. E.

WM. BOATE, O. R. C.

S. H. EAKIN, O. R. T.

Committee.

Several of the candidates made no answer to this circular, ignoring it entirely. Thirty made replies, and not one of them upheld injunctions; and 27 of them agreed, if elected, to vote for a bill which would limit and define the power of the courts in issuing injunctions. Thirteen of those who were pledged were elected. In one district one candidate refused to make reply to the questions, while his opponent made a favorable reply, and we were successful in electing the man who was favorable by a majority of 34 votes. The circular and answers were all made public at the time. I have the answers with me, and if the commission desires to see them I am at liberty to furnish them.

Some of them contain some valuable arguments against the present use of injunctions. I believe there is a growing tendency among our judges to substitute injunction proceedings for indictment and trial by jury, and the actions of some of our courts within the last decade have firmly convinced me that, in order to preserve the liberties guaranteed to us by the Constitution, it is necessary for Congress and our State legislatures to limit and define the power of courts in issuing injunctions. As a most effective means of curing this evil I would suggest the passage of the following bill, which is now pending in Congress, and would urge the passage of similar ones in the various States:

A BILL to limit the meaning of the word "conspiracy" and also the use of "restraining orders and injunctions" as applied to disputes between employers and employees in the District of Columbia and Territories, or engaged in commerce between the several States, District of Columbia, and Territories, and with foreign nations.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That no agreement, combination, or contract by or between two or more persons to do, or procure to be done, or not to do, or procure not to be done, any act in contemplation or furtherance of any trade dispute between employers and employees in the District of Columbia or in any Territory of the United States, or who may be engaged in trade or commerce between any Territory and another, or between any Territory or Territories and any State or States, or the District of Columbia, or with foreign nations, or between the District of Columbia and any State or States, or foreign nations, shall be deemed criminal, nor shall those engaged therein be indictable or otherwise punishable for the crime of conspiracy, if such act committed by one person would not be punishable as a crime, nor shall such agreement, combination, or contract be considered as in restraint of trade or commerce, nor shall any restraining order or injunction be issued with relation thereto. Nothing in this act shall exempt from punishment, otherwise than as herein excepted, any person guilty of conspiracy, for which punishment is now provided by any act of Congress, but such act of Congress shall, as to the agreements, combinations, and contracts hereinbefore referred to, be construed as if this act were therein contained.

Hours of labor exacted.—As a rule, through-freight trainmen and engine-men work 10 hours for a day. However, they are many times required to work from 24 to 36 hours without rest. Their work and rest are very irregular, they having no set time to go out on their runs and no regular arriving time. This also makes their meals irregular, and they are generally required to carry two or three meals with them. On a count of their not having regular times to go on duty they are subject to a call for duty at any time, and consequently their time off duty between runs is not what they can really call their own, for if a call is made upon them and they are not found at home or at their regular stopping places they are disciplined.

Local freight men generally work 12 hours for a day, but a great many times they can not complete their runs in this length of time and are required to work 16 and 20 hours. They have regular leaving and arriving times, and their time off duty can be used as they see fit, for as a rule they are not subject to a call for other than their regular duty.

Passenger men are not required to work as many hours as freight men. They have regular times for leaving and arriving, and their time between trips can be used as they like, for they are not subject to a call for duty at any time, as are through-freight men.

Of late years the policy of railroad companies has been to do away with as many terminals as possible and lengthen the runs of their freight and passenger crews, and in some cases the increase in mileage has been 100 per cent. The result of this practice has been to require more hours on duty without rest, more time away from home, and in many instances has caused employees to sell their homes at a sacrifice and move to the new terminal.

Telegraph operators in many cases are also required to fill the office of station agent. Their duties are arduous and their hours long. Some telegraph operators employed at interlocking and block-signal stations are only required to work 8 hours for a day, but as a rule they work 12 hours and over. I believe the hours exacted from railroad employees are excessive. Eight hours out of 24 is quite enough for any employee in yard or telegraphic service to work, and 10 hours are long enough for road men to work.

Although there have been many improvements introduced in the system of handling trains, the lessening of work on their account will not compare with the increase in the physical and mental strain put upon employees by the adoption of the present heavy equipment, increased tonnage of trains, block signals, and the increase in clerical work.

Within the last few years engines of much greater hauling capacity have been put into use. These engines have a greater steam capacity and burn much more coal than engines used in the past. This increases the labor of the fireman. They are much harder to handle and have more machinery about them, which requires more attention from the engineers to keep them in running order. They haul longer trains, which increase the work of the conductors and brakemen, there being more cars to look after.

The adoption of the block-signal system has decreased the danger of wrecks and made it much safer for travel on railroads, but it has increased the physical and mental strain on engineers, firemen, and telegraph operators, the engineers and firemen having to be on the lookout for these signals, while the telegraph operators must watch more closely the movement of trains.

Then, too, the manner of making reports has been materially changed. Where in the past only brief reports, and in some cases none at all, were required, very elaborate and detailed forms have of late been put into use, and in a great many cases duplicates are required.

The cause of many accidents could, I believe, be traced to employees being over-worked and not having the required amount of rest. I will submit reports of coroners' juries on two such cases which just happened recently:

ALLEGHENY COUNTY, ss:

An inquisition, indented, taken at Fourth and Fifth wards, Pittsburg, in the county of Allegheny, on the 13th, 16th, and 18th days of November, A. D. 1899, before me, Jesse M. McGeary, coroner of the county aforesaid, upon the view of the body of Alfred C. Carter, then and there lying dead, upon the oaths and solemn affirmations of John Dingfelder, Owen McCabe, Edward Feick, Jas. Zoog, John L. Donaldson, H. L. Hubley, good and lawful men of the county aforesaid, who being sworn and affirmed and charged to inquire on the part of the Commonwealth when, where, and how, and after what manner the said Alfred C. Carter came to his death, do say upon their oaths and affirmations aforesaid that the said Alfred C. Carter, age 33 years, married, and residing at Rankin, Pa., came to his death suddenly while in caboose of extra north 65, * * * R. R., and while the train was stopped at * * * station engine No. 7, hauling extra freight, collided with extra No. 65 on Sunday, November 12, 1899, at 10.12 p. m., and instantly killed him.

And, from the evidence, the jury find his death was accidental and caused by the flagman of said train north 65 in not going back the required distance to flag an approaching train, but we do not believe that the same tends to criminal negligence, because of the time the crew were on duty.

And so the jurors aforesaid, upon their oaths or affirmations as aforesaid, say that the aforesaid Alfred C. Carter, for the cause aforesaid, in the manner and form aforesaid, came to his death, and not otherwise.

In witness whereof, as well of the aforesaid coroner, we, the jurors, have hereunto put our hands and seals, on the day and year and at the place above mentioned.

JESSE M. McGEARY, Coroner.	[SEAL.]
JOHN DINGFELDER.	[SEAL.]
EDW. FEICK.	[SEAL.]
JOHN L. DONALDSON	[SEAL.]
OWEN McCABE.	[SEAL.]
JAS. ZOOG.	[SEAL.]
H. L. HUBLEY.	[SEAL.]

20 HEARINGS BEFORE THE INDUSTRIAL COMMISSION.

STATE OF PENNSYLVANIA, *County of Allegheny*, ss:

I, Jesse M. McGeary, coroner of Allegheny County, in the State aforesaid, do hereby certify that the above and foregoing is a true and correct copy of the verdict in the matter of the inquest held on the body of Alfred C. Carter, deceased, which was rendered on the 13th, 16th, and 18th days of November, A. D. 1899, as appears from the records of my office.

Witness my hand and seal, at Pittsburg, in said county, this 19th day of December, A. D. 1899.

JESSE M. McGEARY, *Coroner*. [SEAL.]

[SEAL.]
[10-cent stamp.]

ALLEGHENY COUNTY, ss:

An inquisition, indented, taken at Fourth and Fifth wards, Pittsburg, in the county of Allegheny, on the 21st, 23d, 27th, and 30th days of December, A. D. 1899, before me, Jesse M. McGeary, coroner of the county aforesaid, upon the view of the body of William J. Richards, then and there lying dead, upon the oaths and solemn affirmations of John Mumford, John L. Donaldson, John Diemer, John Dingfelder, Michael Hagerty, Jas. Zoog, good and lawful men of the county aforesaid, who being sworn and affirmed and charged to inquire on the part of the Commonwealth when, where, and how, and after what manner the said William J. Richards came to his death, do say, upon their oaths and affirmations aforesaid, that the said William J. Richards, age about 35 years, married, and residing at 314 Third street, Esplenboro, came to his death at the West Penn Hospital, Pittsburg, on Wednesday, December 20, 1899, at 1 o'clock a. m., from injuries received by engine No. 124, * * * R. R., running into caboose, opposite * * * station, on Monday, December 18, 1899, about 12.30 a. m.

And from the evidence the jury find that the crew, John J. Richards, David H. Grant, and James Crop, did not properly protect the rear end of their train, causing a rear-end collision.

We recommend that the * * * R. R. force their employees to take the necessary amount of rest to properly perform their duties.

And so the jurors aforesaid, upon their oaths or affirmations as aforesaid, say that the aforesaid William J. Richards, for the cause aforesaid, in the manner and form aforesaid, came to his death, and not otherwise.

In witness whereof, as well of the aforesaid coroner, we, the jurors, have hereunto put our hands and seals, on the day and year and at the place above mentioned.

JESSE M. McGEARY, *Coroner*. [SEAL.]
JOHN MUMFORD. [SEAL.]
JOHN DIEMER. [SEAL.]
MICHAEL HAGERTY. [SEAL.]
JOHN L. DONALDSON. [SEAL.]
JOHN DINGFELDER. [SEAL.]
JAS. ZOOG. [SEAL.]

STATE OF PENNSYLVANIA, *County of Allegheny*, ss:

I, Jesse M. McGeary, coroner of Allegheny County, in the State aforesaid, do hereby certify that the above and foregoing is a true and correct copy of the verdict in the matter of the inquest held on the body of William J. Richards, deceased, which was rendered on the 21st, 23d, 27th, and 30th days of December, A. D. 1899, as appears from the records of my office.

Witness my hand and seal, at Pittsburg, in said county, this 8th day of January, A. D. 1900.

[SEAL.]
[10-cent stamp.]

JESSE M. McGEARY, *Coroner*. [SEAL.]

In each case one man was killed and two badly injured. Better service and better results would come from a shorter workday. Expert evidence to this effect can be found on pages 13 and 14 of the hearings before the Subcommittee on Labor of the House of Representatives, on March 9, 1892. It is true that on a great many lines there are rules giving the employees the right to 8 hours rest after continuous service of 16 hours or more, but these rules are not lived up to.

The companies are generally the cause of these rules not being lived up to. Especially is this so in the busy seasons, when the taking of 8 hours rest by each crew would mean delay to freight; and each road, if not eager to outdo its competitor, is at least trying to keep up its end, and the men are persuaded to make another

trip without rest. This is sometimes done by moral suasion and sometimes by means more or less coercive. But not a few times do the men themselves choose to go out on the road when they are physically and mentally unfit for duty on account of long-continued service without rest. This, however, only emphasizes the need of legislation on this question to protect the lives of the employees and the public.

In addition to the direct benefits to be gained by a shorter workday there are many general benefits that would accrue therefrom both to the employees and the citizenship of the country. The present day manager of a railroad is generally a man of bright intellectual abilities, and possesses a technical education. If he is lacking in information on any subject he has his staff of expert legal advisers and other sources of information to draw from, and when a question arises between the management and the employees the employees have this combined intelligence to cope with, and to be in any measure successful in this they must have more time for thought and education.

I believe, too, that many other difficulties would be overcome and our country would be better off from a political standpoint if the working classes were given more time to study the various industrial and political questions. As conditions now exist among railroad employees, many of them do not have time enough to get the required amount of rest, much less the opportunity of reading the daily papers and studying the various questions that affect their interests. As evidence of the feeling of a great many railroad employees on this question, the following resolution and editorial are submitted:

"Whereas, the great innovations of modern railroading have brought with them an increase in the physical and mental strain upon employees in the transportation department, and as there is a disposition on the part of our railroad companies to lengthen instead of shorten the runs of the trainmen and engineers as their duties become more arduous, thereby making the strain twofold: Therefore

"Be it resolved, That we, members of the Brotherhood of Locomotive Engineers, Brotherhood of Locomotive Firemen, Order of Railroad Conductors, Brotherhood of Railroad Trainmen, and Order of Railroad Telegraphers, in joint meeting assembled at Carnegie, Pa., this 16th day of July, 1899, urge Congress to pass a law restricting the hours of labor of employees in the transportation department of interstate railroads to 8 out of 24.

"Be it further resolved, That a copy of this resolution be sent to the President of the United States, the United States Senate, the House of Representatives, and the United States Industrial Commission."

[Editorial from the Railway Conductor for November, 1895, p. 611.]

"A shorter workday for labor' continues to be the all-absorbing topic with a great many of the labor organizations through the country, and its discussion seems to grow in interest and enthusiasm as the time passes. There can be no doubt as to its vital importance, especially to those classes of workers whose domain has been most seriously invaded by different kinds of labor-saving machinery. It is hoped that the shortening of the hours will go far toward relieving many of the distressing conditions thus imposed upon great numbers of our most effective workmen. No other remedy offers so much hope, and when a trial could be given with so little of trouble and expense it would seem criminal to refuse it. A number of the strongest organizations are now arranging to submit to a vote of their members a proposition for the establishing of a general 8-hour day on the 1st of May next, and it is safe to say that it will be uniformly confirmed. Whatever may be the result of the adoption of the new policy as a relief for the congested condition of the labor market, it must certainly be indorsed as a humane measure. The growth of sentiment in this regard has been slow, but it has been none the less sure. Only a few years ago and many of the clearest thinkers among our workers were opposed to the shorter day because it meant a shorter wage, but they are now very willing to take the needed rest, and with it all the conditions which may naturally follow. The improved condition of the men who have sufficient time to recuperate, mentally and physically, after one day's work before beginning the next is apparent." * * *

While there might be a little difficulty at first in putting a shorter workday into effect in the transportation department of railroads, the feasibility of the plan is proven by the fact that a number of yards in New York and the New England States and a number of telegraph offices in various parts of the country are now being successfully operated under an 8-hour rule. As an evidence of this fact I submit the following statement of the chairman of the general grievance committee of the Brotherhood of Railroad Trainmen, who assisted in putting the 8-hour day in force, and who is in a position to see its practical workings:

SOUTH BOSTON, MASS., *January 29, 1900.*

Mr. HUGH FULLER,

Hotel Raleigh, Washington, D. C.

DEAR SIR AND BROTHER: In answer to your letter of the 13th instant I send the following, which is at present the best statement I am able to give.

The 8-hour system was inaugurated on the New York, New Haven and Hartford at Harlem, N. Y., on January 1, 1882. The apparent reason for it was the limited track room and because the work was so laborious that the company could not get men to work longer than a month or so at a time; so on the above date Mr. Clark, who was then officially connected with the road, introduced the 8-hour system. It has been gradually extended to all points over their lines, and at the present time it is in operation in all of the big yards on the system. In 1884 or 1885 it was brought about in New Haven by the men presenting a petition asking for the 8 hours, which was refused by the company. The men struck and were out a short time, when the company yielded. There was no labor organization in this strike. I can not give the date it was adopted in New London, but a short time ago the company, after receiving a petition from the men, extended the 8 hours over other portions of the yard there that were not already working the 8 hours. There are other yards in Connecticut that are working the 8 hours, but I can not give locations, except at Bridgeport, and it has been in effect there for 8 years that I know of. In regard to Boston and Providence yards, the Brotherhood of Railroad Trainmen prepared a schedule covering yard and road men on the New York, New Haven and Hartford Railroad, in which they asked for the 8 hours. Said schedule was presented to the officials of the company on February 15, 1899. On May 1, 1899, the 8 hours went into effect in Providence, R. I., and in the freight yards in Boston. On September 25, 1899, it was put into effect in the passenger yards in Boston, and now all yards of the New York, New Haven and Hartford in Boston are working on the 8-hour basis. In Springfield, Mass., I can give no information as to date of its going into effect.

This takes in all the big yards, and we expect to have it in some of the smaller ones before long, as we now have the promise of it. I have got no written expression of the company on the matter, but, as I served on the committee, I can say that the officials did not oppose it, and, if anything, were in favor of it. The general superintendent and general manager raised no objections to its going into effect, and, as far as I know, with the exception of the strike in New Haven, the officials and employees are perfectly satisfied with the system, and especially the men.

The number of men employed in the different yards are as follows: Harlem River, New York, 24; Bridgeport, Conn., do not know. There are other yards in Connecticut that are working on the 8-hour system, but do not know where they are located. In Providence, R. I., 75 men; in Boston, Mass., 191 men; Springfield, Mass., working 8 hours, but do not know the number employed. This does not include tower men, but I have been informed that all towers are working 8 hours.

Hoping in the near future to be able to give you a more correct account, I remain,

Yours, fraternally,

R. MCINTIRE,

No. 97 Sixth street, South Boston, Mass.

The Brotherhood of Railroad Trainmen, at its fourth biennial convention, held in New Orleans, La., in May, 1899, took under consideration the question of asking Congress to pass a law limiting the hours of service on railroads to 8 per day. The question was referred to a committee, which made a favorable report, and their report was unanimously adopted by the convention. (Convention Proceedings, p. 73.)

I would recommend that Congress and our State legislatures pass laws limiting the hours of service of yard employees and telegraph operators to 8 out of 24 and road men to 10 out of 24. Provisions should be made to cover delays caused by wrecks, washouts, and other unavoidable causes. Such laws should also provide exceptions in cases where men are away from home and can not get back home within that time. This is for the purpose of allowing them to have their rest at home with their families, which is the proper place for them to take their rest. Then, too, after they have had their rest, they have a better chance to read and improve their minds at home than they have lying around a caboose or bunk-house at the other end of the division. But in drafting a provision in the law to cover such cases as these the greatest care should be taken lest the whole object of the law be defeated, for I believe all kinds of little schemes would be worked to get more hours of service out of the men.

Sunday labor.—Compensation for Sunday labor is the same as for labor performed on any other day.

Much of my argument for an 8-hour day can be appropriately used in behalf of Sunday as a day of rest, as the advantage to be derived from 1 rest day out of 7 is

as beneficial to the man physically and morally as is that which is gained by a shorter work day.

Some people argue that it would not do to stop Sunday trains; that they are a necessity to carry the mail, perishable freight, and live stock; and that the traveling public would be inconvenienced too much thereby.

To me these arguments appear to be more or less inconsistent and selfish, and I do not think they are the conclusions of minds that have made a study of this question. If it is desired to send a communication in a hurry, by using the telegraph on Saturday evening or Monday morning it can be gotten to its destination quicker than had it been put in the mail on Saturday and been in transit on Sunday, for in the most of cities and towns, even had it arrived on Sunday, it would not be delivered until Monday.

The advent of the refrigerator car removes any necessity, if there ever was any, for moving perishable freight on Sunday; and it is only humane to unload and feed live stock while in transit. Roads which handle live stock now have places arranged to unload stock and feed it, and I have understood that the laws require it; therefore good instead of harm would come from unloading live stock and allowing it to rest over Sunday.

There seems to be a growing tendency to increase Sunday labor on railroads. This is caused by the public demand for Sunday trains for convenience and pleasure, and the eagerness of the officers of the roads to increase the earnings. Several roads that heretofore ran few or no trains on Sunday have of late put on Sunday trains and bid for Sunday traffic. Some roads do a larger freight business on Sunday than on any other day of the week. I have in mind one road in particular whose principal traffic is in coal, coke, and ore, that endeavors to get its freight cleared up on Sunday, and for a large part of the day on Monday there is very little done. As this freight is of a low class it could be held over until Monday, thus giving the employees their Sunday at home; but it seems, in this case at least, that the comforts and natural needs of the men are made secondary to the convenience and business interests of the management.

Committees representing the men have at various times waited upon the managements and asked for a restriction of Sunday trains, and have generally met with the answer that the managers were in favor of it, but competition and the demands of the public required them to run Sunday trains. I believe the competition feature and the eagerness to increase earnings have more to do with it than the demands of the public, for many roads inaugurate Sunday trains and Sunday excursions, and by elaborate advertisements go into the market and bid for and encourage Sunday travel, thus showing that they seek the public patronage for their Sunday trains rather than the public asking for Sunday trains. To verify these statements I submit to the commission the following handbills and newspaper advertisements and clippings.

(The witness here submitted four different handbills which had been distributed in Youngstown, Ohio, each advertising Sunday excursions to Cleveland, Ohio, on the Erie Railroad, for the respective dates following: June 11, 1899; July 9, 1899; July 23, 1899, and August 13, 1899. The first handbill was as follows:)

"Sunday excursion to Cleveland and return via Erie Railroad, Sunday, June 11. Fare for round trip, \$1. Special train will run as follows: Leave Sharpsville, 7.20 a. m.; leave Sharon, 7.30 a. m.; leave Hubbard, 7.45 a. m.; leave Youngstown, 8 a. m.; leave Girard, 8.09 a. m.; leave Niles, 8.16 a. m.; leave Warren, 8.26 a. m.; arrive Cleveland, 10 a. m. Returning, special train leaves Cleveland at 7.30 p. m., making above stops. Tickets good on special train only. D. I. Roberts, G. P. A., New York; F. W. Buskirk, A. G. P. A., Chicago; R. H. Wallace, G. A. P. D., Cleveland; J. D. Cutter, T. P. A., Youngstown."

[Pittsburg Post, July 11, 1899.]

A rush of Sunday freight.—The regular heavy run of through business on all the important lines leading through the Pittsburg gateway was heavy on Sunday. The Panhandle and the Baltimore and Ohio had a heavy fruit, vegetable, and live stock and refrigerator business, all first-class freight, which pays a big revenue. The Pittsburg and Lake Erie had train after train of coal and coke out of the Monongahela and Youghiogheny valleys. The Baltimore and Ohio is having quite a heavy coal traffic to the Eastern cities, and on Sunday train No. 6 passed 30 sections of freight between Pittsburg and Harpers Ferry.

[Pittsburg Post, July 24, 1899.]

Bellefonte, Pa.—Sunday train service for Bellefonte was established for the first time in the history of the town by the Pennsylvania Railroad Company.

[Pittsburg Post, August 8, 1899.]

A heavy run of live stock.—The Panhandle had a very heavy run of live stock Sunday, more than 125 carloads having been brought in during the day. One large train load came in from the Wheeling division, and the other longest train load was gathered up along the Cleveland and Marietta Railroad. The other trains came in from the divisions west of Columbus and Indianapolis.

On the Fort Wayne and Baltimore and Ohio the live-stock traffic was also quite heavy. There was not such a heavy business in refrigerator stuff, but the merchandise business west bound was heavier than usual. On Saturdays the live stock is driven from Ohio and Indiana towns to the stock pens and loaded up for East Liberty, and the trains come in here on Sundays.

[Beaver, Pa., Star, of August 31, 1899.]

East Liverpool and Bellaire.—Under new schedule, taking effect on Pennsylvania lines Sunday, July 23, a new train will be run Sundays between Pittsburg, East Liverpool, Steubenville, and Bellaire. The new train will leave Pittsburg Union Station 7.10 a. m., central time, arriving at Rochester 8.20 a. m., Beaver 8.25 a. m., East Liverpool 9.02 a. m., Steubenville 10.06 a. m., Bellaire 11.15 a. m. Returning, leaves Bellaire at 1 p. m., central time; arrives in Pittsburg at 5 p. m.

[Pittsburg Post, July 21, 1899.]

More Sunday trains.—It was announced yesterday that, beginning next Sunday, the Pennsylvania Company would begin running train 361 through to Bellaire every Sunday, and No. 360 will also be a daily train, leaving Bellaire at 1 p. m. The new south-bound Sunday train will leave Pittsburg at 7.10 a. m. daily. This is in accordance with the statement made in the Post some weeks ago. The next break will be on the Chartiers branch of the Panhandle, which has been without a Sunday train for years.

[Pittsburg Post, August 1, 1899.]

How the freight business moved.—The usual large volume of Sunday through freight was handled on the Pittsburg trunk lines. The Panhandle had some 87 trains, and the total movement exceeded 3,000 cars. The Fort Wayne river division was crowded with trains all day, and the Baltimore and Ohio and the Pittsburg and Lake Erie rails were kept warm. The refrigerator business was heavy on the Panhandle, more than 125 carloads having arrived here from the West.

[Rochester (Pa.) Commoner, August 12, 1899.]

New Sunday trains between Pittsburg, East Liverpool, and Bellaire.—Under new schedule taking effect on Pennsylvania lines, Sunday, July 23, a new train will be run Sundays between Pittsburg, East Liverpool, Steubenville, and Bellaire. The new train will leave Pittsburg Union Station 7.10 a. m. central time, arriving at Rochester 8.20 a. m., Beaver 8.25 a. m., East Liverpool 9.02 a. m., Steubenville 10.06 a. m., Bellaire 11.15 a. m. Returning leaves Bellaire 1 p. m., central time, arriving at Pittsburg 5 p. m.

[Pittsburg Post, August 26, 1899.]

Excursion to Wheeling to-morrow. Rate, \$150 round trip. Train leaves Baltimore and Ohio depot at 8.10 a. m.

[Rochester (Pa.) Commoner, September 2, 1899.]

New Sunday trains between Pittsburg, East Liverpool, and Bellaire.—The new train will leave Pittsburg at 7.10 a. m., central time, arriving at Rochester 8.20 a. m., Beaver 8.25 a. m., East Liverpool 9.02 a. m., Steubenville 10.06 a. m., Bellaire 11.15 a. m. Returning leaves Bellaire 1 p. m., central time, arriving at Pittsburg 5 p. m.

[Pittsburg Post, September 9, 1899.]

Excursion to Ohiopyle to-morrow. Train leaves Baltimore and Ohio depot at 8.20 a. m. Rate, \$1 round trip.

[Pittsburg Post, December 12, 1899.]

The Sunday freight traffic.—From Sunday morning at 4 a. m. until Monday at 9 a. m. the Panhandle moved about 45 east-bound freight trains and 38 west-bound trains on this end of the line, making a total of over 83 trains in the 29 hours. Four-fifths

of this was through business, such as live stock, refrigerator products, merchandise, and machinery. As the Panhandle trains average about 30 cars this would mean a total of 2,490 cars moved. Many of the west-bound trains are made up of empties, and haul from 35 to 40 cars, so that while the average east-bound train does not haul over 23 cars, the longer west-bound trains make the total average greater. On the Fort Wayne and the Baltimore and Ohio the traffic was extraordinarily heavy during the past 48 hours, and the main stem of the Pennsylvania Railroad between Pittsburg and Altoona was crowded with freight trains.

[Pittsburg Post, December 18, 1899.]

Another day of heavy traffic.—Yesterday was another period of heavy freight traffic, and all the through crews on the main stems were kept on the hustle. The Panhandle moved about 80 through freight trains, mostly loaded with perishable goods, in 34 hours, and the Fort Wayne rails were kept bright all along that line throughout the day and night.

The Baltimore and Ohio received a heavy run of freight from the Pittsburg and Western, most of which was first-class through traffic to Baltimore and Philadelphia.

On the Pennsylvania they were kept hustling to keep the Pittsburg yards clear, and between Bolivar and Altoona there was a tremendous rush of traffic.

[Pittsburg Post, February 6, 1900.]

Good run of Sunday freight.—On Sunday the Panhandle had 35 east-bound and over 30 west-bound freight trains between 6 a. m. and 10 p. m., and most of the business was first class. On Monday the through and local business was very heavy and 10 trains an hour passed Idlewood and Grafton. Ten of these trains were loaded with dressed meat and live stock and the balance contained local freight. The Fort Wayne had a tremendous rush of through freight east-bound which almost swamped the West Penn.

[Pittsburg Post, February 20, 1900.]

Very heavy freight traffic.—From Sunday morning at 5 a. m. until Sunday night at 11 p. m. the Panhandle moved over 80 freight trains on the Pittsburg end of the roads. The west-bound business—made up of coke, steel rails, and merchandise—was unusually heavy, and the movement of first-class freight eastward was good. The same report comes from all the other roads which center here. The business on the Baltimore and Ohio main line through Cumberland is said to be tremendously heavy.

[Pittsburg Post, October 31, 1899.]

Heavy live-stock traffic Sunday—Many train loads of cattle were moved through the city eastward—Double-headers necessary—Panhandle passenger traffic requires extra engines—New locomotives for the B. & O. R. R.—Business in the Ohio Valley—Newsy notes from the railroads.—Yesterday the Panhandle brought in over 110 carloads of live stock. One train of 23 cars, from the Cleveland and Marietta, came in at 10 a. m., and was followed by four more trains with about 11 cars each, making a total of 67 carloads handled in 2 hours. The Fort Wayne had a big run of live stock also, and the East Liberty stock yards presented a busy scene in the afternoon, as about 5 more Panhandle trains came in with stock between 2 and 6 p. m.

The railroads and the drovers work in harmony to get as much stock over the road on Sunday as possible, as there are fewer passenger trains on that day, and the trains can be handled with much less trouble than on regular week days.

The Baltimore and Ohio had several trains of live stock coming in from the different divisions of the road, the Pittsburg and Western having delivered many cars to the Pittsburg division. It is noticed that this system is now handling more live stock and first-class freight than ever before in its history, and this is due to the fact that the road is in excellent shape and the stock trains make fast time all the way from Chicago to the Atlantic seaboard.

[Pittsburg Post, February 13, 1900.]

Good run of Sunday freight.—Live stock, refrigerator, and merchandise freight was heavy on all the lines on Sunday. The Fort Wayne and Panhandle had a big rush of traffic, the latter line having brought in no less than 100 carloads of live stock and about 60 carloads of dressed meat. The Baltimore and Ohio main line was crowded as usual with first-class freight, and more than 60 trains passed over the long brick bridge at Cumberland during the day.

[Pittsburg Post, February 26, 1900.]

Live-stock shipments heavy.—From Saturday noon until Sunday evening the Panhandle had over 150 carloads of live stock. One of the big new mogul engines, No. 88, pulled through the Union station yards with 29 cars loaded with cattle from the States west of Pittsburg. Several other stock trains came in during the period of time above defined. The live-stock traffic on the Fort Wayne and the Baltimore and Ohio lines was very heavy during the same period.

[Pittsburg Post, February 27, 1900.]

The regular meeting of the Pittsburg passenger committee will be held this afternoon. The running of Sunday excursion trains in and out of the city next season is an assured fact.

[Pittsburg Post, March 20, 1900.]

Freight movement still heavy.—From Sunday at 6 a. m. until 10 p. m. the Panhandle had about 33 east-bound freight trains and 30 west-bound trains, making a total of more than 63 trains hauled over this end of the road in the time stated, which means more than 100 freight trains every 24 hours. Most of the east-bound freight is composed of grain, live stock, dressed meat, and machinery. Hundreds of Chicago, Burlington and Quincy, Chicago, Milwaukee and St. Paul, and Great Northern cars come over this road daily loaded with grain and are sent through to the Atlantic seaboard.

[Pittsburg Post, March 27, 1900.]

About 90 freight trains were moved on this end of the Panhandle between 12.10 a. m. Sunday and 10 p. m. Sunday night.

The question of Sunday labor and the means of restricting it have been subjects of great discussion among the railroad employees in their union meetings and conventions, and more so of late on account of the apparent policy of the railroads to increase the number of Sunday trains; and the result has been the adoption of strong resolutions against the practice and requests for Congressional action in the matter, as the following resolutions will show:

[Resolution of International Meeting of Railroad Employees in New York City May 23, 1894.]

We favor the enactment of laws affording railroad employees Sunday rest, so far as is consistent with the imperative demands of the people. (Railroad Trainmen's Journal for July, 1894, p. 585.)

[Resolution of third biennial convention of the Brotherhood of Railroad Trainmen held at Toronto, Ontario, May 27, 1897.]

Whereas believing as we do that the one day of rest in seven is for the best interests of labor, and was so designed by Infinite wisdom: Therefore, be it

Resolved, By the Brotherhood of Railroad Trainmen in international biennial convention here assembled, that we reiterate our utterance made in the Boston convention of 1893, viz: That we are unalterably opposed to Sunday trains, the running of which deprive so many of us of our just rights to Sunday rest. (Convention Proceedings, p. 72.)

[Resolution of fourth biennial convention of the Brotherhood of Railroad Trainmen held at New Orleans, La., May 17, 1899.]

Whereas we believe the laws of nature demand that man should have at least one day's rest out of seven, and if the great political and industrial questions are to receive intelligent consideration at the hands of the toiling masses more time must be given them for recuperation and thought, and as Sunday, the first day of the week, is observed more than any other day of the week for rest, and therefore can be easily reserved as a rest day, and as the growing demand of the public for Sunday trains, and the eagerness of railroad companies to increase dividends by running Sunday trains, threaten to entirely deprive the railway employees of a day of rest: Therefore, be it

Resolved, That while we realize the quasi-public nature of our positions, and that it is our duty to meet all reasonable demands of the public and our employers, we believe a rest day is just as dear to us as it is to all other classes, and the demands made upon us for Sunday service are unreasonable. We believe the adoption of the refrigerator car has removed all necessity for the moving of perishable freight on

Sunday; that no harm can come from the unloading of live stock to rest over Sunday; that the demands of the public for Sunday trains for purpose of pleasure and convenience, and the running of trains by railroad companies for the purpose of increasing dividends come from selfish motives, which experience has taught us can not be overcome by suasion, and, as there seems to be no hope of our having a rest day, unless it be secured by legislative enactment, we urge the United States Industrial Commission and Congress to investigate this question; we earnestly ask that Congress pass a law which will prohibit the running of Sunday trains on all interstate railroads: And be it further

Resolved, That a copy of this resolution be sent to the President of the United States, the United States Senate, the House of Representatives, the United States Industrial Commission, the press, and be printed in the Trainmen's Journal. (Convention Proceedings, p. 98.)

This same resolution was also passed at the second biennial convention of the Order of Railroad Telegraphers held at Peoria, Ill., May 25, 1899. (See Supplement to the Railroad Telegrapher for July, 1899, p. 134.)

[Resolution of the convention of the State Legislative Board of Railroad Employees of Pennsylvania, held at Sunbury, Pa., April 27, 1900]

Whereas there is a growing tendency among our railroad managers, through a desire to increase earnings and in compliance to a demand of a certain class of people to increase the running of Sunday trains; and as this action threatens to entirely take from the railroad employees their day of rest; and as there seems to be no remedy for this except through national legislation: Therefore, be it

Resolved, That we urge Congress to pass a law forbidding the running of Sunday trains on all interstate railroads: And be it further

Resolved, That a copy of this resolution be sent to the President of the United States, the United States Senate, the House of Representatives, and the United States Industrial Commission.

Most employees in other classes of employment now enjoy Sunday rest, and I think the railroad employees contribute enough to the public good to entitle them to at least equal treatment at the hands of the public.

Science has taught us that even the exhaustion caused by ordinary labor can not be overcome without one day's rest out of seven. How much more necessary then is a rest day for railroad employees, who, in addition to their physical exertions, are under a constant mental strain, and are required to give service at all times of the day and night, and are exposed to all kinds of weather.

Much agitation has been going on at different times, and a great deal has been said and done to reserve Sunday for religious reasons. So far as results are concerned it would not matter materially to the working classes what influence brought about the reservation of one day out of seven as a day of rest. They would welcome it no matter from what source it came. However, I have given this question a great deal of study and have endeavored to look at it in all of its phases, and if it is to be solved by legislation (which I think is the proper means of solving it), I can not see how we can consistently contend for it from a religious point of view; for just as soon as the religious question is brought into it, just so soon does it become sectarian, and the various creeds which believe in observing the first day of the week will contend for it for sectarian reasons, while the creed which believe in observing the last day of the week will oppose the observance of the first day and contend for the observance of the last day. I believe the observance of one day out of seven can be contended for for humanitarian and patriotic reasons, and much argument can be produced to show why the first day of the week, what is commonly known as Sunday, is the day that should be set apart as a rest day for railroad employees as well as other classes.

The first good reason is because many of our State legislatures have passed laws limiting labor on this day, and in consequence it is observed by our manufacturing and mercantile institutions and by our agriculturists.

Then, too, so many more people observe it and refrain from work for religious reasons than there are people who through religious belief observe some other day. Consequently it is the rest-day now observed by a great majority of our people, and can, therefore, be more expediently given to the railroad employees as their day of rest than can any other day of the week. If the railroad employees are not given this day as their day of rest the good influence of the family circle will avail nothing, for it is on this day only that the rest of the family are at home and are at leisure. On other days their wives are busy with their household cares, the little children are at school, and the larger ones, both boys and girls, are at work in the factories and stores.

It may be argued that this question should be left to the State legislatures, and that Congress should not interfere in the matter. If the State laws were adequate and were respected and lived up to by the railroad companies there might be some reason in such an argument; but the fact of the matter is that many of the State laws are drafted in such a way as to allow them to be easily evaded by the railroad companies, and if there is no chance for evasion they are openly violated and defied. Railroad companies are large and powerful corporations and wield an awful influence in the various States through which these roads run, and in many cases they have no respect whatever for State law, but will hesitate before defying the strong arm of the United States Government; and if Congress should pass a law forbidding the running of Sunday trains I believe it would be respected. I can cite no more convincing evidence of the evasion and defiance of the State law by railroad officials than by calling your attention to the remarkable admissions of several railroad presidents in their testimony before this commission.

Mr. Samuel Spencer, president of the Southern Railway, in answer to a question from Commissioner Kennedy in reference to the possibility of evading the Georgia Sunday law, said: "That is a question that I can not answer. I suppose it is possible. I do not recall the Georgia statute exactly. I have had knowledge of some cases where one car of perishable freight would be used, for instance, to take an entire train of nonperishable freight through along with it. I suppose it is something like that you had in mind." (Hearings on Transportation, p. 266.)

Mr. M. E. Ingalls, president of the Cleveland, Cincinnati, Chicago and St. Louis and the Chesapeake and Ohio railroad companies, testified practically the same as Mr. Spencer. The following appears in his testimony in regard to the Virginia Sunday law:

"Q. But that law does not prohibit passenger traffic?—A. No, nor perishable freight; and the result is that you will see 49 cars of coal running down over the road, and a car of hogs used to run them through; and we run our passenger trains and business through. There is a demand for passenger trains now.

"Q. According to that, practically, there is not a great deal of observance of that law?—A. You might not have cars enough of hogs to go around.

"Q. If you do have hogs enough to go around, you are very sure to run the trains?—A. As long as we can switch in perishable freight, I understand from our attorneys that we are safe. The Virginia people are the cleverest people in the United States. I do not know any State where property-rights are so carefully observed as they are in Virginia; and we do not have any trouble unless we strike somebody who wants to make a fine out of us. The people themselves are all with us; we do not have any trouble with them." (Hearings on Transportation, p. 289.)

Hon. John K. Cowen, president of the Baltimore and Ohio Railroad Company, in answer to a question as to how he managed the running of Sunday freights in the States which had laws forbidding it, said: "Just run along; we have not been prosecuted. I believe we were prosecuted once in West Virginia, but the matter dropped. It has been sort of recognized as a necessity to continue the running of certain trains. There have been from time to time complaints, of course, local complaints, of running excursion trains, which are not absolutely necessary, but we do run excursion trains, and of those there have been complaints from time to time, but no prosecutions. There have not been any actual prosecutions."

In answer to the question, "What is your opinion of such laws anyhow; do you think they amount to anything or are of any benefit to anybody?" he said, "I do not think they amount to anything or are any benefit to anybody." (Hearings on Transportation, p. 304.)

Here are statements of three railroad presidents, and if the presidents of all the roads in this country were brought before this commission to testify I believe the majority of them could tell the same story. Mr. Chairman, if railroad presidents will evade and defy these State laws, and say that they are no good, I think that alone should be evidence enough to convince this commission that if the railroad employees are to get any relief through legislation it must be given by an act of Congress.

The great good that would be derived, socially, morally, and politically, by the stopping of Sunday trains far outweighs any inconvenience that might be suffered by the railroad corporations or the public; therefore I am in favor of Congress passing a law forbidding the running of Sunday trains on all interstate railroads. Provision, however, should be made for the running of relief and wreck trains, and to allow trainmen to complete their trips begun on Saturday, in order to get to their homes.

Overtime.—Some years ago there was no such a thing as getting paid for overtime on railroads, the same amount being paid for a run if it took 24 hours to make it as was paid for the same run if made within 10 hours. This condition existed until the employees started to organize, and generally, as the organizations grew on each system

of railroad, the management granted pay for overtime; and, as a rule, wherever you find the men well organized you find that they are paid for overtime at a rate *pro rata* to the regular time. The telegraph operators seem to suffer the most in this way, as they were the last of these employees to organize, and on many roads they do not get paid for overtime.

Liability of railroads to employees for injury.—A number of States have passed laws making railroad companies liable for damages to their employees for injury caused by neglect or mismanagement of certain classes of employees. The effect of this legislation has been that under certain circumstances employees who have been injured while in the performance of their duty have collected damages therefor.

The effect of such legislation, if extended, will, I believe, have a tendency to decrease injuries to railroad employees, for if the companies are held to account for injuries received through the negligence and incompetency of their employees, it will cause them to be more careful in their management and in the selection of employees. Some States have made it possible for persons dependent upon employees to recover damages in case such employees are killed through the negligence of the railroad, though in some States, I believe, this is not the case.

Speaking in general, the doctrine of risks contemplated by voluntarily engaging in a dangerous occupation is upheld by judicial decisions and has not been modified to any extent by statutes, one exception being in the act of Congress requiring railroad companies to equip their cars with safety appliances. In this case, however, it is limited, inasmuch as it only applies when companies fail to furnish certain appliances.

Most of the liability legislation is limited, very few States making the railroad companies liable for the acts of all their employees, the liability being generally confined to the acts of agents and certain other employees. For instance, in the case of an injury to a brakeman caused by the negligence of a fireman the brakeman could not recover, where if his injury had been caused by the negligence of an agent of the company or, in some States, by a conductor he could recover.

The nature and effect of this legislation is that employees are denied the right to recover unless the injury is caused by the negligence of one of a certain class of employees. I think the laws should make the companies liable for negligence, mismanagement, and incompetency of all of their employees.

Some States have limited the amount that an employee can recover for injury, while some States are forbidden by their constitutions from passing such legislation. Pennsylvania is one of the States which forbids this legislation.

As a general rule the decisions of our courts under the common law are favorable to the companies. This is in keeping with the ruling of an English court laid down in the year 1837, and which seems to be the precedent that has been followed by our courts. It was said during the early decisions on this question that the one great reason why the employer should not be liable to an employee for injury caused by the negligence of a fellow-servant was because the employees were coemployees, working together in the same employment, and that they were in a better position to know each others' faults, and could therefore better protect themselves against injury from each others' negligence than could the employer protect them. But it must be remembered that the decision of the English judge was made at a time when employees worked together on the same piece of work; it was before the great centralization of wealth and consolidation of manufacturing and other establishments, when probably only two or three laborers worked in a shop and were brought closely together not only in their work, but socially, as well; and whatever justice there was in such a rule at that time, if there was any at all, surely disappears when applied to the gigantic manufacturing institutions and the great consolidated systems of railroads of to-day, when thousands work together in the same common employment and never see each other, much less becoming acquainted with each other and studying each others' capabilities and faults; and even if they were acquainted and knew each others' faults, their work is of such a nature and they are so widely separated that they could not guard against accident.

An engineer may be going along the road with his train, and everything may be going all right until he has gone 100 miles, when suddenly, without warning, his train collides with an opposing train and he is injured, all on account of some telegraph operator failing to deliver an order to the train. It may be that he never saw the operator, and even if he had known him and thought he was not a competent man he could not have stopped his train and refused to proceed just because this operator was working at the same time he was. If he would do such a thing as that he would be dismissed from the service. (See Decision, *Frazier v. Pennsylvania Railroad Company*, to follow.)

Then, too, the discrimination of our courts between the public and the employees must appear to the reasonable mind to be unfair. A member of this commission may go to a railroad company and sell, trade, or give it, as the term may be, \$4 for a ride from Washington to Pittsburgh; I go to the same company and sell, trade, or

give it my labor as a conductor from Washington to Pittsburg for \$4. Neither of us enter into any agreement with the company to release it from any responsibility for injury. We both go out on the same train, you as a passenger and I as a conductor. Our train goes along all right for a long distance. I am busy collecting tickets and looking after the comfort of my passengers. After our train has gone a distance of about 200 miles some negligent switchman, whom you and I knew nothing about and whose character and fitness we never had opportunity to know, has left a switch open, which causes our train to be wrecked; you lose two fingers and I lose a leg or an arm; you can go into the courts and recover to the amount of thousands of dollars and I recover nothing; and if I be killed neither can my family, which is dependent on me, recover. If the company is responsible to you it should be to me.

This question has received a great deal of consideration by the railroad employees, and wherever they have had legislative committees at work in the different States they have endeavored to get laws passed which would be more favorable than the common law. The following are a few expressions of the railroad employees in their meetings:

[Resolution of union meeting of organized railroad employees of Texas, held at San Antonio, Tex., September 9, 1896.]

Whereas the supreme court of the State of Texas in its recent decision rendered inoperative our fellow-servant law: Therefore, be it

Resolved, That we demand such legislation as will give us an effective fellow-servant law. (Railway Conductor, for October, 1896, p. 612.)

[Resolution of union meeting of organized railroad employees, held at Carnegie, Pa., July 16, 1899.]

Whereas the common law as applied by our courts in civil actions brought by employees to recover for injuries received through the negligence of coemployees is unfair and unjust, and as there is great need for legislative action to remove the injustices from which we suffer at the hands of our courts in such cases: Therefore, be it

Resolved, That we, members of the Brotherhood of Locomotive Engineers, Brotherhood of Locomotive Firemen, Order of Railroad Conductors, Brotherhood of Railroad Trainmen, and Order of Railroad Telegraphers, in joint meeting assembled at Carnegie, Pa., on this 16th day of July, 1899, earnestly urge Congress to pass a law giving employees of interstate railroads the same rights to recover for injuries caused by the negligence of coemployees as are now enjoyed by those who are not employees.

Be it further resolved, That a copy of this resolution be sent to the President of the United States, the United States Senate, the House of Representatives, and the United States Industrial Commission.

In addition to these resolutions the fourth biennial convention of the Brotherhood of Railroad Trainmen, held at New Orleans, La., May 15, 1899, passed a motion indorsing a national employers' liability law. (Convention Proceedings, p. 73.)

In order that you may have the opportunity to see the way this question is handled in a State where the common law prevails, I have had prepared a copy of some important decisions of the courts of Pennsylvania, which I submit herewith. My reasons for picking the State of Pennsylvania are because of the vast multitudes employed in its mines, enormous manufacturing and mercantile establishments, and on its thousands of miles of railroads.

[Pennsylvania laws and decisions relative to the liability of employers for injuries to employees.]

I.—LAWS.

The State of Pennsylvania has no "employers' liability act." (Shearman & Redfield on Negligence, sec. 2410.)

In the absence of such statute the common-law rule is in operation, which declares that the master is not liable for an injury received by an employee in consequence of the negligence of his coemployee.

See paper entitled "Employer and employee under the common law," in Bulletin No. 1, pages 95-107, of the Department of Labor, for November, 1895.

No act of the general assembly shall limit the amount to be recovered for injuries resulting in death, or for injuries to person or property, and in case of death from such injuries the right of action shall survive, and the general assembly shall prescribe for whose benefit such actions shall be prosecuted. (Art. III, sec. 21, Cons. of Pa. of 1874. Construed in 124 Pa., 183.)

Actions for injury by negligence shall not abate by death of plaintiff. (Public Laws, 669, sec. 18, 1851.)

Such actions may be brought after death of party injured. (Public Laws, 669, sec. 19, 1851.)

In case of death such actions may be maintained by husband, widow, children, or parents. (Public Laws, 309, sec. 1, 1855.)

Such actions shall be brought within one year after the death, and not thereafter. (Public Laws, 309, sec. 2, 1855.)

When any person shall sustain personal injury or loss of life while lawfully engaged or employed on or about the roads, works, depots, and premises of a railroad company, or in or about any train or car therein or thereon, of which company such person is not an employee, the right of action and recovery in all such cases against the company shall be such only as would exist if such person were an employee: *Provided*, That this section shall not apply to passengers. (Public Laws, 58, sec. 1, 1868.)

(This is a police regulation, and is constitutional. It forbids persons from undertaking a dangerous employment except at their own risk. 76 Pa., 506; 89 Pa., 193; 92 Pa., 82.)

II.—COURT DECISIONS.

A railroad company is responsible for injuries suffered by one of its brakemen through a defect in the steps of a freight car while acting as one of a crew sent to a shipper's yard to shift cars preparatory to their being taken into the company's trains. (*Elkins v. Pa. R. R. Co.*, 33 Atl. Rep. (Pa.), 74. Oct., 1895.)

When a master entrusts to the superintendent in charge of an excavation the matter of notifying the employees of any latent danger, the foreman in charge of the gangs engaged in the work of excavation are not vice principals in the absence of the superintendent, so as to render the employer liable for their failure to notify the employee of such danger.

When the only possible danger to an employee engaged in making an excavation is such as may arise during the progress of the work, the employer is not bound to stand by during the work to see if a danger arises, it being sufficient if he provides against such dangers as may possibly arise and gives the workmen the means of protecting themselves. (*Durst v. Carnegie Steel Co.*, 33 Atl. Rep. (Pa.), 1102. Jan., 1896.)

Who is to be considered a representative of the employer and not a coworkman is generally a question of great difficulty. The courts have so disagreed respecting the rule applicable in such cases that the subject, as is said in *Railroad Company v. Baugh* (149 U. S., 368), is in great confusion. To enter upon a general discussion of it here would be folly. A very thorough discussion may be found in the case just cited. Where one is employed to superintend the entire business of the employer or a distinct department thereof, and given control over other employees working therein, he represents the employer; while one employed as a foreman to direct and manage the performance of some part of the general business, even with authority over his coemployees working therein, is not such a representative, and the employer is consequently not responsible for his carelessness. (*Coulson v. Leonard*, 77 Fed. Rep., 538. Dec., 1896. A Pennsylvania case.)

(The *Baugh* decision above cited also declared that the question of the responsibility of a railroad corporation for injuries caused to or by its servants, where there is no State statute on the subject, is one of general law, upon which United States courts exercise an independent judgment, and is not settled by decisions of the State court wherein the cause of action arose.)

Where one railway company runs trains on the track of another the servants of either company are not coservants of the servants of the other. (*C. R. R. Co. v. Armstrong*, 49 Pa. St., 186.)

Servants of a contractor and those of a subcontractor are not coservants. (*Hunt v. Pa. R. R. Co.*, 51 Pa. St., 475; *Hass v. Phila. and S. M. S. Co.*, 88 Pa. St., 269.)

The obligation of the master does not extend beyond the use of ordinary care and diligence. (*Caldwell v. Brown*, 53 Pa. St., 453.)

Where the injured servant remained in the master's employment with knowledge of his coservant's incompetency he can not recover for injuries resulting therefrom unless he shows that he had reason to believe he would be discharged or placed where his negligence would not injure complainant. (*Frazier v. Pa. R. R. Co.*, 38 Pa. St., 104.)

If the officers of a railway company have made careful inquiry into the habits and competency of the employees, and upon such inquiry believe them sober, competent, and careful, the company is not liable for injuries resulting from the negligence of a coemployee. (*O'Donnell v. Allegheny Val. R. R. Co.*, 50 Pa. St., 239.)

The measure of damages for negligence is the same against artificial as against natural persons. (*P. A. and M. R. R. Co. v. Donahue*, 70 Pa. St., 119.)

Where exemplary damages are not warranted by the gross negligence of the defendant they must be strictly compensatory; but this may include compensation for pain and suffering, loss of time, expense of medical attendance, and such damages as the plaintiff will probably sustain in the future. (*P. A. and M. R. R. Co. v. Donahue*, 70 Pa. St., 119; *Pa. R. R. Co. v. Brooks*, 57 Pa. St., 339.)

The scope of the duties of an employee is to be defined by what he was employed to do and what he actually did, rather than by the verbal designation of his position. (*Rumwell v. Dilworth*, 111 Pa., 343.)

To constitute fellow-servants it is sufficient if the employees are in the service of the same master, engaged in the same common work, and performing services for the same general purpose. (*Lewis v. Seifert*, 116 Pa., 628.)

Fellow-servants need not be engaged in the same particular work. It is sufficient if they are engaged in the same common work, although some may be inferior in grade and subject to the control of superiors. (*N. Y. L. E. and W. R. Co. v. Bell*, 112 Pa., 400.)

It is only when the master or superior places the entire charge of his business, or a distinct branch of it, in the hands of an agent or subordinate and exercises no discretion or oversight of his own that the master is liable for the negligence of such agent or subordinate. (*N. Y. L. E. and W. R. Co. v. Bell*, 112 Pa., 400; *Lancaster Ave. Imp. Co. v. Rhoads*, 116 Pa., 377.)

A master is not responsible for injury to an employee through negligence of a mining boss, a fellow-servant. (*Reese v. Biddle*, 112 Pa., 72.)

A mining boss under the Pennsylvania acts of 1870, of 1877, and 1885 is a fellow-servant with the miners, and his employers are not liable to miners injured from an explosion of fire damp caused by his negligence. (*Lincoski v. Susq. Coal Co.*, 157 Pa. St., 153; *Redstove Coke Co. v. Roby*, 115 Pa., 364; *Waddell v. Simson*, 112 Pa., 567; *Lehigh Val. Coal Co. v. Jones*, 86 Pa., 432; *Del. and H. C. Co. v. Carroll*, 89 Pa., 374.)

A train dispatcher is not a fellow-servant with an engineer. (*Lewis v. Seifert*, 116 Pa., 628.)

Where a master delegates duties which the law imposes on him to an agent, the agent, whatever his rank, in performing that duty acts as the master, and the master is liable for injuries caused by his negligence. (*Mullan v. Phila. and S. M. SS. Co.*, 78 Pa., 32.)

An act by the superintendent of a branch of work is, as to a subordinate employee, the act of the corporation, and not a fellow-servant. (*Tissie v. B. and O. R. R. Co.*, 112 Pa., 91.)

A station agent and a brakeman are fellow-servants. (*Derley v. Phila. and R. R. R. Co.*, 3 Cert. Rep. (Pa.), 112.)

One who is engaged in the service of a common master and in a common employment can not recover against the master for the negligence of a fellow-servant, whether he is paid for his service or not. (*Wischam v. Rickards*, 10 L. R. A. (Pa.), 97.)

Notwithstanding the general rule that the master is bound to use due care to furnish safe and sound materials and machinery, yet the servant assumes the risk of obvious defects in things which he voluntarily uses. (*Shaffer v. Haste*, 110 Pa. St., 575; *Davis v. B. and O. R. R. Co.*, 152 Pa. St., 314; *Moore v. Pa. R. R. Co.*, 167 Pa. St., 495.)

If the master gives the employee positive orders to go on with the work under perilous circumstances, the employee may recover for an injury thus incurred if the work was not obviously so dangerous that no man of ordinary prudence would have obeyed. (*Patterson v. Pittsburg and R. Co.*, 76 Pa. St., 389; *Lee v. Woolsey*, 109 Pa. St., 124; *Kehler v. Schwenk*, 151 Pa. St., 519.)

A master is liable to his servants as much as to anyone else for his own negligence. (*Johnson v. Bruner*, 61 Pa. St., 58.)

It is not necessary that the master have actual knowledge of the defect, but it is sufficient to show that he could have discovered the defect by the exercise of reasonable care and diligence. (*Bennett v. Standard Glass Co.*, 158 Pa. St., 120.)

A servant who was formerly employed by the same master is, with respect to his negligence while so employed, to be considered the fellow-servant of another who, being subsequently engaged, is injured by the after effects of such negligence, if they would have been considered fellow-servants had they forever remained in the same service. (*Haley v. Keim*, 151 Pa. St., 117.)

A mail agent and a railroad employee are not fellow-servants. (*Penn. R. Co. v. Price*, 96 Pa. St., 256.)

The chief manager of any separate department of a business is not a fellow-servant of those who are under his absolute orders, with respect to those orders, and

for his negligence in giving such orders, the master is responsible to a servant injured in consequence of his obedience. (*Frazier v. Penn. R. Co.*, 38 Pa. St., 104; *Patterson v. Pittsb.*, etc., R. Co., 76 Pa. St., 389; *Mullan v. Phila. S. S. Co.*, 78 Pa. St., 25; but for contra see *Ryan v. Cumberland V. R. Co.*, 23 Pa. St., 384.)

The British rule, as settled in *Wilson v. Merry*, that the common master is not responsible to any of his servants for the negligence of any other, even though the negligent servant is in supreme and exclusive control over the entire business, has been condemned in every American court. (*Sherman & Redfield on Negligence*, secs. 227-229.)

A servant is not a vice-principal who is not in charge of an entire department. (*Faber v. Carlisle Mfg. Co.*, 126 Pa. St., 387; *Kinney v. Corbin*, 132 Pa. St., 341; *N. Y. L. E. and W. R. Co. v. Bell*, 112 Pa. St., 400; *McGinley v. Levering*, 152 Pa. St., 366.)

Laborers employed upon a railroad track and the conductor or other employees of a moving train are fellow-servants. (*Ryan v. Cumb. V. R. Co.*, 23 Pa. St., 384.)

A servant who accepts reduced wages in consideration of being allowed to travel upon the road to and from his work, is not in service while thus traveling. (*O'Donnell v. Allegheny V. R. Co.*, 59 Pa. St., 239. "Not sound law," says the N. Y. State court of appeals in *Vick v. N. Y. C. and H. R. R. Co.*, 95 N. Y., 267.)

Actions for injuries from alleged negligence, not founded upon contract or undertaking for safety, as a common carrier, must be supported by affirmative proof of the fact of negligence. (*Allen v. Willard*, 57 Pa., 374.)

A person is under a legal duty to stop, look, and listen for approaching trains, and if he does not do this he is guilty of contributory negligence. (*Dean v. R. R. Co.*, 129 Pa., 514.)

I will not take the time to discuss these decisions, but there are a few of them that I wish to call your attention to.

In *Frazier v. Pennsylvania Railroad Company* you will see an injured servant who remains in the master's employment with a knowledge of his co-servant's incompetency can not recover for injuries resulting therefrom unless he shows that he had reason to believe he would be discharged or placed where his negligence would not injure complainant. Such a decision as this is extremely unjust, and when applied to the workings of a modern railroad seems nothing less than preposterous.

I have given you one example to show the injustice of such a rule, but I will try to explain to you a little further how impracticable it would be to carry out the latter part of this decision. Under the latter part of this decision the injured one can not recover unless he had reason to believe the negligent servant would be placed where his negligence would not injure complainant. Let us follow this, now, and see how it would work. Supposing a railroad company has an incompetent engineer in its service. A trainman is aware of this. He makes a complaint. The company says, "Well, we will not allow that man to run an engine. We will reduce him to the position of fireman." But is it not a fact that if this man is negligent his negligence while acting as fireman is liable to cause injury to the trainman? Or, if he is reduced to the position of brakeman and through his negligence he leaves a switch open and causes a wreck in which the trainman is injured, would not this decision debar the trainman from recovering damages because he knew this man was negligent when he was an engineer? Let us go a little further than this. We will say the company removes this engineer entirely from train or engine service and places him in charge of a railroad crossing. If, through his negligence there is a collision of trains at this crossing which causes injury to the trainman, would not the trainman be debarred from recovery because he knew that this man was still in the service and was of a negligent nature? I will draw one more example which is within the range of probability. This engineer might be put to work upon the track as a section hand. Ordinarily, in such a position it might be thought that his negligence would not cause injury to the trainman; but, supposing this man is detailed by his foreman to look over some part of the track to see whether or not it is in safe condition and he neglects some part of this work, which wrecks a train and causes injury to the trainman, if this trainman goes into the courts and sues for damages, would not the judge who bases his opinions on precedent rather than circumstances and justice look up this opinion and follow it and rule that he could not recover because he remained in the company's service after knowing that this man was negligent, even though he was then employed in an entirely different department?

In *Lewis v. Seifert*, employees who work for the same master and perform services for the same general purpose are considered fellow-servants. This rule means, when applied to railroads, that if a trainman is injured in Philadelphia through the negligence of a telegraph operator in Harrisburg, whom he does not know and has never seen, he can not recover for that injury.

According to the principle laid down in *New York, Lake Erie and Western Railway Company v. Bell*, railroad companies are not liable for injury caused by the negligence of foremen, overseers, and other directors in charge of various classes of work. When applied to train or yardmen it would mean that a fireman could not recover for injury caused by the negligence of an engineer, although he is under the direction of the engineer; and that a brakeman could not recover for an injury caused by the negligence of a conductor, although the rules of the company make the conductor his superior.

According to the decision in *Haley v. Keim*, people are fellow-servants even if they are not working for the master at the same period.

When we consider that one of the principal reasons, as given in the early decisions, for making employees bear the burden of the negligence of their fellow-servants rather than the master, was because they were working together and were therefore better able to protect themselves from injury through each others' negligence than was their master able to protect them, this ruling certainly appears both inconsistent and unjust. It further shows how far the judicial mind will wander in order to put the burden upon the poor injured employee if there is no statutory law to check it. As broad as the common law is, I think it has been stretched when a court will decide—as it has in this case—that employees who are not working for the master at the same time are fellow-servants.

The question of employers' liability as now handled by our courts by rules of common law is in very indefinite shape; and the law on the subject is what is commonly denominated "judge-made law," and is taken from a great mass of judicial decisions in England and the United States, from the year 1837 until the present time. The principles adopted and the circumstances in each case differ so widely that eminent lawyers confess that the matter is so confused and the results are so uncertain that it would be far better to have the question covered by statutory law. And eminent legal authority has ventured so far as to say that the common law on this subject has come to be a mass of legal subtleties more fruitful of controversy and litigation than justice, and that the growth of the law is in the direction of still greater complexity.

So much complication and trouble had arisen in the State of New Jersey over the common-law practices on this question that the department of labor statistics of that State engaged Mr. Frank Burgen, one of the most eminent lawyers of that State, to look into the matter and make a report. After an examination, this attorney made a report in which appears the following:

"* * * The present law on the subject is exclusively judge-made, and has come to be a mass of legal subtleties more fruitful of controversy and litigation than justice. * * * Kindred conditions afford a very fruitful field for controversy and litigation, and the decision in an action for damages often turns not on the merits of the case, but according to the ability and industry displayed by one party or the other in collecting and presenting the evidence so as to get the benefit of the law as stated in some leading case or recent decision. * * * The growth of the law on this subject is in the direction of still greater complexity, and the enlightened spirit of our time demands reform. * * * Workmen themselves have organized mutual benefit associations to obtain compensation for injuries which is denied to them either by the language or processes of law." (Report of Bureau of Labor Statistics of New Jersey for 1898, pp. 303-308.)

If one of the responsibilities of a railroad corporation is to care for and protect the lives and limbs of its patrons, I can see no just reason why this responsibility should not be extended to its employees, especially when the employees are in no better position to protect themselves and guard against the negligence of coemployees.

During the last few years the railroads have adopted very stringent rules in regard to the employment of men, by which applicants for employment must not be over a certain age, generally 30 or 35, and must stand a rigid physical examination, and are refused employment on account of the loss of a small portion of a hand or foot. Thus it will be seen that these companies will have nothing but the young and best blood and those who are without physical blemish; and, since they draw from the best of American manhood, the obligation upon them is greater when they cripple and maim. When they injure men and render them unfit for duty they should be responsible to them for such injury.

I am in favor of Congress passing a simple statute giving to the employees of interstate railroads the same right to recover for injury as is enjoyed by the public or those who are not employees; and the State legislatures should pass similar laws to govern roads not engaged in interstate traffic. This would place the employees and the public on the same plane, which would be simple justice and equality before the law.

Inadequate or defective appliances.—Some railroad companies, in order to keep down expenses, allow their appliances on cars and engines to become defective from wear

and lack of repair. Very often, too, cars and engines are kept in the service in a defective condition because the companies are short of rolling stock and motive power, and they do not like to take this rolling stock out of the service long enough to make the necessary repairs. Especially is this so when the traffic is heavy. This negligent practice is not confined to old, worn-out cars, the use of which might be prompted by a desire to get all the service out of them possible before it became necessary to remove them from the service entirely, but even the new safety appliances put on new cars in recent years are allowed to become defective; so much so that men are required to go between cars to couple and uncouple them, one of the things which the safety-appliance law was especially designed to do away with. The Interstate Commerce Commission detailed a man to go over the country and inspect these appliances, and he found that the condition of the cars which had been reported as equipped with safety devices was very defective; so much so, as the commission puts it, "as to reflect discreditably upon the roads." (See Thirteenth Annual Report of the Interstate Commerce Commission, p. 52.)

The safety-appliance law passed by Congress and approved March 2, 1893, does not provide for automatic couplers and grab irons on engines. Neither does it require that drawbars on engines shall be the same height as those on cars. I can think of no reason why such requirements were left out of the law, as they are very important. I think, however, that these provisions were overlooked by those who framed the law. It is true that roads which are now buying or building engines are putting automatic couplers on the rear ends of them, but many of them are not having them put on the front ends. This would not matter so much if trainmen were not required to couple cars to the front ends of engines, but on a great many roads freight crews are required to turn at points where there are no turntables nor Y's to turn their engines on, and they are required to go along backward and do their shifting and picking up of cars by coupling them to the front ends of their engines.

I know of one company which has purchased practically all of its freight engines since the safety appliance law was passed, but not one of them had an automatic coupler on the front end when they were delivered to the company new from the locomotive works. Then, too, there are a great many engines used which have not even got patent couplers on their rear ends. I have known cases where such engines were wrecked and had these old couplers broken, and the whole rear ends of their tanks demolished, making it necessary to put in new end sills and new couplings, but when they were turned out of the shops after being rebuilt, they would have the old-style link-and-pin couplers on them.

When we consider that most of the coupling that is to be done is done with the engine, it is very important that they should have all of these safety appliances on them.

One other source of danger, and one which has caused many a poor fellow to lose his life, is the failure of railroad companies to keep their frogs, switches, and guard rails properly blocked so as to prevent trainmen from getting their feet caught therein.

Then, too, many train men are killed and injured by being struck with overhead structures, which could just as well be built high enough to clear a man on the top of a box car if there was a disposition to do so. The same danger arises from side structures which are built too close to the track, and many a man has been killed or injured when climbing on the side of a car by being struck with such an obstruction and being knocked off or knocked under the wheels. I want to particularly call the commission's attention to these overhead and side structures, because there seems to be a great desire among railroad companies and municipalities to do away with grade crossings, and in some cities they have already started with this reform, and I think that in making their plans the train men's safety should be given consideration. I think the overhead structures should be high enough to clear a man on the top of a car and the side structures should be a sufficient distance from the track to prevent injury to a man on the side of a car.

I would recommend that the national safety appliance law be so amended as to require railroad companies to equip their engines with automatic couplers and grab irons, and that the height of drawbars on engines should be the same as those on cars. And as this law only applies to common carriers engaged in interstate commerce, its provisions should be reenacted into State law by the State legislatures, the same as has been already done in some States. I would recommend national and State legislation requiring railroad companies to block, fill, or adjust all their frogs, switches, and guard rails so as to prevent the feet of employees from being caught therein. I would also recommend that all new structures, or old ones rebuilt, be placed at a sufficient distance from the tracks to clear train men on the tops and sides of cars.

I believe that if railroad companies were required to report to the Interstate Commerce Commission the real causes of injury to employees, it would have a tendency

to reduce the number of accidents, for the reason that they would dislike very much to report accidents the causes of which would reflect on their management, and consequently extra precautions would be taken by them to prevent these injuries.

I think, too, that great advantage is taken of the employees by the common law in regard to contributory negligence, and I think the law should be so amended as to not make contributory negligence a complete bar against recovery; but I think the jury should be allowed to say to what extent the employee was guilty of contributory negligence. For instance, if a railroad company has in use defective appliances, because an employee remained in its service after becoming acquainted with such defects is not to my mind a good reason why the company should not be liable. In such cases, as I understand it, the courts have held that if a defect is known to the employee and he does not tell the employer of it, and he still remains in the service, he can not recover if he is injured through such defect. This rule might have had some justice in it under former industrial conditions, but it is certainly unjust when applied to a modern railroad. For instance, there may be some defect about an engine; according to the rules it would be the duty of the engineer to report this defect and not the duty of the fireman or brakeman; in fact, if either of them were to report it they might be told that it was not their business, that it was the business of the engineer to report such things.

The engineer reports the defect and the company does not remedy it, and the engine goes out on another trip in that condition and causes an injury to the fireman or brakeman. Would it be right that they be barred from recovery just because they did not have an understanding with some one in authority that this defect would be remedied? I have here a copy of House bill 1086, introduced at this session by Representative Moon, which embodies this question, and, with a little modification so as to make it apply to railroads, should be enacted into law. It reads as follows:

A BILL to restrict the application of the doctrine of contributory negligence so as to permit persons guilty of negligence which is not the proximate cause of an injury to persons or property to recover damages and to define the term "proximate cause" and the right of litigants to have the same determined by a jury, and the duties of Federal judges in such cases

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That if any person or persons have sustained injuries or damage in person or property, and if such injury or damage was proximately produced by the negligent act or conduct of any person or persons, copartnership, company, association, or corporation against whom suit may be pending to recover damages for such injury, either by original writ or removal from State court or otherwise, in any of the courts of the United States having jurisdiction of such cases, the fact that the plaintiff or plaintiffs in such action may have been guilty of some negligence contributing to his, her, or their damage or injury shall not bar or defeat such plaintiff's or plaintiffs' right to recover damage, and in all such cases the plaintiff or plaintiffs may be entitled to recover actual compensation for the injury sustained, but the amount of the recovery of damages for injuries sustained under such circumstances shall by the jury be mitigated or diminished in proportion to the contribution of negligence by the plaintiff or plaintiffs suing, unless the plaintiff or plaintiffs were as much at fault and equally to blame with the defendant or defendants, and in that event the plaintiff shall not be entitled to recover anything.

SEC. 2. That the term "proximate cause," used in the first section of this act, within the meaning of the same, shall be defined as the direct or immediate cause of the injury, or that cause which directly or immediately brought into operation the agency or agencies which did produce the injury complained of.

SEC. 3. That it shall be the duty of Federal judges on the trial of such cases, after declaring the law applicable, to leave to the jury as a question of fact the determination of the act of negligence proximately producing the injury or damage, and shall not direct them as to such finding. But this shall not be construed as depriving the court of the right to set aside the verdict and grant a new trial if the finding of the jury under the law and evidence should not meet the approval of the court.

Aid and benefit features of employees' associations.—The five organizations of railroad employees have insurance and benefit departments, through which the members are paid various sums for sickness and total disability, and in cases of death their dependents are paid the same amount as would be paid the member for disability. The disability and death policies are paid through the national organizations, and the sick benefits are paid by the local lodges or divisions. The amounts paid for disability or death range from \$400 to \$5,000, it generally being optional with the member what amount he shall carry. The weekly benefits paid by subordinate lodges and divisions range from \$3 to \$15. The total amount paid out by these organizations in disability and death claims to January 1, 1900, amounted to \$23,072,563.36. The exact amount

paid in weekly benefits I can not give you, but I am safe in saying it amounts to several millions of dollars.

These associations are strictly mutual, and there is no speculation on the money paid in dues and assessments; and consequently the men get better rates than they do in the old-line insurance companies or in the "relief departments" conducted by the companies.

Relief departments by railroads.—Some roads conduct relief departments, which are kept up principally by deductions from the wages of the employees each month. These associations are in name "voluntary," but in nature they are compulsory; that is, the old employees who do not belong to them are coerced or intimidated into joining them, and new applicants for employment are not hired unless they agree to become members of these associations. The employees have some voice in their management, and are allowed a minority representation on the advisory boards, but the railroad companies in organizing these associations and making the laws to govern them have shrewdly seen to it that the companies' representation on the boards is in the majority, and can at all times dictate and dominate the policy of the association. They have taken good care, too, to see to it that the law-making power of the associations can never fall into the hands of the employees. As I have said, these associations are kept up mostly by monthly deductions from the wages of the employees, but the companies agree to make good any deficiency in the fund. As a condition of receiving benefits, an employee must release the company from responsibility for injury, because it agrees to make good any deficiency in this fund. As the figures of those who have investigated show that the amount paid in by the employees is sufficient to fully cover the cost of carrying their risks, and that the amount paid into such fund by the company is only between one-fifth and one-sixth of the total amount paid in, it is considered that it is taking a very unfair advantage of the employees to require them to release the company from responsibility for injury.

(For insurance rates, see *Locomotive Engineers' Journal* for September, 1896, pp. 784-789; for figures in regard to the amount contributed by railroad companies to relief funds, see evidence of J. K. Cowen in hearings before the Industrial Commission on transportation, p. 306.)

The effect of these associations on the relations between employer and employee is anything but pleasant. The employees have had their eyes opened in regard to these associations. They see that through the intricate workings of these relief departments they are being financially robbed and deprived of their legal rights in the courts, and they denounce them bitterly.

The primary motives of railroad companies in operating these departments are avaricious rather than benevolent. First, because they require an employee to release them from responsibility for injury, and, second, because membership in the relief department keeps employees out of labor organizations on account of their being unable to pay the dues in both. In this way the employees are deprived of the great benefit of labor organizations and the company's hands are therefore more free to impose unfavorable conditions upon its men, and through this means they will become gradually bound up so that the company can do as it pleases with them. If these relief departments did not serve the purposes of releasing the company from responsibility for injury and alienating the interest of employees from labor organizations, there would not be many of them in existence.

I have not had the time and means at my command to make as thorough an investigation of these departments as I would like to have done, but I have been able to gather enough evidence together to substantiate the charge that they are founded on iniquity and governed by laws that are in direct conflict with the spirit of American institutions, and are foisted upon the employees in defiance of the laws of our country. So numerous are the flagrant abuses practiced by railroad companies through these relief departments upon their employees that I will not attempt to cover them all, but will try to point out to you those that have appeared to me to be the most unjust and open to criticism.

I wish first to call your attention to the blank applications for membership prescribed by three railroads which operate these associations:

BALTIMORE AND OHIO RAILROAD COMPANY—RELIEF DEPARTMENT

Application for full membership in the relief feature.

To the Superintendent of the Relief Department:

I, _____, of _____, in the county of _____ and State of _____, desiring to be employed in the service of the Baltimore and Ohio Railroad Company as _____ in the _____ department, _____ division, do hereby, as one of the conditions of such

employment, apply for membership in the relief feature, and consent and agree to be bound by all the regulations of the relief department now in force and by any other regulations of said department hereafter adopted applicable to the relief feature; for which regulations now in force reference is hereby had to any copy of the last edition of the book of regulations of said department issued by the superintendent.

I also agree that the said company, by its proper agents, and in the manner provided in said regulations, shall apply monthly in advance from the first wages earned by me under said employment in each calendar month, sums at the rate of _____ per month as a contribution to the relief feature of said department, for the purpose of securing the benefits provided by said regulations for a member of class _____ to myself, or in the event of my death to _____, or to whomever I may hereafter, from time to time, designate in writing by way of substitution, with the written consent of the superintendent; or if no such beneficiary be then living, to my next of kin (as determined by the laws of the State of Maryland), in accordance with regulation No. 18, subject to all the provisions and requirements of said regulations.

I expressly stipulate that my marriage shall ipso facto have the effect to substitute my wife in the place and stead of the beneficiary named above to receive said benefits, in the event of my death, if she be then living.

I further agree that this application when accepted by the superintendent shall constitute a contract between myself and the said company as a condition of my employment by the company, governed in its construction and effect by the laws of the State of Maryland, and as such be an irrevocable power and authority to said company to appropriate the above amounts from my wages and apply the same as aforesaid, and shall constitute an appropriation and assignment in advance to the said company in trust for the purpose of the relief feature, of _____ such portion of my wages, which assignment shall have precedence over any other assignment by me of my wages or of any claim upon them on account of liabilities incurred by me.

I further agree that in consideration of the contributions of said company to the relief department and of the guaranty by it of the payment of the benefits aforesaid, the acceptance of benefits from such relief feature for the injury or death shall operate as a release of all claims against said company or any company owning or operating its branches or divisions or any company over whose railroad, right of way, or property the said Baltimore and Ohio Railroad Company or any company owning or operating its branches or divisions shall have the right to run or operate its engines or cars or send its employees in the performance of their duty, for damages by reason of such injury or death which could be made by or through me; and that the superintendent may require, as a condition precedent to the payment of such benefits, that all acts by him deemed appropriate or necessary to effect the full release and discharge of the said companies from all such claims be done by those who might bring suit for damages by reason of such injury or death; and also that the bringing of such a suit by me, my beneficiary or legal representative, or for the use of my beneficiary alone or with others, or the payment by any of the companies aforesaid of damages for such injury or death recovered in any suit or determined by a compromise or any costs incurred therein, shall operate as a release in full to the relief department of all claims by reason of membership therein.

I also agree for myself and those claiming through me to be specially bound by regulation No. 11, providing for the final and conclusive settlement of all disputes by reference to the superintendent of the relief department and an appeal from his decision to the committee on the relief department.

I understand and agree that this application when accepted by the superintendent shall constitute a contract between me and the said company, by which my rights as a member of the relief feature and as an employee of said company shall be determined as to all matters within its scope; that each of the statements herein contained and each of my answers to the questions asked by the medical examiner and hereto annexed shall constitute a warranty by me, the truth whereof shall be a condition of payment of the benefits aforesaid.

I hereby certify that I am _____ years of age; am correct and temperate in my habits, and have no injury or disease, constitutional or other, which will tend to shorten my life; am now in good health, and able to earn a livelihood.

In witness whereof I have signed these presents at _____, in the State of _____, this day of _____, 18—.

Witness: _____.

The foregoing application is accepted at the office of the superintendent of the relief department, in Baltimore City, Md., this _____ day of _____, 18—.

Superintendent of the Relief Department.

PENNSYLVANIA RAILROAD COMPANY—RELIEF DEPARTMENT.

Application for membership in the relief fund.

To the Superintendent of the Relief Department:

I, ———, of ———, in the county of ——— and State of ———, employed in the service of the Pennsylvania Railroad Company, as ——— upon the ——— department, ——— do hereby, by reason of such employment, apply for membership in the relief fund, and consent and agree to be bound by the regulations of the relief department of the said company as contained in the book of said regulations, approved by the board of directors, which I have read or have had read to me, and by any other regulations of the said department hereafter adopted, and by the provisions of any agreement or agreements made by the said company with any other corporation or corporations associating in administration of their respective relief departments, in accordance with said book of regulations.

I also agree that the said company, by its proper agents, and in the manner provided in said regulations, shall apply as a voluntary contribution from any wages earned by me under said employment, or from benefits that may hereafter become payable to me, at the rate of ——— per month, for the purpose of securing the benefits provided for in the regulations for a member of the relief fund of the ——— class, and additional death benefit, equal to ——— the death benefit of the first class. Unless I shall otherwise designate in writing, with the approval of the superintendent of the relief department, death benefit shall be payable to ——— (here designate the beneficiary or beneficiaries).

And if any person now or hereafter designated by me to receive the death benefit shall not be living or shall be incapacitated for executing the requisite receipt and release, or if there shall be no such person, the death benefit shall be payable as provided in the regulations of the relief department for such event. And I agree that the acceptance of benefits from the said relief fund for injury or death shall operate as a release of all claims for damages against said company arising from such injury or death which could be made by or through me, and that I or my legal representatives will execute such further instrument as may be necessary formally to evidence such acquittance.

I also agree that this application, when approved by the superintendent of the relief department, shall make me a member of the relief fund on and from the date upon which, by the provisions of the regulations and the terms of this application, it takes effect, and shall constitute a contract between myself and the said company, and that the terms of this application and the regulations of said department shall, during my membership, be a part of the conditions of my employment by the company, and that the same shall not be avoided by any change in the character of my service, or locality where rendered while in such employment, nor by any change in the amounts applicable from my wages to the relief fund which I may hereafter consent to, and that the agreement that the above-named amounts shall be appropriated from my wages shall apply also to any other amounts arising from changes made as aforesaid, and shall constitute an appropriation and assignment in advance to the said company, in trust, for the purposes of the relief fund, of such portions of my wages, which assignment shall have precedence over any other assignment by me of my wages, or of any claim upon them on account of liabilities incurred by me.

I also agree, for myself and those claiming through me, to be especially bound by regulation numbered 65, providing for final and conclusive settlement of all disputes by reference to the superintendent of the relief department and an appeal from his decision to the advisory committee.

I certify that I am correct and temperate in my habits; that so far as I am aware I have no injury or disease, constitutional or otherwise, which will tend to shorten my life, and am now in good health and able to earn a livelihood.

I also agree that any untrue or fraudulent statement made by me to the medical examiner, or any concealment of facts in this application, or resignation from the service of the said company, or my being relieved from employment and pay therein at the pleasure of the company or its proper officers, shall forfeit my membership in the aforesaid relief fund and all benefits, rights, or equities arising therefrom, excepting that my leaving the service shall not (in the absence of any of the other foregoing causes of forfeiture) deprive me of any benefits to the payment of which I shall have previously become entitled by reason of accident or sickness occurring while in the service.

This application to take effect the ——— day of ———, A. D. ———, if I shall be on duty on that date; otherwise upon the date of my going on duty thereafter.

In witness whereof I have signed these presents at ———, in the county of ———, State of ———, this ——— day of ———, A. D. ———.

Witness: (Signature) ———.

The foregoing application is approved at the office of the superintendent of the relief department, at ———, in the county of ———, State of ———, this ——— day of ———, A. D. ———.

(Signature) ———,
Superintendent of the Relief Department.

Application for membership in the Philadelphia and Reading Relief Association.

To the Superintendent of the Philadelphia and Reading Relief Association:

I, ———, of ———, in the county of ———, and State of ———, employed, or about to be employed, in the service of the ——— Company as ——— the ——— do hereby, by reason of such employment, apply for membership in the Philadelphia and Reading Relief Association, and consent and agree to be bound by the regulations of said association, as contained in the book of said regulations, approved by the advisory committee, which I have read or have had read to me, and by any other regulations of the said association which may be hereafter adopted.

I also agree that the said company, my employer, or any other company whose employees may become members of the said association, and which may hereafter employ me, shall, by its or their proper agents, and in the manner provided in said regulations, apply as a voluntary contribution from any wages earned by me under such employment, or from benefits that may hereafter become payable to me, at the rate of ——— (\$——) per month, for the purpose of securing the benefits provided for in the regulations for a member of the said association of the ——— class, and additional death benefit equal to ——— the death benefit of the first class. Unless I shall otherwise designate in writing, with the approval of the superintendent of the relief association, death benefit shall be payable to ———. [Here designate the beneficiary or beneficiaries.]

And if any person now or hereafter designated by me to receive the death benefit shall not be living at the time of my death, or shall be incapacitated for executing the requisite receipt and release, or if there shall be no such person, the death benefit shall be payable as provided in the regulations of the association for such event. Any funeral or other expenses incident to my death which shall have been paid by the superintendent of the relief association in accordance with the regulations, shall be held to be in part payment of the said death benefit, and the amount so paid shall be deducted from the total amount of said death benefit before payment to the person or persons entitled to receive the same. And, in consideration of the contribution to be made to the relief fund of the said association by the Philadelphia and Reading Railroad Company, and its successors, and of the agreement of the several associated companies in respect of any deficit in the relief fund for benefits to their respective employees, I hereby agree that the acceptance of benefits from the said relief fund, or from said association, for injury or death, shall operate as a release of all claims for damages against said company, my employer, and against any of said associated companies by which I may hereafter be employed, arising from such injury or death, which could be made by or through me, and that I or my legal representative will execute or, where necessary, procure to be executed, such further instrument as may be necessary formally to evidence such acquittance.

I also agree that this application, when approved by the superintendent of said association, shall make me a member of said association on and from the date upon which, by the provisions of the regulations of said association and the terms of this application, it takes effect, and shall constitute a contract between myself and said company, my employer, and such of the associated companies by which I may be hereafter employed, and that the terms of this application and the regulations of said association shall, during my membership, be a part of the conditions of my employment by said companies, or any of them, and that the same shall not be avoided by any change in the character of my service, or locality where rendered, while in such employment, nor by any change in the amounts applicable from my wages to the relief fund which I may hereafter consent to, and that the agreement that the above-named amounts shall be appropriated from my wages shall apply also to any other amounts arising from changes made as aforesaid, and shall constitute an appropriation and assignment in advance, to the said company or companies, my employers, in trust, for the purposes of said association, of such portion of my wages, which assignment shall have precedence over any other assignment by me of my wages or of any claim upon them on account of liabilities incurred by me.

I also agree for myself and those claiming through me to be especially bound by the regulations providing for final and conclusive settlement of all disputes by reference to the superintendent of said association and an appeal from his decision to the advisory committee.

I certify that I am correct and temperate in my habits; that, so far as I am aware, I have no injury or disease, constitutional or otherwise, which will tend to shorten my life, and am now in good health and able to earn a livelihood.

I do hereby further acknowledge, consent, and agree that any untrue or fraudulent statements made by me to the medical examiner, or any concealment of facts in this application, or my resignation from the service of said company, my employer, or from any of the associated companies, or my being relieved from employment and pay therein at the pleasure of the said companies, or any of them, or their proper officers, shall, except as otherwise provided in the regulations, forfeit my membership in the said association, and all benefits, rights, and equities arising therefrom, excepting that my leaving the service shall not (in the absence of any of the other foregoing causes of forfeiture) deprive me of any benefits to the payment of which I shall have previously become entitled by reason of accident or sickness occurring while in the service.

This application shall take effect on the — day of —, A. D. —, if on that date I shall be on duty in the service of the said company; otherwise upon the date of my going on duty in such service, and am not at the time suffering from injury or disease.

In witness whereof I have signed these presents at —, in the county of —, State of —, this — day of —, A. D. —.

Witness: — — —.

Signature of applicant.

Witness: — — —,

Signature of parent, guardian, or husband.

Witness to signature of parent, etc.

The foregoing application is approved at the office of the superintendent of the Philadelphia and Reading Relief Association at Philadelphia, Pa., this — day of —, A. D. —.

Superintendent of the Philadelphia and Reading Relief Association.

It is claimed by some of the defenders of these departments that membership in them is "strictly voluntary." This argument is denied by the employees and others who have investigated the subject, and so convincing are the facts to the contrary that the argument is not taken seriously by those who have become acquainted with the inside workings; but fearing the same old argument might be presented to this commission I will point out a few of the facts which to my mind clearly prove the fallacy of the contention. In a table which I will submit later I will show that a large majority of the employees who have spoken on the matter say that it is necessary to join the relief departments to secure employment, or that they are intimidated or coerced into joining them after securing employment. Prof. E. R. Johnson, of the University of Pennsylvania, who made an investigation of these departments, in his evidence before this commission said:

* * * "A prominent official of an important railway corporation told me in a confidential conversation that he did not care whether the membership in relief association was compulsory or not. At that time his railway made membership in his association compulsory; but he stated that he did not care whether it was compulsory to join the association or not, for the reason that the indirect pressure that the corporation could bring to bear would accomplish the same result."

After making this statement, he was asked this question: "Did they force the employees?" To this question he answered: "Yes." (Hearings before the Industrial Commission on the subject of Transportation, p. 57.)

In the application for membership in the Baltimore and Ohio Relief Department, heretofore quoted, the following appears:

"I, — — —, of — — —, in the county of — — — and State of — — —, desiring to be employed in the service of the Baltimore and Ohio Railroad Company as — — — in the — — — department, — — — division, do hereby, as one of the conditions of such employment, apply for membership in the relief feature, and consent and agree to be bound by all the regulations of the relief department now in force and by any other regulations of said department hereafter adopted applicable to the relief feature."

When an employee is required to join the relief department as a condition of employment, is not membership in that department compulsory?

President C. P. Huntington, of the Southern Pacific Railway, in a circular issued February 15, 1900, establishing the relief department on that road, said: "Applicants for employment after March 1, 1900, must become members of the relief department before entering the company's service." (Railroad Trainmen's Journal for April, 1900, p. 335.)

I think this is sufficient evidence to prove to a reasonable mind that membership in these associations is not voluntary, and I would not encroach upon the commission's time by submitting any further proof were it not for the fact that in the face of all the evidence that has been produced, I expect you will find some people who will still insist that membership is voluntary, so I wish to call your attention to the evidence of Hon. J. K. Cowen, president of the Baltimore and Ohio Railroad, before this commission October 21, 1899:

In answer to a question by Senator Mallory he said: "If a person comes into the service now he agrees to go into the relief department."

In answer to a question by Commissioner Farquhar he said: "He can not get into the service without going into the relief department unless he is over age and for some special reason is relieved." (Hearings before the Industrial Commission on Transportation, p. 305.)

The next claim made for these departments is that the money received from the employees to keep up the fund is given in "voluntary contributions." If membership in these associations is compulsory it necessarily makes the payment of these moneys compulsory, and to prove the former is but to prove the latter. Therefore I think it almost a waste of time to say any more on that proposition, but it might be well to here call your attention to the straits these companies must have been in when making the laws to govern these departments to find words deceptive enough to answer their purposes but still look good on the outside.

That they were in a measure unsuccessful in this is shown by their making a new definition for the word "contributions." On page 21 of the regulations governing the Baltimore and Ohio Relief Department I find the following: "The word 'contribution,' wherever used in these regulations, refers to the sums paid into the treasury of the company on account of the relief feature, either by appropriation of wages earned or by deposits of cash for or by members."

On page 29 of the regulations governing the Pennsylvania Voluntary Relief Department, I find it defined in this way: "The word 'contribution,' wherever used herein, shall be held to mean such portion of wages or benefits, or cash payments in lieu thereof, as a member shall have agreed in his application shall be applied for the purpose of securing to him the right to benefits from the relief fund."

On page 30 of the regulations governing the Philadelphia and Reading Relief Association, I find it defined in these words: "The word 'contribution,' wherever used herein, shall be held to mean such portion of wages or benefits, or cash payments in lieu thereof, as a member shall have agreed in his application shall be applied for the purpose of securing to him the right to benefits from the relief fund."

They first compel a man to join these associations and agree to allow them to keep a part of his wages each month, and then want to call it a contribution. If there was not an attempt at deception in this matter, why did they pick a word that required so much defining? I believe that the general understanding of the word contribution is to give of one's own free will, and I deny that these employees pay this money in that spirit. And while they may not have the means of education at their command that the railway managers have, they are well enough acquainted with the English language to know that white is not black and a thousand definitions will not make green mean yellow.

Now as to the objects or motives of railway managers in operating these departments. The companies claim that the object is benevolence. We dispute this, and claim, on the other hand, that their motives are avaricious.

What the companies would have us believe are their motives are printed in their regulations, and it might be well to quote them. On page 9 of the regulations governing the Pennsylvania Railroad Voluntary Relief Department, I find this declaration:

"The object of this department is the establishment and management of a fund to be known as 'The relief fund,' for the payment of definite amounts to employees contributing to the fund, who under the regulations shall be entitled thereto, when they are disabled by accident or sickness, and in the event of their death, to the relatives or beneficiaries specified in the applications of such employees."

On page 3 of the regulations governing the Philadelphia and Reading Relief Association, the purpose is stated in this language:

"The object of this association is the establishment and management of a fund to be known as 'The relief fund,' for the payment of definite amounts to members of

the association, when, under the regulations thereof, they shall be entitled thereto, by reason of disablement from accident, sickness, or other cause, and, in the event of their death, to their relatives or other beneficiaries specified in their applications for membership or thereafter designated in accordance with the said regulations."

On page 4 of the regulations governing the Baltimore and Ohio Relief Department, it is put briefly in this language:

"The relief feature will afford relief to its members entitled thereto, when they are disabled by injury or sickness, and to their families in the event of their death."

But we are fully convinced that these luring promises are only for the purpose of throwing dust in the eyes of the employees, and that the primary objects of the railroad companies in operating these departments are to deprive the employees of the right to sue in case of injury, and to keep them out of labor organizations.

As I have said before, I think if these two things could not be accomplished there would not be many relief associations in existence. Taking the second question first, I will give you what I think are good reasons to base this claim on:

In the first place, many of the employees say that they believe one of the objects of the companies is to keep them out of labor organizations. They also testify that it serves this purpose, for men are sometimes unable to keep up the dues in the relief department and their labor organizations, and as it is compulsory on them to pay dues into the relief department, they must withhold their membership from the labor organizations.

In 1889, shortly after these relief associations had been started, Mr. E. F. O'Shea, grand secretary and treasurer of the Brotherhood of Railroad Brakemen, in answer to questions submitted by the Department of Labor in regard to relief associations, said:

"Some of the principal lines have lately organized so-called relief associations for the ostensible purpose of 'caring for our dear employees,' but the real purpose is to undermine and ultimately to destroy the brotherhood and place the men entirely at the mercy of the corporations. The brakeman does not receive wages commensurate with the work he performs or the dangers he is compelled to undergo, hence he is unable to keep up his membership in more than one organization, and as a portion of his wages is retained each month for his membership in the relief fund, he has no choice in the matter. A protest will result in discharge, and a discharge forfeits all moneys paid into the fund. The relief fund is a delusion and a snare, and many of the brakemen know it from bitter experience." (Fifth Annual Report of the Commissioner of Labor, p. 39.)

Prof. E. K. Johnson, in testifying before this commission, said: "A majority of railroad men could not afford to carry insurance in the relief departments and in the brotherhoods; both the relief departments rather worked against the beneficial departments of the brotherhoods." Further he was asked: "Did it lessen their allegiance to the brotherhood organization?" To this he answered: "Yes; and made it rather difficult for a man who was to be a member of the relief department to join the brotherhoods." (Hearings before the Industrial Commission on Transportation, p. 57.)

Now, as to the other motive that prompts these companies—that of depriving employees of the right to recover for injury:

Each of these companies, as will be noted by glancing over the applications for membership in the relief department, requires as a condition of receiving benefits from the fund that the employee shall release it from all claims for damages arising from such injury.

If the companies are prompted by a spirit of benevolence, why do they take such an unfair advantage of an injured employee? Is it benevolence to strip a cripple of the legal rights given him by the laws of the land? One of the strongest evidences that the greatest desire of railroad companies is to prevent the paying of damages is afforded by watching their actions in such matters, and I desire right here to call the commission's attention to the attitude of some of our railway managers toward their employees who have been injured in the service and have sought redress in the courts, the way they discourage these employees and apparently use every means at their command to suppress the evidence and truth in these cases. For instance, a road is running from Pennsylvania into Ohio. The laws and courts of Ohio are considered by the employees to be more fair and equitable than those of Pennsylvania, and the employee of this road when he sues naturally goes to Ohio to enter suit, and the case is tried in Ohio. He has to depend on his fellow-employees, who are his witnesses, to go voluntarily into Ohio to give evidence, because, as I understand it, they can not be compelled to go from one State into another to give evidence in such cases. The officers of the road go to these witnesses and tell them that they do not have to go into Ohio to testify unless they want to, and they give them to under-

stand that it is the company's desire that they do not go. These employees are talked to by their superior officers, from the train master up to the general superintendent, and are finally persuaded not to go. Then the only way left open for the injured employee to get their testimony is to go into Pennsylvania and take their depositions. The practice in taking these depositions is for the counsel on both sides to get together and mutually agree on a date on which they will go together and take the depositions. The counsel for the company advises the officers of the road what day they will come, and the company then goes to these witnesses whose testimony would be favorable to the employee and gets them to go to some place where they can not be found on the day the depositions are being taken.

It is made known to these witnesses, too, that they will lose nothing for the loss of time and expenses while evading the lawyers. Then, too, if a good witness for the plaintiff is on a run that takes him into Ohio, and they fear he will be subpoenaed some time while in Ohio, they will in some instances put him on another part of the road to work, so that he will not run into Ohio. These witnesses know and feel in their own hearts that they are doing a wrong to their fellow-employee, but the remonstrances, or at least the suasive talk of a general superintendent, who has probably never honored them with an audience before, is too much for their will power, and they finally bend. And in this way the poor employee who has been injured through some fault of the company is deprived of some of his best witnesses. I remember, however, of one case where a man was handled in this way, and he was taken to task for it by his lodge of our organization; and when he fully realized the way his fellow-workmen felt about it, he took courage and went and freely gave his testimony; and the plaintiff, who was a member of a sister organization, recovered several thousand dollars for the loss of a hand.

What I desired to bring out by the foregoing was to show the means railroad officers will resort to to save damage suits; and it strengthens my assertion that one of the main features of the relief departments is to prevent the collection of damages for injury, when the company is liable.

But no stronger evidence can be obtained, showing the objects of these relief associations, than to take some of the history of the actions of the companies toward legislation which sought to nullify these release contracts. A few years ago, when such legislation was proposed in the State of Iowa, the Chicago, Burlington and Quincy Railroad Company, which operates a relief department, marshaled all of its forces and influence and resorted to some questionable means to defeat this measure.

The fight made by the railroad employees in Iowa aroused so much public sentiment against these departments in that part of the country that the Pennsylvania Company was very much disturbed lest their association would be stripped of its best feature by State legislation in that section of the country. So at the last session of the Indiana legislature it sought to legalize its relief department by statute and had its attorneys draft the following bill, which was introduced in the senate by a senator who was favorable to that corporation:

[Engrossed senate bill No. 335.]

A BILL for an act making it lawful for railroad companies owning or operating railroads in the State of Indiana, and for all other corporations, companies, firms, or persons employing labor in said State, to organize and maintain relief departments for the creation, maintenance, and management of relief funds for the payment of benefits to employees, contributing to such funds when disabled by accident or sickness, and in the event of their death to their relatives or other beneficiaries, authorizing employees to agree to contribute, and to contribute voluntarily to such funds, providing that the expense and cost of managing, caring for, investing, and disbursing such funds shall be borne solely by said corporation, companies, firms, or persons; that they shall be liable for the safekeeping thereof, and for any deficiency in said funds, providing for the acceptance of benefits from said funds by the members and their beneficiaries, and prescribing the effect of such acceptance, and matters relating thereto, and declaring an emergency.

SECTION 1. *Be it enacted by the general assembly of the State of Indiana*, That it shall be lawful for railroad companies owning or operating railroads in said State, and for all other corporations, companies, firms, or persons employing labor in said State to organize and maintain relief departments for the creation, maintenance, and management of relief funds for the payment of benefits in definite amounts to employees contributing to such funds when they are disabled by accident or sickness, and, in the event of their death, to the relatives or other beneficiaries of the decedent who may be specified in the application for membership of such employees.

SEC. 2. The employees of such companies, corporations, firms, and persons may agree to contribute and may contribute voluntarily to the creation and maintenance of such funds, but all the expense and cost of managing, caring for, investing, and disbursing such funds shall be borne solely by the companies, corporations, firms, and persons, and they shall be liable for their safekeeping and for any deficiency in the funds to pay the benefits agreed upon.

SEC. 3. In case of personal injury to any employee or of his death while a member of any such relief department and entitled to benefits, he or his beneficiary named in the application for membership may accept the benefits from the relief fund in lieu and in bar of any damages resulting from such injury or death, and the acceptance of benefits from the relief fund to which such employee or his beneficiary is entitled by reason of membership in the relief department shall be a valid defense to any action for damages resulting from such injury or death, but nothing contained herein or in any contract of such employees shall operate to deprive him or his representatives of his or their right of action for damages resulting from such injury or death if such employee or his beneficiary does not accept the benefits from such relief fund.

SEC. 4. An emergency exists for the immediate taking effect of this act, therefore the same shall be in force from and after its passage.

The company worked hard for the passage of this measure and kept a number of its employees at Indianapolis trying to show the legislators the blessings of their so-called voluntary relief department. The bill was referred to the committee on judiciary, which reported the bill with amendment, as follows:

"MR. PRESIDENT: Your committee on judiciary, to which was referred senate bill No. 335, introduced by Senator Hogue, has had the same under consideration and begs leave to report the same back to the senate with the recommendation that said bill be amended by adding to section 3 the following:

"Amend by adding to section 3 the following:

"Provided, That there shall be paid to any employee or beneficiary any and all benefits to which he is entitled by reason of such membership for the period of 15 days after his injury, and the acceptance of such benefit shall not operate as a bar in a suit for damages on account of such injury; and any act done, or any release or contract executed, within 15 days of any injury received by any member of any such association, shall not be a bar to any suit for damages on account of said injury; and that when so amended said bill do pass."

"J. D. EARLY, *Chairman.*"

The amended report was concurred in February 17, 1899, and on February 24, 1899, the bill was called up by Senator Hogue, the man who introduced it, and read a third time by sections. It was then again amended by striking out all of lines 11 and 12, after the word "death," in section 3. And then it was still further amended by striking out all of section 3.

This left a measure that was undeceptive and would have carried out every principle set forth in the Pennsylvania Company's declaration of purposes of its relief fund. But this kind of legislation was not what it was seeking; it was seeking to legalize these release contracts; and when these iniquitous provisions were stricken from the bill the senator who had introduced it, and, as I understand it, introduced it at the instance of the Pennsylvania Company, moved to strike out the enacting clause, which motion prevailed, and it killed the bill.

Mr. Chairman, I have taken particular pains to look up the history of this Indiana legislation in order to give you the exact facts. I placed myself in communication with the secretary of state of Indiana; also with the chairman of the legislative board of railroad employees of that State, who was in attendance at Indianapolis during that session of the legislature, and to substantiate my statements I submit their letters:

DEPARTMENT OF STATE,
INDIANAPOLIS, IND., *January 22, 1900.*

H. R. FULLER, *Washington, D. C.*

DEAR SIR: I herewith inclose to you a type-written copy of senate bill No. 335, introduced in the senate of the sixty-first general assembly. The original bill, with the amendments added thereto, had been ordered to engrossment, after which, on February 24, the enacting clause was stricken out, and therefore the bill was killed.

Very truly, yours,

GEO. W. GONSER, *Deputy Secretary.*

I again wrote to the secretary of state for more details in regard to this bill and received the following letter:

INDIANAPOLIS, IND., *March 12, 1900.*

H. R. FULLER, *Washington, D. C.*

DEAR SIR: Replying to your favor of March 10, I beg to say that senate bill No. 335 was introduced into the general assembly by Hon. Enoch G. Hogue, a Republican senator. On February 24, 1899, the bill was called up by Mr. Hogue and

read a third time by sections. Senator Minor, a Democrat, made the following motion:

"I move you that senate bill No. 335 be referred to a committee of one and amended by striking out all of lines 11 and 12 after the word 'death' in section 3," which motion prevailed.

Senator Morris Winfield, a Democrat from the district composed of Cass and Pulaski counties, made the following motion:

"I move you that senate bill No. 335 be amended by reference to a committee of one, its author, with instructions to strike out section 3," which motion prevailed, on a decision whereon 21 senators voted in the affirmative and 13 senators voted in the negative.

The bill as amended did not meet the approval of Senator Hogate, who thereupon moved to strike out the enacting clause, which motion prevailed. If there is any blame to be attached to either party for the defeat of this bill, it can only be attached to the Democratic party.

Very truly, yours,

UNION B. HUNT, *Secretary of State.*

The following is the statement made by Mr. B. L. Frederick, the chairman of the railroad employees' legislative board:

INDIANAPOLIS, IND., May 16, 1899.

H. R. FULLER, *McKees Rocks, Pa.*

DEAR SIR: Your letter of the 1st instant relative to the bill introduced at the last session of the general assembly of this State, making it lawful for railroad companies and other corporations to organize and maintain relief departments, received.

This bill which was known as S. B. 336 and introduced by Senator Hogate, of Boone County, was, I understand, drawn up by Mr. Samuel O. Pickens, of this city, and the chief counsel for the Pittsburg, Cincinnati, Chicago and St. Louis Railway in this State. This company (Pittsburg, Cincinnati, Chicago and St. Louis Railway) kept 6 of their employees stationed at the state house during the entire session, working in the interest of this measure—they having a list showing the percentage of members and nonmembers on each division to show that the relief department as conducted by that company was purely voluntary and not compulsory. On 2 or 3 of these divisions the percentage of membership was as low as 60 per cent, but upon investigation I find the majority of the employees on these divisions that have a low percentage are men who are past the prime of life and would be considered by other insurance companies as poor risks.

The bill met with great opposition from the representatives of the employees for this reason: That the acceptance of the benefits of the relief association was a valid defense for the company in a suit for damages.

When the bill came up for passage with the amendment attached all interest was lost, showing conclusively that the bill was introduced to have the relief departments act as a bar in a suit for damages.

Trusting you will find this information sufficient, I am, sir,

Very respectfully, yours,

B. L. FREDERICK,
Chairman Indiana Legislative Board.

Subscribed and sworn to before me this 29th day of March, A. D. 1900.

[SEAL]

JOHN W. DONNELLY,
Notary Public in and for Cook County, Illinois.

Now, I wish to call your attention to the remarkable wording of the title of this bill. Note how lucidly it sets forth every provision of the bill except the release provision. That is covered by these harmless appearing words: "and prescribing the effect of such acceptance, and matters relating thereto." Indeed, the language of the bill is almost a repetition of that in the title, with this one exception. If there was not an attempt to deceive, why did they not clearly express this provision in the title of the bill? If this release clause was fair, why were they afraid to set it forth in the title as they did the other provisions of the bill? Why did they not say in the title: "and the acceptance of benefits from the relief fund shall be a valid defense to any action for damages resulting from such injury or death?"

But this is not all the evidence that can be produced to show that the greatest object aimed at is to save damage suits. The employees are almost unanimous in that opinion. Prof. E. R. Johnson, whose testimony I have already referred to several times, speaks this way: "I think the corporations have organized the relief departments not from philanthropy, but because it is good business." He further says: "I think the economic motive is the motive of the corporations." (Hearings before the Industrial Commission on transportation, pp. 58-59.)

President Cowen, of the Baltimore and Ohio Railroad Company, in his evidence

before this commission, said: "And practically the effect of the relief department has been to almost entirely wipe out litigation with employees on account of injuries; not entirely, but almost entirely. I think really it is quite a rare case now for us to have much trouble with our employees."

If we had no more evidence, would not this admission make absurd any pretension that the relief departments were not organized for the purpose of saving damage suits?

But it is argued by the friends of the relief associations that anything that will save litigation is commendable. To my mind this is a wrong conception. I will agree, however, that anything that will remove the cause for litigation is commendable. We should not allow the railroad companies to escape the responsibility for injury to their employees, and then they would take more precautions to protect the lives and limbs of their employees; and the result would be a decrease in the number of accidents, and consequently the cause for litigation would be lessened. This would be going to the root of the evil, which is the right way to go about it.

It is said by those who have investigated this question that the companies contribute only about 16 or 20 per cent of the relief funds, but still they claim the right to make an employee release them from responsibility for injury before they will allow him to draw benefits from this fund of which he and his fellow employees have contributed over 80 per cent. For the paltry sum which is the company's contribution to the benefits he draws, he is deprived of the legal rights given him by the laws of the land. To plainly show the real injustice of this part of the scheme I will draw an example of how it works with an employee who is injured and is entitled by law to recover for such injury: An employee who is a member of the relief department loses an arm. We would say that the courts would allow him \$5,000 for this injury. We will now say that he receives \$100 from the relief fund, \$20 of which the company has contributed. For this \$20 he surrenders his right to the \$5,000 which he was entitled to according to law, and he is out the difference between \$20 and \$5,000, which is \$4,980.

As previously stated, the companies have the majority on the governing boards, and therefore practically make the laws and dictate the policy of these associations; and it is impossible for the employees' representatives to change these laws to an equitable basis.

I ask the question: If the employees contribute 80 per cent of the funds why should they not have a majority representation? I would like to be shown another business institution that is run in such an arbitrary manner. Where, if you please, could we find a railroad president or director who owns the controlling interest in a road who would allow it to be run by the minority stockholders?

I have often heard the phrase used, "the tail wagging the dog," but it never presented itself so strongly to me as it does in this feature of the relief departments.

The amounts paid in disability and death claims by these associations are not commensurate with the amounts paid in dues. The insurance departments of our brotherhoods, and even the old-line insurance companies, give better rates. I have not had the time myself to go into this feature of the question and give you the exact figures, but I have here a very able and carefully prepared comparison made by one of the editors of our organizations, which I submit, as follows:

THE PLANT SYSTEM—RELIEF AND HOSPITAL DEPARTMENT.

We alluded to the philanthropic pose of Superintendent Dunham, of the Plant System, in our August number, and stated therein that in forcing his relief and hospital scheme on the employees it was compelling them to share the company's losses without sharing in its profits.

We have before us the printed application for membership which is headed "Plant system relief and hospital department." This document is too long for space at our disposal in this issue, and we will use such quotations as will answer our purpose at this time and if found necessary will publish in full later. This document is addressed to the superintendent and chief surgeon, and reads (the name and place added):

"I, Richard Roe, of Brunswick, Ga., desiring to be employed in the service of the companies constituting the Plant System as engineer in the train department, do hereby, as one of the conditions of such employment, apply for membership in the relief and hospital department, and consent and agree to be bound by all regulations of the relief and hospital department now in force, and by any other regulations of said department hereafter adopted."

It will be readily seen that employment in any capacity depends upon the physical possibility of the applicant coming within the requirements of the medical examination, which is more searching than the examination of any old-line insurance com-

pany, as it covers not only physical conditions but eyesight, hearing, and color list. And it is safe to say that no man, however proficient in the business, or how badly he may need work or they need his services, can obtain it only through the one channel, the relief and hospital department, and not then if for any reason the superintendent or medical examiner does not want him to pass. The application further says:

"I also agree that the said companies, or either of them, by its or their proper agents and in the manner provided in said regulations, shall apply monthly in advance, from the first wages earned by me under said employment in each calendar month, sums at the rate of — per month as a condition to the relief and hospital department for the purpose of securing the benefits provided by said regulations for a member of class — to myself, or in the event of my death to —."

"I expressly stipulate that my marriage shall ipso facto have the effect to substitute my wife in the place and stead of the beneficiary named above to receive said benefits in the event of my death, if she be then living."

"I further agree that this application, when accepted by the superintendent and chief surgeon, shall constitute a contract between myself and the said companies, and each of them, as a condition of my employment by the company, governed in its construction and effect by the laws of the State of Georgia, and as such be an irrevocable power and authority to said companies, or either of them, to appropriate the above amounts from my wages and apply the same as aforesaid, and shall constitute an appropriation and assignment in advance to the said companies, or either of them, in trust for the purposes of the relief and hospital department, of such portions of my wages, which assignment shall have precedence over any other assignment by me of my wages, or of any claim upon them on account of liabilities incurred by me."

"I further agree that in consideration of the contributions of said companies to the relief and hospital department, and of the guaranty by them of the payments of the benefits aforesaid, the acceptance of benefits from the said relief and hospital department for injury or death shall operate as a release of all claims against said companies, and each of them, for damages by reason of such injury or death which could be made by or through me; and that the superintendent and chief surgeon may require, as a condition precedent to the payment of such benefits, that all acts by him deemed appropriate or necessary to effect the full release and discharge of said companies, and each of them, from all such claims, be done by those who might bring suit for damages by reason of such injury or death; and also that the bringing of such a suit by me, my beneficiary, or legal representative, or for the use of my beneficiary alone, or with others, or the payment by any of the companies aforesaid of damages for such injury or death recovered in any suit or determined by compromise, or of any costs incurred therein, shall operate as a release in full to the relief and hospital department of all claims by reason of my membership therein."

"I also agree, for myself and those claiming through me, to be specially bound by regulation No. 13, providing for the final and conclusive settlement of all disputes by reference to the superintendent and chief surgeon of the relief and hospital department; and an appeal from his decision to the committee on the relief and hospital department."

"I understand and agree that this application, when accepted by the superintendent and chief surgeon, shall constitute a contract between me and the said companies, and each of them, by which my rights as a member of said relief and hospital department, and as an employee of said companies, or either of them, shall be determined as to all matters within its scope, that each of the statements herein contained, and each of my answers to the questions asked by the medical examiner, and hereto annexed, shall constitute a warranty by me, the truth whereof shall be a condition of payment of any of the benefits aforesaid."

It will be noted that the applicant agrees that the acceptance of his application creates a fixed and immutable condition of his employment. He also agrees to obtain a release, if requested, from all parties who might come within the scope of law for bringing a suit against the company, and that the bringing of a suit shall act as a positive release of the companies' liability to pay any part of the indemnity accruing from his monthly payments and membership in the relief and hospital department. He also agrees that his rights in the indemnity department and his position as an employee shall rest upon the truth of his answers to the medical examiner, and without qualifications. One might state what he believed to be absolutely true of his own physical condition and still be as wide of the truth as many of the students with M. D. attached to their names in making an examination. The applicant takes this risk all to himself, as he does all the other risks incident to his employment and insurance with this philanthropic company. We append below the fixed and immutable condition of employment of all classes of employees on the

Plant System. In this exhibit they take pains to say, "Free medical and surgical attendance by company's surgeons to all members," and that members must insure in the class their salary calls for. We shall see later whether medical attendance is free to anyone but the Plant Company.

The Plant System relief and hospital department, what it costs, and benefits to be derived.

Class according to salary per month.	A.—\$35 or under.	B.—Over \$35 and not more than \$50.	C.—Over \$50 and not more than \$75.	D.—Over \$75 and not more than \$100.	E.—More than \$100.
<i>Class according to employment.</i>					
<i>Cost per month:</i>					
First class (those engaged in operating trams).....	\$1.25	\$2.50	\$3.50	\$4.50	\$5.50
Second class (not so engaged).....	1.00	2.00	2.75	3.50	4.25
<i>First or second class.</i>					
<i>Benefits.</i>					
For accidental injuries per day, not including Sundays—					
First 26 weeks.....	.50	1.00	1.50	2.00	2.50
After 26 weeks.....	.25	.50	.75	1.00	1.25
For sickness per day, not including first 6 working days or Sundays, for 52 weeks.....	.50	1.00	1.50	2.00	2.50
In event of death from—					
Accident.....	500.00	1,000.00	1,500.00	2,000.00	2,500.00
Natural causes.....	250.00	500.00	750.00	1,000.00	1,250.00

Free medical and surgical attendance by company's surgeons to all members. No charge will be made to members for care and treatment while in hospitals. For care of the families of members in company's hospitals, actual cost will be charged with an addition of 10 per cent.

Members employing other than the company's surgeons will do so at their own expense. Benefits will not be paid in such cases unless reported promptly on relief and hospital department Form 12.

Employees becoming members of the department must insure in the class their salary requires.

Now, the second class, not in train service, is necessarily made up of all the other classes that compose the necessary force employed; and as there are six classes listed in old-line companies before we come to hazardous, it will be fair to take the middle class, called ordinary, and turning to this column we find \$1,000, and \$7.50 weekly indemnity. Old-line company, 84 cents a month, or \$10.12 a year; Plant system, \$2 a month, or \$24 a year; \$1,500 old line, \$7.50 weekly benefits, 94 cents a month, or \$11.25 per year; Plant, same class, \$2.75 per month, or \$33 a year; \$2,000 old line, \$12 a week, \$1.46 per month, or \$17.52 per year; Plant, same class, \$3.50 a month, or \$42 per year; \$2,500 old line, \$12.50 per week, \$1.56½ a month, or \$18.75 per year; Plant, same class, \$4.25 per month, or \$51 per year. In roads where hospital department only is maintained, the payments, would, we think, not exceed \$4.50, \$6, \$9, and \$12 a year for these classes, and the Plant's excess charges over the old-line company is \$13.88, \$21.75, \$24.48, and \$32.25 a year—almost three times as much as the cost of hospital maintenance. This looks like a good big margin for the Plant System, and we will leave the reader to estimate whether the medical service is free, or whether the employee pays the bill. And when we realize, as we all do, that a very small percentage of the above class get killed, and consequently the maturing claim by natural death being paid only one-half, we do not think the Plant System will be bankrupt by its philanthropy. Now we will make a comparison of the other class, "extra hazardous," as they are listed by the old-line companies.

Now, the condition for an engineer or conductor who earns more than one hundred dollars a month is a payment of \$5.50 per month, or \$66 a year, on a \$2,500 policy, with \$15 weekly indemnity for 26 weeks, and one-half, or \$7.50, if he is disabled more than 26 weeks, and full payment on his policy if he is killed while on duty in the service of the company; but if he dies from other causes he receives only \$1,250, and benefits on account of accidental injury will be paid only when shown by evidence satisfactory to the superintendent to have been received while actually engaged in the performance of duty in the service of the company.

Now, the old-line schedule before me lists \$2,500, extra hazardous, \$15 weekly indemnity, at \$4.26 a month, or \$51.36 a year, and full payment of \$2,500 whether killed following his occupation or otherwise, or dies a natural death. And when we understand that about sixty of every one hundred maturing policies under the Plant System would only receive \$1,250, because 60 per cent die natural deaths, and that

indemnity is not paid when injury is received when not on duty, it does not take long to fathom the incentive that actuates its superintendent in adopting this means of relieving the Plant Company of sustaining its legitimate liabilities, and possibly having something left, and with no means provided by which one of these employees who have paid excess charges over cost of maintenance ever getting any of it back. And if they are discharged or leave the service of the company, these accumulations which are sure to accrue remain the property of someone—Who?

Now, we will make a comparison with the Brotherhood of Locomotive Engineers' Mutual Life and Accident Association. This is the extra hazardous risk. For the twelve months ending July 20, 1896, there were 141 natural deaths, 73 killed and died from injuries received, 17 loss of hand or foot, and 22 loss of eye, a total of 253. Of the killed, 1 was thrown from his horse, 3 died from gunshot wounds, 1 thrown from a buggy, 1 drowned, and 1 killed in a cyclone; and these the Plant would pay half or declare them forfeited entirely. The cost of carrying \$2,500 in the Brotherhood of Locomotive Engineers' Mutual Life and Accident Association for the past year, with 39 liabilities maturing for loss of hand, foot, or eye, has been \$41.66, and the cost of weekly indemnity equal to the Plant is carried on in many of our divisions for 75 cents a month, or \$9 a year, making a total of \$50.66 for \$2,500, with weekly indemnity and the policy always paid in full. Now let us see what the difference would amount to paid in full, as the Brotherhood of Locomotive Engineers does, and natural deaths one-half, as the Plant System does. Two hundred and fifty-three policies maturing at \$2,500 amounts to \$630,000. Now, the Plant System would only pay in full for those killed—73—\$182,500. As they would not pay for loss of hand or eye, they would only pay on the 141 natural deaths \$176,251, total, \$358,750. In favor of the Plant Company, \$271,250 on policy payments only, as compared with the Brotherhood of Locomotive Engineers' insurance. If the Brotherhood of Locomotive Engineers paid its policy holders on the same basis the Plant does, it would cost but \$22.50 a year to pay the bill and cost of collecting. Now, the men on the Plant System have paid \$15.34 a year more for their risk being carried by the Plant than the Brotherhood of Locomotive Engineers' insurance has cost its members, and they have paid \$14.64 more than an old-line company would ask, and on the ordinary class almost three times as much as the rate in an old-line company.

For further comparison, we will take the number carried by the Brotherhood of Locomotive Engineers' insurance department which are all extra hazardous, and in which all payments are made in full, and loss of hand, eye, or foot paid the same as on death, which will give 39 more maturing policies than in either the Plant or the old-line company. For the information of the members of the Brotherhood of Locomotive Engineers' insurance, we will take the average number carried during the year, our figures being based on the actual records of the insurance assessments for that time. We will give the amount of cost to the insured to carry \$2,500 and \$15 a week in each of the three, and deduct the amount that would be paid on matured policies in each, leaving the balance to cover weekly indemnity, profit, or surplus.

In the Brotherhood of Locomotive Engineers' insurance, 16,860 members pay in \$50.66 a year, or a total of \$854,127.60, and receive on 253 matured policies (the last year's record as to actual number of policies paid) \$630,000, leaving balance of \$224,127.60 to meet weekly indemnities. The old-line companies' figures on same number would be: Paid in by insured at \$51.36 a year, \$865,929; as they do not pay for loss of hand, foot, or eye, we will deduct 17 for loss of hand or foot and 22 for loss of eye, a total of 39, leaving matured policies in old-line company 214 instead of 253, and this total would be \$535,000; this deducted from the amount paid in would leave a balance of \$330,929 to meet weekly indemnity claims, commissions, and profits—\$106,801.40 more than the Brotherhood of Locomotive Engineers. The Plant System of payments, \$66 a year on 16,860 members, would amount to \$1,112,760, and they, like the old-line company, do not pay for hand, foot, or eye, and would stand at 214, same as the other. Besides this, however, they do not pay but half on natural deaths; so the account would stand (taking our record again), accidental deaths, 73, at \$2,500, \$182,500; natural deaths, 141, at \$1,250—\$176,251, or a total of \$358,750, and there has been \$1,112,760 paid in, leaving a balance in favor of the Plant of \$754,010; \$529,873 more than the Brotherhood of Locomotive Engineers. Now, the members of the Brotherhood of Locomotive Engineers' insurance pay in \$11,802 less than the same risk in an old-line company, and pay out for loss of hand, foot, or eye 39 matured claims, amounting to \$98,500, and having paid in \$11,802 less the saving would stand \$110,302 in favor of the Brotherhood of Locomotive Engineers' insurance. And when we compare it with the Plant System the members of the Brotherhood of Locomotive Engineers' insurance would pay in \$258,863 less, and get in return, as we have shown, but \$358,750 on matured policies in lieu of \$630,000 from the Brotherhood of Locomotive Engineers—a difference of \$271,250; this, added

to the \$258,863 excess payment, shows the cost to be greater than that of the Brotherhood of Locomotive Engineers by \$530,113. Our exhibit shows a balance to meet weekly indemnity of \$224,127.60, the old-line companies' indemnity fund as \$330,929, and the Plant as \$754,000. We have not considered the greater factor in proportion to the number employed in railroad service which do not come under the class of extra hazardous, and by examination it will be found that the saving for some one besides the insured in that class is very much greater in percentage, and while the number employed on the Plant System we presume is considerably smaller than that we have used in this article, we think we are safe in saying that this philanthropic Superintendent Dunham will be able without much difficulty to figure out enough to at least pay the doctors and do so without using any of the Plant System's earnings, but get it out of the pockets of the employee, not by voluntary contribution, but by a system of coercion, the employee being afraid to do otherwise, fearing the loss of position. There are other railroad companies that have paternalism with similar conditions, but it has been left for Superintendent Dunham to reach the extreme in compelling the employee to more than pay the company's losses without sharing in its profits. The owners of the Plant System can not relieve themselves of their responsibility for having a tyrant as their business manager, who resorts to every kind of scheme of good or ill repute to foster his or their interests.

I presume there are those interested in the Plant Relief and Hospital Association who will try to deny the statements in this article, and to show that the company is not only doing their share toward expense, and are really actuated by a love of caring for their employees, but in doing so—if they wish to be honest in it—they must first show what had been the legitimate cost of medical attendance on the company's business before the employee began to pay the bills; and also show the real diminution of the expense of their legal department, by virtue of the contract the employee signs, forfeiting his claims to the benefits which should accrue to him from his own payments into the relief and hospital fund, if he or any of his heirs or assigns should presume to sue the company, even though the injury was caused by the grossest carelessness on the part of the officials of the company themselves. There are those who maintain that the employees like these associations—the contract, compulsory part, and all—but the best explanation of that is that they do not like to say they do not like it.

The readers can infer as much as they like. There is a redeeming quality in hospital departments rightly conducted. Where the collections from the employees are moderate, and where there is no ironbound contract to relieve the company of its rightful obligation to pay legitimate claims against it, and in which there does not enter the speculation-fostering features of the others, there is a streak of charity in it, and though one never expected to be benefited by it personally, having a home of his own, they willingly contribute for the benefit of others whose circumstances differ. There is a good chance in hospital system relieved of the other feature, for company officials to be actuated by a meritorious desire to benefit and relieve suffering humanity when the occasion requires it. We believe the public should know what is the real intent and purpose of the man at the head of the Plant System. That it is not charity, they need not be told; that it is gain, pure and simple, is self-evident, and ought to be condemned. He has denied the employee the right to a voice in any condition as associated with the Plant System, and they have no voice in this relief and hospital department. They are requested not to use their voices, but a pen to sign away their liberties at the command of Superintendent Dunham or suffer discharge.

This article was prepared by Mr. C. H. Salmons, the editor and manager of the Locomotive Engineer's Journal, and was printed in that journal for September, 1896; and Mr. Salmons writes me that no one has so far undertaken to disprove any of the statements contained in it.

One of the great luring promises put forth by the relief departments is the pension feature. This is also looked upon with suspicion by the men, as they claim that a man who has stamina enough about him to protest against unfavorable conditions being imposed upon him will not be allowed to remain in the service long enough to be put upon the pension list; and they prefer to look after their own future rather than have paternalism exercised over them by the companies.

The Interstate Commerce Commission, in its Thirteenth Annual Report, in touching on the question of relief departments, said:

"There are some conditions imposed upon members by the relief departments which have provoked no little criticism. For instance, objection is made that two of the railroad companies make membership a condition of employment; another objection is that, generally, membership is forfeited when the employee's service in

the company terminates; and still another is that all the relief departments provide that an employee or his beneficiary, by accepting the benefits afforded by the relief, thereby waives any legal right to recover damages against the company in case of injury or death caused by accident. It is also urged against these relief departments that they create in the mind of the employee a sense of dependence on the continued good will of the employer, since any beneficial interest in the relief fund ceases upon the discharge of the employee or his voluntary retirement from the employer's service. Moreover, when contracts are exacted requiring membership of relief departments as a condition of receiving employment, there is said to be a tendency toward, if not the actual assumption of, powers which ought not to be exercised by railway corporations." (Tenth Annual Report of the Interstate Commerce Commission, p. 111.)

The following are a few editorials from the journals of our organizations, which contain some very good arguments against these relief associations, and will, I believe, be of some assistance to the commission:

"One of his admirers, in writing of the life of Mr. McLead, declared him to be a democrat in his dealings with his employees, and in support of his statement said there was no hand on the Reading so much covered with dust and grease that the president would not shake it. Another proof of his solicitude for his employees was made as follows: 'The first thing he did upon assuming prominence in the company was to start a relief association among the men, which has a membership of 15,216 and a surplus in the treasury of \$228,480.43. The receipts of the association last year were \$262,787.28 and the disbursements were \$241,101.91. It is administered by an advisory board composed of ordinary employees and a number of the representatives of the Reading's board of managers.' This looks good and sounds better, but the romance and sentiment attached to the story can not bury the truth. * * * There is not the first principle of democracy in any part of it, although there is an assumption of such in allowing ordinary employees to meet and hear the managers of the road direct the government of the association. The fact that the board of managers have their representatives to assist gives a pretty fair idea how far the wishes of the employees are allowed to govern. Membership in this far-sighted and benevolent association is made a condition of employment; promise not to join any labor organization, or to withdraw from those already joined, is part of the same contract drawn by this democrat. Under the guise of philanthropy this association has taken from the men on the system in one year over \$262,787 and given them in return \$241,101, while the balance is kindly held for them by the company, which is anything but a reliable depository. This same democrat would have extended his pet scheme to the leased lines had the employees of those lines not met the proposition with organized and determined resistance, and had system federation not been in force among the organizations of railroad employees on the leased lines, they too would be paying tribute to this, the greatest philanthropic fake the work- ingmen of this country have ever had to submit to. Their combined front presented in opposition to this infamous proposition alone saved them from the humiliation of placing their necks under this oppressive yoke." * * * (Railroad Trainmen's Journal for May, 1893, p. 381.)

The Railway Conductor for March, 1897, page 180, speaking on a law introduced in Iowa to declare void all contracts wherein employees waived their rights to recover for injuries by accepting benefits from relief departments, says:

"This is the substance of the contention we have always made upon this subject, and is no more than common sense and common justice would dictate. When men are compelled to pay for their insurance it is their property, no matter whether it be the company employing them or some private corporation selling the insurance, and the fact that they accept insurance for which they have paid should have no more bearing upon their right to collect from the company for damages received than the acceptance of groceries upon the same terms. So long as the men are obliged to support the insurance they should be protected in their right to the product of their investment, and the companies should not be allowed to exploit them in this way in order to save having to pay for damages wrongfully inflicted. The measure is a just one and should be made law, not only in Iowa, but in all the States where similar attempts are being made to compel railroad men to insure themselves against the ignorance or carelessness of others in the interest of the employing corporations."

"RELIEF ASSOCIATION CONTRACTS."

"This subject has attracted the attention of railway employees to an unusual degree of late, and has been brought prominently to the attention of legislators by the numerous appeals on the part of railway employees for legislation which would more fairly protect their interests than that which now exists.

"Voluntary or so-called voluntary relief associations, practically or wholly controlled by the employing corporation, and in which their employees or seekers after employment are required to hold membership or declare their willingness to do so, have always been distasteful to the employees. Aside from the natural resentment felt by the employee, the principal objection to these relief associations lies in the fact that the employee, upon becoming a member of the association, is required to sign a contract under which if he is injured while in the discharge of his duties and accepts the temporary financial relief provided by the association, he relinquishes and releases all right to recover damages against the employing corporation through suit at law. On the one hand, it is held that the man in search of employment, and who has behind him the imperative duty of providing for those who are dependent upon his daily toil for sustenance, will not hesitate long about signifying his willingness to become a member of the relief association.

"It is claimed that the contract releasing the company from liability for damages in consideration of receiving benefits from the association is secured under duress; that it is against public policy; that it lacks the essential to all contracts—consideration; that it strikes down the voluntary right to contract, and that it lacks mutuality. On the other hand, all these claims are denied and it is claimed that the contract is a purely voluntary one. It is said that the employee can elect for himself, in the event of his receiving personal injury, whether he will relinquish his claim against the relief association or release his right to attempt to recover through appeal to the courts. Inasmuch as the employee can secure insurance against accident, and even against illness from many causes, without any conditions other than the payment of the premium, and that premium but slightly, if any, higher than that paid to the relief association, it can not be said that the association is maintained through a spirit of pure magnanimity. It is established and maintained as a means of escaping legal liability for personal injuries to employees.

"At the last session of the Iowa legislature an amendment to the laws of the State abrogating and avoiding such contracts of release of liability was the occasion of the most earnest and spirited contest during the session. In the closing hours of the session the amendment was defeated in the senate, having been passed by a very large majority of the house. It will undoubtedly be again introduced at the next session, and one, at least, of its strongest opponents in the last session has declared his intention of supporting it in the future." (Editorial from the Railway Conductor for November, 1897, p. 753.)

The following resolution was adopted by the State legislative board of railroad employees of Pennsylvania, at its meeting at Sunbury, Pa., April 27, 1900:

"Whereas the relief associations now operated by the Baltimore and Ohio, Pennsylvania, and Philadelphia and Reading railroad companies impose unfair conditions on the employees of said roads, inasmuch as the employees are required to pay the largest part of the money that goes to make up the funds, but are denied the right of majority representation on the managing boards, and are required to release the companies from responsibility for injury before they can receive benefits from these funds which they themselves have furnished the greatest part of; and as membership in these associations is practically compulsory, it keeps employees out of labor organizations, as many of them find it difficult to pay the dues in both, and they are therefore denied the benefits and protection which labor organizations give them, and in consequence are left more to the mercy of the companies; and as these roads branch out and absorb new lines, these unjust conditions are imposed upon the employees of the new lines taken in: Therefore be it

"Resolved, That we condemn these associations, and assert that instead of their object being that of benevolence, as claimed by the companies, they are based upon iniquitous principles, controlled by arbitrary laws, and are in violation of the laws of Congress; and we earnestly ask Congress to investigate these associations and pass a law that will prevent their being further imposed upon railroad employees."

It may be said, as has been said before, that these are only the utterances of the officers and leaders of the organizations, and they do not express the feeling of the employees toward these relief departments, and that the employees are perfectly satisfied. President Cowen, of the Baltimore and Ohio Railroad Company, said in his testimony before this commission:

"I believe that the arrangement is not only a perfectly fair one, but I think it is one which is approved by 99 per cent of our men." (Hearings before the Industrial Commission on transportation, p. 306.)

I want to say that Mr. Cowen either did not know what he was talking about or tried to misrepresent matters to this commission. Which was the case I am, of course, unable to say. I had talked with many employees of the Baltimore and Ohio Railroad, and never heard one of them say that he was satisfied with the relief department, but after reading this statement of Mr. Cowen's I concluded that it was

proper that this commission should be furnished with evidence coming directly from the employees; so, with the approval of Grand Master Morrissey, of the Brotherhood of Railroad Trainmen, I sent a copy of the following circular to each lodge of that organization located on the Baltimore and Ohio and Pennsylvania railroads:

THE RALEIGH,

Washington, D. C., February 10, 1900.

To all Lodges of the Brotherhood of Railroad Trainmen on the Baltimore and Ohio and Pennsylvania Railroads.

DEAR SIRS AND BROTHERS: The United States Industrial Commission is investigating the subject of "Railroad relief departments," and as I have been requested by the commission to appear before it in the near future and give testimony upon this and several other questions in which we are interested, I desire to be in a position to state to the commission exactly how the employees feel toward these associations, and would respectfully ask you to furnish me, over the signatures of your master and secretary and under lodge seal, answers to the questions submitted on attached blank.

Kindly fill out this blank and return to me at Hotel Raleigh, Washington, D. C., in the inclosed envelope, at your earliest convenience. Care will be taken to protect the officers signing this statement.

Fraternally, yours,

H. R. FULLER.

CLEVELAND, OHIO, February 11, 1900.

Circulation of this letter with accompanying questions is approved.

P. H. MORRISSEY, Grand Master B. R. T.

Name of railroad system upon which your lodge is located? _____

Number of members of your lodge employed on said system? _____

(1) Is membership in the relief department considered by the employees to be voluntary or compulsory? _____

(2) Do men who seek employment receive it if they do not make application for membership in the relief department? _____

(3) Is the blank application for membership in the relief department handed to the new employee without solicitation on his part? _____

(4) Are the actions of the company's representatives such as to make him believe that the filling out of this blank by him is necessary for him to secure employment? _____

(5) Are employees who are already in the service and not members of the relief department coerced or intimidated into joining it? _____

(6) If so, in what way is this generally done? _____

(7) Is the amount deducted from the pay of the employees each month by the company considered by them to be a voluntary contribution on their part, or do they consider that they are required by the company to pay this amount to the relief department? _____

(8) Do you think membership in the relief department has a tendency to keep members out of labor organizations on account of their being unable to pay the dues in both? _____

(9) Are members of the relief department granted special privileges over those who are not members? _____

(10) Do the employees consider it fair that upon receiving benefits from the relief department they should be required to release the company from responsibility for injury? _____

(11) Do you agree with the opinion that the prime objects of the railroad companies in operating relief departments are to deprive the employees of their right to recover for injury and to alienate their interests from our brotherhoods? _____

Location of lodge, _____; date, _____, 1900; name of lodge, _____; No. of lodge, _____.

[SEAL.]

_____, Master.

_____, Secretary.

The following table shows the result of the answers of the employees of the Pennsylvania Railroad to these questions:

TRANSPORTATION.

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PENNSYLVANIA RAILROAD.

Lodge No.	State.	City or town.	1.	2	3	4	5.	6	7.	8.	9.	10.	11.
123	Delaware.....	Wilmington.....	Compulsory.....	Yes ¹	Yes.....	No.....	Yes.....	They claim relief is a benefit and will get members preference in laying off men.....	Required.....	Yes.....	Yes.....	No.....	Yes.
528	do.....	do.....	do.....	Yes.....	Yes.....	Yes.....	Yes.....	By company's officers continually boring us, saying it is to our interest to join the relief department.....	do.....	Yes.....	Yes.....	No.....	Yes.
424	Illinois.....	Chicago.....	do.....	No.....	Yes.....	Yes.....	Yes.....	By sometimes telling them one thing, and sometimes another, or that it would be a good thing.....	do.....	Yes.....	Yes.....	No.....	Yes.
261	Indiana.....	Indianapolis.....	do.....	No.....	Yes.....	Yes.....	Yes.....	By trainmaster calling them up several times a day, and by coercive language and actions.....	do.....	Yes.....	Yes.....	No.....	Yes.
109	do.....	Logansport.....	do.....	No.....	Yes.....	Yes.....	Yes.....	Men who do not belong will not get better positions.....	do.....	Yes.....	No.....	No.....	Yes.
16	do.....	New Albany.....	do.....	No.....	Yes.....	Yes.....	Yes.....	By representative telling them they are standing in their own light by not joining.....	do.....	Yes.....	Yes.....	No.....	Yes.
124	Maryland.....	Baltimore.....	do.....	No.....	Yes.....	Yes.....	Yes.....	They are told by the officials it is for their interest. Some consider this a threat.....	do.....	Yes.....	Yes.....	No.....	Yes.
257	New Jersey.....	Camden.....	do.....	Some times.....	Yes.....	Some times.....	Yes.....	.....	do.....	Yes.....	No.....	No.....	Yes.
119	do.....	Jersey City.....	do.....	No.....	Yes.....	Yes.....	Don't know.....	.....	do.....	Yes.....	No.....	No.....	Yes.
514	do.....	do.....	do.....	No.....	Yes.....	Yes.....	Yes.....	Company's representatives tell you if you belong to relief you will be on the steady list.....	do.....	Yes.....	No.....	No.....	Yes.
552	do.....	South Amboy.....	do.....	Yes.....	Yes.....	Yes.....	Yes.....	.....	do.....	Yes.....	Yes.....	No.....	Yes.
38	do.....	Trenton.....	do.....	No.....	Yes.....	Yes.....	No.....	By canvass made by the advisory board.....	do.....	Yes.....	No.....	No.....	Yes.
239	do.....	do.....	do.....	No.....	Yes.....	Yes.....	Yes.....	Men join to hold their positions.....	do.....	Yes.....	Yes.....	No.....	Yes.
413	New York.....	Elmira.....	do.....	No.....	Yes.....	Yes.....	Yes.....	They tell you the best thing to do is to join the relief department.....	do.....	Yes.....	Yes.....	No.....	Yes.
84	Ohio.....	Ashtabula.....	do.....	No.....	Yes.....	Yes.....	Yes.....	By sometimes asking employees to join relief.....	do.....	Yes.....	Yes.....	No.....	Yes.
280	do.....	Cleveland.....	Almost compulsory.....	Yes.....	No.....	No.....	No.....	.....	do.....	Yes.....	No.....	No.....	Don't know.
175	do.....	Columbus.....	Compulsory.....	No.....	Yes.....	Yes.....	Yes.....	You are simply requested to become a member of the relief department.....	Required.....	Yes.....	No.....	No.....	Yes.
421	do.....	Dennison.....	do.....	No.....	Yes.....	Yes.....	Yes.....	By asking them to join.....	do.....	Yes.....	Yes.....	No.....	Yes.

¹ But are advised to join relief.

² But are asked to join when employed.

³ Members of relief satisfied to pay dues.

PENNSYLVANIA RAILROAD—Continued

Judge No.	State.	City or town.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
47	Ohio.	Mansfield.	Compulsory.	No.	Yes.	Yes.	Yes.	The company hands the employee a card and asks him to fill it out.	Required.	Yes.	No.	No.	Yes.
79	do.	Massillon.	do.	No.	Yes.	Yes.	Yes.	By continually soliciting.	do.	Yes.	Don't know.	No.	Yes.
21	do.	Youngstown.	do.	No.	Yes.	Yes.	Yes.	Employer tells him that he better join or he will lose anything in the way of promotion.	do.	Yes.	No.	No.	Yes.
465	Pennsylvania.	Allegheny.	Voluntary.	Yes.	No.	No.	No.	By having old employees go around to join nonmembers and ask them to join.	Voluntary.	Yes.	No.	No.	Yes.
106	do.	do.	Compulsory.	No.	Yes.	Yes.	Yes.	By asking nonmembers to join, telling them they should belong.	Required.	Yes.	Yes.	No.	Yes.
571	do.	Carnegie.	do.	No.	Yes.	Yes.	Yes.	By giving preference to employees who are members of relief department.	do.	Yes.	No.	No.	Yes.
117	do.	Columbia.	do.	No.	Yes.	Yes.	Yes.	By making members of relief department.	do.	Yes.	Yes.	No.	Yes.
386	do.	Conemaugh.	do.	No.	Yes.	Yes.	Can not say.	By calling them to the office or by letter.	do.	Yes.	Can not say.	No.	Yes.
159	do.	Derry Station.	do.	No.	Yes.	Yes.	Yes.	By solicitation, and employee feels in some way that his position is more secure.	do.	Yes.	Yes.	No.	Yes.
199	do.	Erie.	do.	No.	Yes.	Yes.	Yes.	Are called to office and asked why they don't join relief; are told it is to their interest to do so.	do.	Yes.	No.	No.	Yes.
83	do.	Harrisburg.	do.	No.	Yes.	Yes.	Yes.	They are called to office by written request, from train master of their respective divisions.	do.	Yes.	No.	No.	Yes.
42	do.	do.	do.	No.	Yes.	Yes.	Yes.	By officers calling you to office and saying that the best thing you can do is to join relief.	do.	Yes.	Yes.	No.	Yes.
574	do.	do.	do.	No.	Yes.	Yes.	Yes.	By holding you off till you do join, and agitating the matter all the time until you do join.	do.	Yes.	Yes.	No.	Yes.
17	do.	do.	do.	No.	Yes.	Yes.	Yes.	By handing them membership blanks from time to time.	do.	Yes.	Yes.	No.	Yes.
498	do.	Huntingdon.	do.	No.	Yes.	Yes.	Yes.	By making it appear that they will be discriminated against.	do.	Yes.	Yes.	No.	Yes.
227	do.	Newcastle.	do.	No.	Yes.	Yes.	Yes.		do.	Yes.	Yes.	No.	Yes.
263	do.	Northumberland.	do.	Yes.	Yes.	Yes.	Yes.		do.	Yes.	No.	No.	Yes.
383	do.	Philadelphia.	Compulsory.	No.	(¹)	Yes.	Yes.		do.	Yes.	No.	No.	Yes.
160	do.	W. Philadelphia.	do.	No.	Yes.	Yes.	No.		do.	Yes.	Yes.	No.	Yes.

388	do	do	Voluntary	Yes	No	Yes	By committee of advisory board.	do	Yes	No	Yes
389	do	do	Compulsory	No	Yes	Yes	By communication and by request.	do	Yes	No	Yes
390	do	do	do	do	Yes	Yes	In case there is a reduction in the force	do	Yes	No	Yes
391	do	do	do	do	Yes	Yes	the ones that belong are retained in	do	Yes	No	Yes
392	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
393	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
394	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
395	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
396	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
397	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
398	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
399	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
400	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
401	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
402	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
403	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
404	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
405	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
406	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
407	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
408	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
409	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
410	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
411	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
412	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
413	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
414	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
415	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
416	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
417	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
418	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
419	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
420	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
421	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
422	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
423	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
424	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
425	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
426	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
427	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
428	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
429	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
430	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
431	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
432	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
433	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
434	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
435	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
436	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
437	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
438	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
439	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
440	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
441	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
442	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
443	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
444	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
445	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
446	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
447	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
448	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
449	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
450	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
451	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
452	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
453	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
454	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
455	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
456	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
457	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
458	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
459	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
460	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
461	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
462	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
463	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
464	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
465	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
466	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
467	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
468	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
469	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
470	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
471	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
472	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
473	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
474	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
475	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
476	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
477	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
478	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
479	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
480	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
481	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
482	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
483	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
484	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
485	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
486	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
487	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
488	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
489	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
490	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
491	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
492	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
493	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
494	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
495	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
496	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
497	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
498	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
499	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes
500	do	do	do	do	Yes	Yes	do	do	Yes	No	Yes

1 Not officiable as only a few are not members.

2 Although most all have been asked to join.

3 Undecided by members present.

4 Applicant sent to doctor before employed.

5 In some cases.

6 But they don't last long.

7 When employed are presented with blank.

The total number of lodges making replies to the questions was 45. They came from 36 cities and towns in 8 different States, and represent 4,031 members.

According to the answers received to question 1, 96 per cent say that membership in the relief department is considered by the employees to be compulsory.

In answer to question 2, 78 per cent say that men who seek employment do not receive it if they do not make application for membership in the relief department.

In answer to question 3, 94 per cent say the blank application for membership in the relief department is handed to the new employee without solicitation on his part.

In answer to question 4, 83 per cent say that the actions of the company's representatives are such as to make him believe that the filling out of this blank by him is necessary to secure employment.

In answer to question 5, 85 per cent say that employees who are already in the service and not members of the relief department are coerced or intimidated into joining it.

The answers to question 6 show the numerous coercive tactics employed by the company to get the employees to join the relief department. Couple these to the statement made by a railroad manager to Prof. E. R. Johnson, "That he did not care whether it was compulsory to join the association or not, for the reason that the indirect pressure that the corporation could bring to bear would accomplish the same result," and I think it clearly proves that the employees are required to join these associations against their will. (For statement of railroad manager here referred to, see Hearings before Industrial Commission on Transportation, p. 57.)

In answer to question 7, 97 per cent say that the amount paid into the relief fund by the employees is not a voluntary contribution, but that they are required by the company to pay it.

In answer to question 8, 100 per cent say that they think membership in the relief department has a tendency to keep members out of labor organizations on account of their being unable to pay the dues in both.

In answer to question 9, 57 per cent say that members of the relief department are granted special privileges over those who are not members.

In answer to question 10, 100 per cent say that they do not consider it fair that upon receiving benefits from the relief department they should be required to release the company from responsibility for injury.

In answer to question 11, 92 per cent say that they agree with the opinion that the prime objects of railroad companies in operating relief departments are to deprive the employees of the right to recover for injury and alienate their interests from our brotherhoods.

The following table shows the result of the answers of the employees of the Baltimore and Ohio Railroad to the questions:

TRANSPORTATION.

65

BALTIMORE AND OHIO RAILROAD.

Lodge No.	State.	City or town.	1	2.	3.	4.	5	6.	7.	8.	9.	10.	11.
528	Delaware	Wilmington	Compulsory	No.	Yes	Yes	Yes	By being sent to medical or	Required	Yes	Yes	No.	Yes
4	Illinois	Chicago	do	No.	Yes	Yes	Yes	then you become a member.	do	Yes	Can not say.	No.	Yes
138	Indiana	Garrett	do	No.	Yes	Yes	Yes	Superintendent requests them	do	No.	Yes	No.	Yes
16	do	New Albany	do	No.	Yes	Yes	Yes	Men who do not belong will	do	Yes	Yes	No.	Yes
433	Maryland	Baltimore	do	No.	Yes	Yes	Yes	not get better positions.	do	Yes	No.	No.	Yes
								By intimating that it would	do	Yes	No.	No.	Yes
438	do	do	do	No.	Yes	Yes	Yes	and that the employee to join the relief de-	do	Yes	(1)	No.	Yes
447	do	do	do	No.	Yes	Yes	Yes	partment.	do	Yes	Yes	No.	Yes
497	do	Brunswick	do	No.	Yes	Yes	Yes	By being dismissed for slight	do	Yes	Yes	No.	Yes
267	do	South Cumberland	do	No.	Yes	Yes	Yes	offenses.	do	Yes	(2)	No.	Yes
								When one of one case where	do	Yes	Yes	No.	Yes
432	Ohio	Akron	do	No.	Yes	Yes	Yes	employee was called from	do	Yes	Yes	No.	Yes
								his work and sent to med-	do	Yes	Yes	No.	Yes
425	do	Chicago	do	No.	Yes	Yes	Yes	ical examiner's office to make	do	Yes	Yes	No.	Yes
175	do	Columbus	do	No.	Yes	Yes	Yes	an appointment.	do	Yes	No.	No.	Yes
								By giving them behind work	do	Yes	Yes	No.	Yes
132	do	Cleveland	do	No.	Yes	Yes	Yes	over them and running	do	Yes	Yes	No.	Yes
								younger men around them.	do	Yes	Yes	No.	Yes
478	do	Mansfield	do	No.	Yes	Yes	Yes	Held off until you become a	do	Yes	Yes	No.	Yes
169	do	Newark	do	No.	Yes	Yes	Yes	You are simply requested to be-	do	Yes	No.	No.	Yes
								come a member of the relief	do	Yes	Yes, at first	No.	Yes
21	do	Youngstown	do	No.	Yes	Yes	Yes	department.	do	Yes	Yes	No.	Yes
								By being assigned stating all	do	Yes	No.	No.	Yes
378	Pennsylvania	Bennett	do	No.	Yes	Yes	Yes	must join. All compelled to	do	Yes	No.	No.	Yes
								join or quit the service.	do	Yes	No.	No.	Yes
								They compel employee to join	do	Yes	No.	No.	Yes
								A conductor who does not be-	do	Yes	No.	No.	Yes
								long can not run a passenger	do	Yes	Yes	No.	Yes
								train.	do	Yes	Yes	No.	Yes
								By being from medical ex-	do	Yes	Yes	No.	Yes
								aminer.	do	Yes	No.	No.	Yes
								Can not say.	do	Yes	No.	No.	Yes

¹Promotion depended on membership; now all are members.

²Promotion depends upon membership.

¹All compelled to join before receiving employment.

²All are compelled to belong to relief.

BALTIMORE AND OHIO RAILROAD—Continued.

Lodge No.	State.	City or town.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
218	Pennsylvania	Connellsville	Compulsory	No.	Yes	Yes	Yes	If promoted to conductor, they send you to medical examiner to have insurance increased.	Required	Yes	Yes	No.	Yes
457	do	Foxburg	do	No.	Yes	Yes	All belong.		do	Yes	Don't know	No.	Yes
244	do	Greenwood	do	No.	Yes	Yes	All are members.		do	Yes	No	No.	Yes
518	do	McKeesport	do	No.	Yes	Yes	Yes	You have to belong to the relief department.	do	Yes	Yes	No.	Yes
222	do	Newcastle	do	No.	Yes	Yes	Yes	By handing them membership blanks from time to time.	do	Yes	Yes	No.	Yes
387	do	Philadelphia	do	No.	Yes	Yes	All belong.	No one is given employment unless they belong to join relief department.	do	Yes	All belong	No.	Yes
179	do	Pittsburg	do	No.	Yes	Yes	Yes	By being held off until they join relief department.	do	Yes	do	No.	Yes
499	do	Uniontown	do	No.	Yes	Yes	All belong		do	Yes	do	No.	Yes
352	West Virginia	Martinsburg	do	No.	Yes	Yes	Yes	The company expects it.	do	Yes	do	No.	Yes
355	do	Parkersburg	do	No.	Yes	Yes	All belong.		do	Yes	do	No.	Yes
110	do	Wheeling	do	No.	Yes	Yes	No.		do	Yes	Yes	No.	Yes

1 As all belong, required to join before employed.

The total number of lodges making replies to the questions was 23. They came from 26 cities and towns in 7 different States and represent 1,674 members.

In answer to question 1, 100 per cent say that membership in the relief department is considered by the employees to be compulsory.

In answer to question 2, 100 per cent say that men who seek employment do not receive it if they do not make application for membership in the relief department.

In answer to question 3, 100 per cent say the blank application for membership in the relief department is handed to the new employee without solicitation on his part.

In answer to question 4, 100 per cent say that the actions of the company's representatives are such as to make him believe that the filling out of this blank by him is necessary to secure employment.

In answer to question 5, 69 per cent say that the employees who are already in the service and not members of the relief department are coerced or intimidated into joining it. This low percentage may be accounted for by the fact that 24 per cent of the answers to this question say that all belong to the relief department; consequently there is no reason to coerce them.

The answers to question 6 are similar to the answers given by the Pennsylvania employees to the same question, and, as I have before said, show the many ways the company goes about it to force the employees into the association.

In answer to question 7, 100 per cent say that the amount paid into the relief fund by the employees is not a voluntary contribution, but they are required by the company to pay it.

In answer to question 8, 92 per cent say that they think membership in the relief department has a tendency to keep members out of labor organizations on account of their being unable to pay the dues in both.

In answer to question 9, 33 per cent say that members of the relief department are granted special privileges over those who are not members. This low percentage may also be accounted for by the fact that 40 per cent of the answers to this question say that all belong to the relief department.

In answer to question 10, 100 per cent say that they do not consider it fair that upon receiving benefits from the relief department they should be required to release the company from responsibility for injury.

In answer to question 11, 100 per cent say that they agree with the opinion that the prime objects of railroad companies in operating relief departments are to deprive the employees of the right to recover for injury and alienate their interests from our brotherhoods.

In addition to the answers to these questions received from the lodges I have received numerous letters and papers, sent unsolicited by members of these relief departments, which are very unfavorable to the departments. The following are some of them. In order to fully protect the men who wrote these letters I withhold their names, but I have the original letters here with me and would like to have the commission look them over:

"H. R. FULLER,

Washington, D. C.

"The relief department has made amendments to the by-laws without consulting the ones who pay to keep it up, and make laws in which we have no say whatever, and in the last lot of amendments adopted by them all of our members kicked against those changes, but they were made all the same and they were given to us after they were adopted by the officials. We had no vote in the matter and have no say whatever what shall be the laws which govern us and what shall be done with the money we pay in, and we don't know what becomes of it, only what they choose to put on paper and give us, and no information will be given us, as we have tried to find out such things the same as we do in our own lodge room.

"Yours, fraternally."

"Mr. H. R. FULLER,

Washington, D. C.

"DEAR SIR: Your letter of a few days ago was received and contents noted. The inclosed sheet was filled out and inclosed you for your consideration, etc., and hope that the matter will be taken up at the earliest possible moment to see what can be done.

"Of course you will understand you will have to treat our names as confidential, otherwise there will be consequences.

"Fraternally, yours."

"Mr. H. R. FULLER,

"Legislative Representative, Washington, D. C.

"DEAR SIR AND BROTHER: Yours of the 17th received and noted. Think you will find blank O. K. now. The Pennsylvania Railroad relief is in a way not compulsory; men are employed without joining relief, but are almost forced to join afterwards. They are made to believe that if they are not members of relief they may expect to get released at any time.

"Fraternally, yours."

"H. R. FULLER, Esq.

"DEAR SIR AND BROTHER: I think I can give you some information that will be of use to you, but if you make use of the same I would ask that my name be not mentioned. The Baltimore and Ohio relief has a clause in their regulations which says that after a member becomes 65 years old and is unable to work that he will be pensioned. My father has been in the employ of the Baltimore and Ohio for 49 years and has a record of never having been suspended. He is now 71 years old and unable to work. He applied for a pension but as yet has not received it, and the excuse for not giving him the same is that there is not enough money in the pension feature to put any more on it, yet the relief has posters all around stating that they have money to lend employees on houses, etc. My father has been a member ever since it started. If this was some boss he would have got it without much trouble. For what I pay in the relief I can get about three times the benefits in other organizations.

"Yours, in B., S., and I.

"P. S.—Please destroy this communication."

[Camden Lodge No. 287, Brotherhood of Railroad Trainmen, meets second and fourth Sundays at 1 p. m.]

"CAMDEN, N. J., April 6, 1900.

"H. R. FULLER.

"DEAR SIR AND BROTHER: Inclosed you will find copies of letters in regard to the voluntary relief fund of the Pennsylvania Railroad system. I have the original letters in my possession, but have promised not to divulge the names of supervisor or foreman. I think it would be well to have the copies typewritten, as my handwriting is well known here, for I suppose you will use them in your work. Hoping for the full success of your enterprise,

"I remain, fraternally, yours."

The following are the copies of the letters that were inclosed with the above letters:

"PENNSYLVANIA RAILROAD, WEST JERSEY AND SEASHORE DIVISION,
"Woodbury, January 30, 1900.

"S ———.

"DEAR SIR: I think by this time you have been able to judge if ——— will suit you in the gang.

"Please get him to join the relief fund at once. If he will not, get another man that will.

"Yours, truly,

"———, Supervisor."

"PENNSYLVANIA RAILROAD, WEST JERSEY AND SEASHORE DIVISION,
"Woodbury, N. J., March 20, 1900.

"To all Foremen, Salem Branch and Bridgeton Branch:

"You will arrange to increase your force April 1, one (1) more laborer, making a total of three (3) laborers at 12 cents per hour. Condition of employment of this man is that he join the relief fund; also give their full names.

"Yours, truly,

"———, Supervisor."

Now, I ask you, Mr. Chairman, to compare the answers contained in these tables, also these few letters, to the statement of President Cowen that the relief department is approved by 99 per cent of the men. Is it reasonable to think that these employees approve an association which they are compelled or forced to join to hold their positions—an association which takes from them their legal rights because they draw benefits from a fund that they themselves have created over 80 per cent of? I

would answer no. The manhood and independence of these men rebel against such unjust conditions, and they are opposed to these associations rather than in favor of them. If Mr. Cowen had said that 99 percent of the men were opposed to these associations I think his statement would have come nearer being correct.

A very small per cent of the roads operate relief associations; but they are slowly growing, and the large lines which now operate them are leasing and buying in new branches. The relief departments are introduced on the newly acquired lines, and in this way are being extended year by year. Speaking theoretically, I believe, from a competitive standpoint, that the roads which operate relief departments have an advantage over those which do not, inasmuch as they reduce damage suits, which must mean thousands of dollars to the companies each year. This was practically admitted by Mr. Cowen when he said that these associations had almost entirely done away with damage suits. To put all roads on the same level in this regard means that we must do one of two things—allow these departments to be extended to all roads, which would be to extend an evil which the employees would bitterly resist, or prohibit their further operation by the roads now having them.

Section 10 of the act of Congress approved June 1, 1898, forbids the making of membership in these associations a condition of employment. It also forbids the employer from requiring the employee to enter into these contracts releasing the employer from responsibility for injury; but this law is being openly violated and defied. In order to show to the commission how boldly these railroad companies do this, I will quote that part of the law applying to such cases and then quote some of the words used by these companies in defiance of it. The law reads:

"That any employer subject to the provisions of this act, and any officer, agent, or receiver of such employer * * * who shall require any employee or any person seeking employment, as a condition of such employment to enter into a contract whereby such employee or applicant for employment shall agree to contribute to any fund for charitable, social, or beneficial purposes, to release such employer from legal liability for any personal injury by reason of any benefit received from such fund beyond the proportion of the benefit arising from the employer's contribution to such fund, * * * is hereby declared to be guilty of a misdemeanor, and, upon conviction thereof in any court of the United States of competent jurisdiction in the district in which such offence was committed, shall be punished for each offence by a fine of not less than one hundred dollars and not more than one thousand dollars."

Letter of President Huntington, of the Southern Pacific Railway, to the employees of that road on February 15, 1900:

"* * * Applicants for employment after March 1, 1900, must become members of the relief departments before entering the company's service."

President Cowen, of the Baltimore and Ohio Railroad, when testifying before this commission, after having had this law read to him, said:

"If it is sought by that act to change the agreement that is made between the railroad company and its employees, I should say that the act is invalid—that a party has a perfect right to make that agreement on his part, and the railroad company has the right to make that agreement. I should take that position unhesitatingly, even if I thought that act covered our department. It is an enormous advantage to the employee."

He was then asked this question:

"As a lawyer, would you not take the position that the law should be complied with until declared unconstitutional?"

To this he answered:

"No; I would not. On the contrary, the only way you are going to get a decision as to its constitutionality is not to comply with it."

This convinces me that the law on this question is inadequate, and that as long as these relief associations are allowed to exist, just so long will these companies take unfair advantages of the employees; and I think the only effective remedy is to legislate these associations out of existence by prohibiting railroad companies from operating them. I would, however, require the railroad companies to still carry the insurance of those employees that they have forced into the associations and have become so crippled or grown so old that no other insurance company will insure them.

Organizations of employees.—The objects sought by these organizations are to better the conditions of their members by securing better pay, shorter hours, and in a general way bettering the conditions of employment. This is done through committees representing the employees and the managements. They have also been instrumental in securing the passage of laws by Congress and the State legislatures which have been of considerable benefit to the employees. They also seek to raise the moral

standard of the employees, and in this, as well as in the other objects sought, they have been to a great degree successful. The control of these organizations over their members is such that they generally live up to the laws and are governed by the will of a lawful majority on all questions. The employees who are not members of these organizations receive most of the benefits that are procured through the organizations, the only exception being that when they are wrongfully suspended or discharged they do not have the organizations to assist them. It would take many volumes to tell all the good that has been accomplished by these organizations. The proportion of the employees of the departments represented by these organizations who belong to the organizations varies some. On some roads nearly 100 per cent belong, while on others it is as low as 75 per cent.

Disputes and differences between employers and employees.—The usual subjects of dispute are increases and reductions in wages and conditions of employment. There are also many disputes over men being suspended and dismissed from the service wrongfully. Of late years strikes have not occurred very often on railroads. This is due to the fact that the employees are well organized and the officers of the roads give more consideration to their complaints. These organizations do not strike until all honorable means have been exhausted to settle the difficulty otherwise. Strikes are conducted in a peaceful and law-abiding manner, the leaders always counseling against violence. The effects of strikes, if resorted to for good causes, are beneficial to the employees, even if they are not the victors, for it demonstrates to the employers that the men will resist injustice when it is imposed upon them.

Difference between strikes and boycotts.—The difference between a strike and a boycott is, that in a strike the employees withdraw from the service of the employer; and a boycott is to injure the employer's business by inducing others not to patronize his business.

Conciliation, mediation, and arbitration.—I am a firm believer in conciliation, mediation, and arbitration. The employees generally seek these means of settlement of disputes, but the employers as a rule do not want to submit questions to arbitration. They generally meet the proposition with the answer that they have nothing to arbitrate; or, if it is a question of an increase in wages, they say that this is a question that they can not afford to submit to outsiders for settlement; and if it is a question of some wrong being imposed upon the employees by the management, they will say that it is a question of management, and they can not afford to let outsiders say how they shall manage their road. They do not want to arbitrate, and these excuses are given rather than openly say that they are not in favor of arbitration.

Laws and judicial decisions to repress strikes.—The interstate commerce and antitrust laws have the effect of more or less repressing strikes. Whether these laws were so designed, or whether it is the construction put upon them by the courts, I am unable to say.

I have this to say, however, that our experience in the last few years with the three different departments of our Government has proven to us that the legislative and executive branches have been inclined to deal fairly with us, while the judicial branch has been inclined to oppress us. The result of this has been to create among the working class of people a feeling of distrust and a lack of confidence in our courts.

Transportation of United States mail and its effects on strikes.—The transportation of United States mail is a matter that figures very prominently in strikes upon railroads. The companies are quick to take advantage of the fact that any stoppage of the mail means that the influences and forces of the United States Government are brought into action to again start the mails to moving. In many instances striking employees have agreed to work and transport the mails themselves, providing cars which did not contain United States mail were not put in the same train. The companies would not agree to this and would allow the mail to be delayed for days, where it could have been taken through with very little or no delay, all for the purpose of getting the support of the United States authorities and prejudicing the public mind against the strikers. I am not in favor of force; wherever it is resorted to by strikers or others it should be put down; but I believe that men should not be punished for interfering with the United States mails when they do not interfere with them. I believe that when it is clearly shown to the United States authorities that the mails can be moved without delay the Government should require the companies to do so, and not allow them to be delayed for the sole purpose of getting other cars through with them and to prejudice the public mind. If the public would stop long enough to look into the question they would put the blame where it belongs; but they do not do this, and the strikers have to stand all the blame. I have heard of cases where the mail that should have gone in one car was divided up and a sack or two put on each of several trains solely for the purposes I have just mentioned.

Compulsory arbitration.—While I am a firm believer in arbitration, I do not think compulsory arbitration is a safe thing for the workingmen. If arbitration was compulsory, it would only be a matter of time until courts would be made arbitrators, and their decisions would be more or less the result of corporation influence, as is now the case so many times. To make arbitration compulsory would in effect destroy the thirteenth amendment to the Constitution of the United States, which is the greatest safeguard the working people have. I think the only arbitration that should be had is that which is mutually agreed upon by both sides to the controversy.

Use of intoxicants by railway employees.—There was a time when intoxicating liquors were used by railway employees to an extent that endangered their own lives and the lives of the public, but I am glad to say this is not the case now. This reform has been brought about, I might say, by these organizations. It is true that many companies have very stringent rules against drinking, but they have not had the effect that these organizations have. It would be hard to find a railroad official who has had any dealings with these organizations who would not say that the organizations should be given a great amount of credit for what they have done toward raising the moral standard of the employees.

Effect of rate wars upon railway wages.—I can not give you any positive evidence of where rate wars have directly affected wages, but there is no question but what wages are more or less dependent upon the revenues received for the transportation of freight and passengers. One of the great arguments used by railroad companies against increases in wages is low freight rates. The employees dislike to see the earning capacity of the roads diminished; but, on the other hand, they like to see the roads prosperous and making money, because it gives them an opportunity to ask for better wages and shorter hours without any fear of being met with the argument that the revenues will not permit the granting of these requests.

Effect of ticket brokerage upon railway wages.—The same arguments that I have used against rate wars are equally as applicable to the question of ticket brokerage. There is no doubt in my mind but what the scalping business has taken many dollars out of the earnings of the roads. Speaking in a general way, the scalping business is based and built upon deception, fraud, and forgery, and it should be prohibited by law. That class of employees which has the greatest grievance against the scalping business is our passenger conductors. The extra amount of work necessarily put upon passenger conductors by the companies, in order to protect themselves from the scaler, together with the many unpleasant duties they are required to perform in order to carry out the rules and protect themselves, have made that position a very disagreeable one.

I have here a few samples of tickets and mileage books that we use, and I will endeavor to explain to you just how they are to be treated by conductors, when presented for transportation, and the extra precautions that they are required to take to assure themselves that they have not been manipulated by the scalpers.

Effect of watering stock on railway wages.—If stock is watered the difficulty in paying dividends on all the stock becomes greater, and this, I believe, has a tendency to affect wages.

Effect of railway consolidations upon railway employment and wages.—The effect of railway consolidations has in some cases been detrimental to employees, while in others it has been beneficial.

In cases where the wages and conditions of employment are unfavorable on the absorbing lines, the employees of the lines absorbed are required to submit to these unfavorable conditions. Particularly is this so in regard to relief associations, as the lines operating them generally extend them to the newly acquired roads.

In cases where the wages and conditions of employment are more favorable on the absorbing lines, the employees of the lines absorbed generally share in these good conditions. I have known of many cases where small branch lines have been absorbed and the employees thereof were benefited to a great degree by the consolidation, for the reason that the wages and conditions on the absorbing lines were better than on the small lines. I believe, however, that much of this difference is due to the fact that the employees on the large lines are well organized and have brought about these good conditions, while the employees on the small lines were not organized and did not have the same opportunities for bettering their conditions.

(Testimony closed.)

WASHINGTON, D. C., June 14, 1900.

TESTIMONY OF MR. M. R. BACON,*Freight Manager of the Michigan Alkali Company.*

The commission met at 2 p. m., Mr. A. L. Harris presiding. At that time Mr. M. R. Bacon, of Wyandotte, Mich., freight manager of the Michigan Alkali Company, was introduced as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. KENNEDY.) Please state your name, post-office address, and occupation.—A. M. R. Bacon; post-office address, Wyandotte, Mich.; manufacturing business.

Q. (By Mr. FARQUHAR.) You said manufacturing business; what is your relation to this company?—A. I manage the freight matters.

Q. You manage the freight matters for this company?—A. Yes.

Q. (By Mr. KENNEDY.) Have you a paper which you desire to read to the commission?—A. I have.

Q. You may read your paper.

(The witness read his paper, as follows:)

The Michigan Alkali Company was established by Capt. John B. Ford, "the father of the Plate Glass Industry in America," and founder of the Pittsburg Plate Glass Company (but not of the trust). It is strictly a family affair, a family corporation consisting of himself, his 1 surviving son, and 3 grandsons, and 6 granddaughters, no one outside of the family owning a dollar's worth of stock.

The manufacture of our principal products is based on salt, of which we have a stratum averaging over 300 feet in thickness, underlying our property. Labor enters largely into the cost of manufacture. We employ about 2,000 men, and, counting the raw material, which exceeds 1,500 tons daily, it would be safe to say that over 80 per cent of the cost would be for labor. We pay good wages to the laborer, the common laborer at our quarry getting \$1.50 per day, and we pay all employees in cash at regular intervals. We consume daily 700 tons of coal, 100 tons of coke, and 700 tons of limestone, and, during the year, many hundred tons of ammonia; and send forward, every day in the year, 500 tons of finished products, consisting of carbonate of soda, commonly known as soda ash, bicarbonate of soda, caustic soda, and 500 barrels of Portland cement.

The soda ash is what is known as light or soap makers' ash and dense or glass makers' ash, the average test of each being above 58 per cent pure alkali, and is shipped in bulk, bags, and barrels—light ash in bags of 200 pounds each, dense ash in bags of 400 pounds each, light ash in barrels of 300 pounds each, and dense ash in barrels of 570 pounds each.

Bicarbonate of soda is the baking soda of commerce, and is shipped in bags, kegs, and barrels, the barrels weighing 420 pounds each, including barrel.

Caustic soda, for soap makers, refiners of oils, etc., is shipped in sheet-steel drums of 750 pounds each.

Portland cement is shipped in barrels of 400 pounds each, or bags of 100 pounds each.

We ship in carload lots, and to the full capacity of the cars, and our products are pretty well distributed over the United States, except to some parts of the West and South, where the freights are against us.

It is in regard to freight matters that I would make a short statement, basing my conclusions on our own experience in shipping our products—heavy freight.

Our incoming and outgoing freights amount to over 2,000 tons daily, so you will see that freight matters are quite an item to us.

Our barrel goods take barrels about the size of a flour barrel, and the drum of caustic soda is about the shape of the barrel, and takes up the same space in the car.

To show you the relative size and weight of our packages, we will use for illustration a barrel of flour, which (including barrel) weighs 212 pounds—though flour in the market is a much more valuable product; and we will take 15 tons as a minimum carload:

A barrel of flour weighs 212 pounds; a 15-ton car would contain 143 barrels.

A barrel of dense ash weighs 570 pounds; a 15-ton car would contain 52 barrels.

A barrel of light ash weighs 300 pounds; a 15-ton car would contain 100 barrels.

A barrel of bicarbonate weighs 420 pounds; a 15-ton car would contain 70 barrels.

A barrel of cement weighs 400 pounds; a 15-ton car would contain 75 barrels.

A drum of caustic weighs 750 pounds; a 15-ton car would contain 40 drums.

You can readily see that our products must not be considered or ~~classed~~ with light freight that takes up space in the cars without the weight to make even the mini-

imum carload of 15 tons, when loaded to the full capacity of the car, nor should it be classed with bulky, unwieldy freight that would take several men to handle in loading and unloading. Our goods are compact, put up in packages that are easily handled, and every car is loaded to its full capacity, and, as a rule, we send forward our shipments in carloads of 20 to 30 tons each.

Yet the railroads charge us at the rate of \$1.09 to take a barrel of ash to Boston, when shipping in carload lots, or \$1.42½ for a drum of caustic, while they will take a barrel of flour to the same place for 37 cents (based on 1899 rate). We understand, of course, that flour is a staple article and should be favored in making freight rates, but that favor should not be carried to extremes.

For the better comparing, I will tabulate the freight, carload lots, to a few of our principal shipping points on a barrel of flour and four of our products, from Wyandotte, to wit:

To -	Barrel dense ash.	Barrel light ash.	Barrel bi- carbonate.	Drum caustic.	Barrel flour.
	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Boston.....	109.3	57	79.8	142.5	37.1
New York.....	91.2	48	67.2	120	32.8
Philadelphia.....	73.8	42	58.8	105	28.6
Baltimore.....	74.1	39	54.6	97.5	27.5
Richmond.....	94	49.5	69.3	123.7	26.5
Chattanooga.....	159.6	84	205.8	285	.....
Atlanta.....	205.2	108	260	405	.....
New Orleans.....	188.1	98	188.6	247.5	.....
Memphis.....	102.6	54	75.6	135	.....

For the purpose of making comparisons, let us see what the freight on our products would be per car, taking a minimum carload of 15 tons, and also see what the freight would be on an average train of 30 cars, supposing we shipped a train load to these same points, also giving the approximate number of miles from Wyandotte that the car would travel, to wit:

To—	Miles.	Product.	Railroad charges, carload.	Railroad charges, train of 30 cars.	Rate per 100 pounds.
					<i>Cents.</i>
Boston.....	760	Ash, bicarbonate and caustic.....	\$37.00	\$1,710	19
New York.....	700	.....do.....	48.00	1,440	16
Philadelphia.....	656	.....do.....	42.00	1,260	14
Baltimore.....	638	.....do.....	39.00	1,170	13
Richmond.....	774	.....do.....	49.50	1,485	16½
Chattanooga.....	578	Bicarbonate.....	147.00	4,410	49
Atlanta.....	716	.....do.....	195.00	5,850	65
New Orleans.....	1,000	Ash, bicarbonate and caustic.....	99.00	2,970	33
Memphis.....	700	.....do.....	69.00	2,070	23

There must be something wrong with a system of freight making, of freight classification, that would produce such figures as these. Why should it cost \$195 to haul a carload from Wyandotte to Atlanta, a distance of 716 miles, when you can take the same carload from Wyandotte to New York, about 700 miles, for \$48? Why should it cost \$4,410 to haul a train load from Wyandotte to Chattanooga—578 miles—when you can take the same train load 656 miles, to Philadelphia, for \$1,260? Why should the rate be 23 cents to Memphis and only 16 cents to New York, the distance from Wyandotte to either place being about the same—700 miles?

There is something wrong with a freight classification that puts bulk, keg, bag, and barrel goods in the same classification as paper-package goods, as is the case in classifying all bicarbonate soda, putting it in the fifth class.

There is something wrong in a system of freight classification that makes the freight from Wyandotte to Chattanooga, Tenn., 28 cents per 100 pounds on soda ash, and 38 cents per 100 on caustic soda, a difference of 10 cents per 100 pounds, when all of our shipping points north of the Ohio River put these two products in one and the same class—the sixth class.

There is something wrong with a system of freight classification that makes a rate of 36 cents on soda ash, and 54 cents on caustic soda, a difference of 18 cents per 100, from Wyandotte to Atlanta.

There is something wrong with a system of freight classification that permits the different traffic associations to make the classifications of the same products different

in the different associations. One classification of the same products should hold good in each and every other traffic-association territory into or through which it may pass.

One classification of the same product should be sufficient and that classification should be the same on that product all over the United States.

There is something wrong with a system of freight classification that permits the traffic associations to raise the freight rates at pleasure at any time during the year. This puts the manufacturer all at sea in making contracts, when he has no assurance that the rates on which the contract is based may not be raised at any time during the life of the contract. As witness the freight rates on our products from Wyandotte, Mich., to Richmond, Va., within the year 1899 raised from 13 cents per 100 (same rate as Baltimore) to 24 cents per 100, then changed to 16½ cents per 100; then, on January 1, 1900, back to 13 cents per 100; then, on January 23 (less than a month) again raised to 16½ cents per 100.

Can it be contended that such a vacillating policy is right? Doesn't justice to both the manufacturer and consumer demand that there should be some stability in making and maintaining reasonable freight rates?

There must be something wrong in a system of freight classification that permits not only an excessive but a prohibitive freight rate to Southern seaboard cities and cities contiguous thereto or within a few hundred miles where ocean freights come into competition. As witness the freight rate of 36 cents per 100 on soda ash, 54 cents per 100 on caustic soda, and 65 cents on bicarbonate soda from Wyandotte, Mich., to Atlanta, Ga., where English products can be delivered via Savannah at a much lower rate. And witness further a rate of 23 cents per 100 from Wyandotte to Memphis, and a rate of 33 cents per 100 from Wyandotte to New Orleans, while the same goods are laid down in New Orleans from Liverpool, England, with a freight rate of only 10.7 cents per 100. Why is it that we can meet the English competition of the Eastern seaboard cities and points contiguous thereto and not in Southern cities? It is all owing to a system of classification by traffic associations that permits such prohibitive freight-rate making.

Where there is a wrong, there should be a remedy. That remedy must come through legislation—through Congress.

There should be but one traffic association in the United States; that traffic association, under the supervision of the Interstate Commerce Commission, should make all the freight schedules.

There should be no Central Traffic Association. There should be no Western Traffic Association. There should be no Southern Traffic Association. One traffic association is enough. Let one traffic association make the freight rates, and then we will know what those rates are. As it is, we are all at sea. We start our goods under one classification. They may pass through one or two other traffic association's territory, and finally arrive in another, taking a different classification through each different traffic association's territory which it may pass or enter. The different traffic associations now have different rates. Compare the Central Traffic Association rates with those of the Western. Then compare those two with the Southern Traffic Association. Go west of the Mississippi River or south of the Ohio River, and you are all at sea when comparing their classifications with those of the Central Traffic Association schedules.

Take our products—caustic soda, soda ash, and bicarbonate—for illustration. They each take the same classification to Boston, New York, Philadelphia, Chicago, and to all the principal points north of the Ohio River and east of the Mississippi, but cross either of the rivers, and you will find a different classification for each product—a general "mix up."

The recent raise in freight rates on some products is an outrage on both the manufacturer and consumer.

I believe 1892 was considered "flush times" with the railroads of this country. Then came a time of depression in all kinds of business, but the railroads did not put down their rates during these hard times, and the rates considered high enough for the flush times of 1892, and which have been prevailing ever since up to the end of 1899, should be high enough for 1900. They claim the cost of equipment has been increased, but that increase is offset by the decreased cost of operation, which has been reduced to a minimum.

The reports of the railroads show that their earnings have increased, while the cost of operating the roads has decreased, and these same reports show that the railroads made good dividends with the rates existing in 1899, and there was no good reason to raise the rates on January 1, 1900. But they say they must share in the prosperity of the country. They did and would share in the general prosperity under the old rates, as shown by the increased business that exceeds the capacity

and equipment of the road, so much so that they have been troubled to take care of and move the business that has come to them from the general prosperity of the country.

Prosperity is not stimulated or advanced by raising freight rates, but by the accumulating and increased volume of business.

The people and the factories of the United States gave the railroads business when business was stagnant—all through the hard times—when there was scarcely a margin for profits. Now that they have a possible chance to make good their losses, they are asked to share their profits with the railroads by paying increased freight rates.

Freight traffic should be so adjusted that the rates would have a tendency to build up the country and encourage manufactures and help the people generally along the routes traversed by or contiguous to the different railroads of the country.

All manufactures must have raw material, and for diversified industries you seldom, if ever, find all the raw material in one locality. You must depend on the railroads to bring the different materials together. Everything depends on reasonable freight rates. In localities where freights are excessive, you will find no big factories.

Take the South, for illustration, with its great natural resources. It should be the home of the biggest manufacturing plants in the world. Let the railroads give that country reasonable freight rates, then watch the country prosper. Then see the diversified industries that will gather there. Then note the increased business of the railroads from every point of the compass to her growing manufacturing centers. I can see no effort or disposition on the part of the railroads to bring this about. It can only come from a reasonable and just classification of freight rates, by one traffic association, under the supervision of the Interstate Commerce Commission, which must be given power to enforce its mandates.

The transportation problem is one of the biggest problems now confronting the American people, and it is growing in magnitude daily, and the quicker Congress grapples with it the better for the people and the better for the railroads themselves.

There was no good reason for the recent raise in freight rates. The dividends earned by the railroads in 1898 were greater than were ever earned in the history of any country. So 1898 must have been an exceedingly prosperous year for the railroads. Yet we find that for the year ending June 30, 1899, the gross earnings exceeded the previous fiscal year by \$59,927,186, the total gross earnings being \$1,307,253,484. When you consider that it is estimated by the railroads themselves that more than 80 per cent of any line's income is derived from freights, you will readily conclude that there was no necessity for the railroads to raise their freight rates this year.

While on this subject of freight matters, it may not be out of order to give you a few words in regard to the freight on our fuel supply. To burn our 700 tons of limestone daily we must burn 100 tons of coke. To keep our machinery running, we must burn 700 tons of coal each and every day throughout the year. The freight rate on our coke has been raised 55 cents per ton above last year's rate. This is \$55 per day on our 100 tons daily supply, or, in other words, we will have to pay \$20,075 more freight on coke, alone, this year than we did last year or any previous year. What do you think of that? An advance of \$20,075 on one year's supply of coke alone.

In answer to our protest on this raise, the Norfolk and Western Railroad says: "The advance in our rates over last year's is 55 cents. I do not know what has been the advance in the oven price of coke to the Alkali Company, but I venture to say that it is nearly, if not quite, three times 55 cents. It would seem, therefore, that the complaint is more appropriate to the coke people than to the railroad company."

I suppose that this answer is based on the theory that if you find a man that has been robbed of everything but his clothes, you must pitch in and take the clothing.

We have also heard that the freight rates on coal would be raised. In this connection I want to call your attention to a statement of Mr. A. L. Fuller, of the Anthracite Coal Operators' Association, to wit:

"Railroads do not sign written agreements when they enter into a pool to control a certain product, but there is an agreement between the roads of the anthracite coal district of Pennsylvania that is just as binding as any agreement ever written. They are combined not only to control the rates on coal, but also to control the price of coal, and they will permit only a certain amount to be hauled at any rate, in order to keep the supply down and the price up.

"There has never been a time in the history of the trade, no matter how great the demand, when the mines were allowed to produce all they could. The roads do not tell us that they can not furnish the cars—they simply say they will not; and if one appealed to the law he would be involved in litigation that would last a lifetime."

We put in a protest to the traffic association that met in New York City on January 22 against the raise in freight rates on our different products. To this protest we received answers from the chairman of the Central Freight Association and the chairman of the Official Traffic Association. Entirely different answers were made, and, as neither touched a single point in our protest, we are forced to the conclusion that but very little attention is given to the protests of shippers; but the Central Freight Association admits, in its answer, that no one of the traffic associations knows the reason of the rates of any of the other traffic associations.

Where there is so much smoke there must be some fire. Something must be wrong somewhere. The railroads must be at fault.

In the traffic association is where a great deal of the trouble lies. Something must be done to remedy the wrong. I realize that no person should criticise openly unless he is able to suggest a remedy, and that that remedy should be open to criticism. My suggestion is this:

There should be but one freight or traffic association, and that association should be under the control of the Interstate Commerce Commission, with power given the commission to enforce its mandates. That association should be composed of 6 railroad men and 3 business men, representing business independent of the railroads. The 6 railroad men should be practical railroad men, selected or suggested by the railroads themselves and appointed by the Interstate Commerce Commission—one from the Atlantic coast, one from the Pacific coast, one from the Gulf coast, one from the Great Lakes section, and one from the middle interior; the salaries, if feasible, to be paid by the railroads; and the other 6 members should be appointed by the Interstate Commerce Commission and paid by the Government, and should represent the 6 classifications of freight, and be appointed from shippers represented by the class of freight which each represents (or of which class of freight he handles the greater quantity); that is to say, there should be a member representing the first class to be appointed from shippers of freight taking that rating or classification; then a member representing the second class, the third class, the fourth class, the fifth class, and the sixth class, each to be chosen from shippers of freight taking the rate or classification which he is to represent, these 12 members to hold quarterly or monthly meetings to fix rates, etc., all rates to be promulgated by the 1st day of October in each and every year, and to take effect and be in operation for one year (unless lowered) from the 1st day of January following; and no raise in rates shall take effect during the year.

The Cullom bill is all right in some particulars, but, in my opinion, it does not wholly cover the ground that should be covered by national legislation at this time. The bill introduced by the Hon. Henry C. Smith, of Michigan, is all right as far as it goes, but does not go far enough.

I recognize the value of the railroads to this country, and would not do them an injustice. I also recognize the right of the people, and would see justice done them.

The railroads are public carriers. They must depend upon the people for their business. When the people prosper, the business of the railroads is increased, and they prosper. When freight rates are advanced and made to pay all the product will bear, or more, it strikes directly at the people, the consumers, and swells the prosperity of the railroads many hundred per cent at the expense of the people.

The increased business of the country is sufficient compensation to the railroads without raising the freight rates. For proof of this assertion, you have simply to refer to the reports of the railroads themselves for the years 1898 and 1899.

The railroads can condemn, take private property, and build wheresoever they will; they can go through your yard, through your farm, tear down your house. They are granted public franchises. They carry the Government mails. Their property is protected by the laws of the country. Then is it any more than right to ask that all traffic rates should be under the supervision of their protectors, the United States Government?

The reason given by the railroads for the existence of so many or different freight or traffic associations is that the Eastern railroads do not know the conditions with which the Western roads have to contend in fixing classifications and freight rates; that the Northern railroads do not know the conditions prevailing, and which must be considered by the railroads of the South; that the East, the West, the North, the South do not know the conditions of the middle interior, and vice versa. Hence they contend that the different freight or traffic associations are necessary. It is to overcome these objections, or to meet these reasons, rather, that I would select railroad men from the different parts of the country, as heretofore suggested. This would be treating the railroads with fairness, while the business men, independent of the railroads, selected from shippers distributed over the country, representing the six different freight classifications, would be fair to the shipping interests of the country. This

may look like a rather large subcommission or association, but, on the other hand, look at the number of men required by the railroads to do this same work. It would require more work than the Interstate Commerce Commission could attend to, and as millions, yes, billions, of dollars are involved, in which the people are interested, this subcommission or association should be large enough to do the work right; and while it should be under the supervision of the Interstate Commerce Commission, that commission of itself, for want of numbers, would be unable to do the necessary work thoroughly and systematically.

Vice-President Clough, of the Great Northern Railroad, makes the statement that he is opposed to the pending amendments to the interstate-commerce law, because they give judicial power to the Interstate Commerce Commission and make its decisions final. He says that it would be impossible for the commission to establish rates and classifications of freights in all parts of the country without knowing the local conditions and requirements that bear upon the question. If Congress can delegate power to a commission to levy and collect taxes and regulate other matters in the new possessions, it surely could delegate the supervision of freight classifications and rates to a commission—the Interstate Commerce Commission.

There should be an increase in the President's family—I mean his political household—to the extent of creating two new departments, at least, in his Cabinet. There should be a department of transportation and a department of manufactures. The business interests of the country warrant it, and present conditions demand that more attention be paid to these matters.

Now, while we are teaching statesmanship to our swarthy neighbors of the Antilles, or establishing a habitation for the Goddess of Liberty in the Sandwich Islands, or wrapping the American flag around the dusky inhabitants of Samoa, or giving "up-to-date" civilization to the island of Guam, or while chasing that little brown man of the Luzon, or while serenely watching the eventual destruction of that small cradle of liberty in South Africa by overwhelming numbers, where the wild Boer has proven himself the equal of the British lion, man for man; while contemplating all these things let us not forget that we have matters—big problems—that demand our attention right here at home, and that the freight transportation problem is one of them, and should have serious consideration by our national legislators. And due consideration should be given to the schemes for ship canals from the Mississippi to the Great Lakes, and from the Great Lakes to the Hudson, with a view to helping to solve the inland transportation problem.

Then there is the trust problem, which you have been considering. Then there may be another problem—a railroad trust—confronting us. As to whether a combination is right, depends upon the object for which it is organized. No combination is right that would curtail the reasonable wages now paid for labor or that would be detrimental to the people. No combination is right that is organized to increase the cost of the necessities of life or against the business interests of the country. No combination is right that would limit the resources of the country or that would have a tendency to stagnate the growth and improvement of the country. No combination is right that has for its object the annihilation of reasonable competition in any branch of business.

A railroad trust might mean all these and more too, and should have due consideration.

I take the following extracts from an interesting two-column article in the New York Commercial Advertiser, of date March 12, 1900, under the headlines:

MIGHTY POOL OF RAILWAYS—COAL TRADE IN ITS GRASP, ETC.

* * * The impression has gone out that the reduction in freight rates made last Saturday by the Eastern Trunk Line railroads, because of the uprising against the heavy advances made January 1, will very greatly lessen the anticipated profits of the railroads. Such, however, is not the case. Most of these reductions cover less than carload lots and do not greatly affect the great bulk of tonnage. Furthermore, the effect of the 15 per cent cut on third-class practically amounts to the restoration of these rates in a few cases to the basis prevailing before January 1, and is, in reality, only a sop to small shippers.

The situation is but little changed in regard to the enormous profits of railroads under the new classification.

Profits estimated.—The increased profits in coal, as a result of the advances in transportation rates, some already announced in certain parts, and others to be named on April 1, will increase the revenues of the railroads upward of \$16,484,314 in this one industry alone. But the aim has been to take in other large products, and a careful computation of the increased profits that will accrue to the railroads gives a net gain

of more than \$31,000,000 annually for nine of the leading trunk lines. The railroads, for which statistics are here given, are the New York Central, Pennsylvania, Erie, Delaware, Lackawanna and Western, Lehigh Valley, New Jersey Central, Reading, Baltimore and Ohio, and Delaware and Hudson. In each case the data is for the last fiscal year, with the exception of the New Jersey Central, in which the figures of 1898 are used as a basis for computing the increase. Following are the tabulated exhibits:

PROFITS ON COAL AND COKE.

TABLE 1.—*Increased profits of \$16,484,000 on coal and coke and more than \$15,000,000 on other freight as result of advances in rates.*

	Coal and coke (average advance 15 cents a ton).	Other freight (average advance 10 cents a ton).	Total freight and extra profits.
	Tons.	Tons.	Tons.
New York Central.....	6,654,954	18,701,520	25,356,470
Pennsylvania	32,216,450	68,483,587	100,700,037
Erie	11,363,640	13,553,304	24,916,944
Delaware, Lackawanna and Western	7,278,218	5,330,297	12,608,507
Lehigh Valley.....	13,067,536	8,467,046	21,534,582
New Jersey Central	5,085,718	7,874,200	12,959,918
Reading	13,735,815	11,385,928	25,121,743
Baltimore and Ohio	13,712,273	11,341,905	25,057,178
Delaware and Hudson	6,767,170	4,373,936	11,141,106

ADDITIONAL PROFITS.

New York Central.....	\$999,243	\$1,870,152	\$2,869,395
Pennsylvania	4,832,467	6,848,858	11,680,325
Erie	1,704,546	1,355,330	3,059,876
Delaware, Lackawanna and Western	1,091,731	533,029	1,624,760
Lehigh Valley.....	1,960,130	846,704	2,806,834
New Jersey Central	762,857	787,420	1,550,277
Reading	2,060,297	1,138,682	3,198,979
Baltimore and Ohio	1,056,838	1,134,490	2,191,328
Delaware and Hudson	1,015,105	437,393	1,452,498

ON MANUFACTURED GOODS.

TABLE 2.—*Additional profits in transportation of manufactured goods and merchandise.*

	Manufactures (average advance 25 cents a ton).	Merchandise (average advance 25 cents a ton).	Total tonnage (two classes).
	Tons.	Tons.	Tons.
New York Central.....	1,775,345	2,490,921	4,266,264
Erie	3,689,062	1,087,136	4,776,198
Delaware, Lackawanna and Western	910,771	756,816	1,666,587
Lehigh Valley.....	1,461,239	1,926,219	3,387,458
Delaware and Hudson	1,269,079	162,756	1,431,835

ADDITIONAL PROFITS.

New York Central.....	\$443,835	\$622,730	\$1,066,565
Erie	922,265	271,784	1,194,049
Lehigh Valley.....	365,309	481,554	846,864
Delaware and Hudson	317,269	40,689	357,958
Delaware, Lackawanna and Western	227,687	188,954	416,641

TRANSPORTATION.

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MILLIONS MORE IN DIVIDENDS.

TABLE 3.—How the increased profits will be equal to more than 3 per cent on a combined capital of \$1,000,000,000.

Railroads.	Additional profits.	Capital stock.	Per cent additional profit.
New York Central.....	\$2,869,395	\$100,000,000	2
Pennsylvania.....	11,680,825	129,303,700	9
Erie.....	3,059,876	1 43,000,000	4
		2 16,000,000	4
		3 113,000,000	4
Delaware, Lackawanna and Western.....	1,624,760	26,200,000	6
Lehigh Valley.....	2,806,834	40,441,000	7
New Jersey Central.....	1,550,277	22,497,000	7
Reading.....	3,198,889	1 28,000,000	4
		2 42,000,000	4
		3 70,000,000	4
Baltimore and Ohio.....	3,191,328	4 60,000,000	7
		3 45,000,000	7
Delaware and Hudson.....	1,452,498	35,000,000	4
Total (equal to more than 3 per cent on capital of \$1,000,000,000).....	31,434,682		

¹ First preferred 4 per cents.

² Common.

³ Second preferred 4 per cents.

⁴ Preferred 1 per cents now paid.

The most remarkable part of these exhibits is the effect it will have on the earning capacity of the capital stock of the several corporations. It means something like 9 per cent additional on the Pennsylvania alone. There is practically no increase in operating expenses attached to the increase in rates, and the additional revenue which may be expected therefore means so much more in dividends on the stock. There is, of course, some difficulty in finding a basis on which to estimate the increased earnings, since no railroad company compiles figures showing the exact increase on the many different classes of freight.

Increased dividends.—If the New York Central, during the current fiscal year, makes \$2,869,395 more than last year as a result of the increased rate, it will be able to pay 2½ per cent more in dividends. The Pennsylvania, if its net earnings are increased \$11,680,825, will be able to pay 9 per cent more on its capital of \$120,303,700. The Erie would be able to pay full 4 per cent on its \$43,000,000 of first preferred stock, and 4 per cent on its \$16,000,000 second preferred stock, besides earning three-fifths per cent on the \$113,000,000 of common stock. The Reading would also be able to pay 4 per cent on its \$28,000,000 first preferred stock, and 4 per cent on the \$42,000,000 second preferred, besides showing a little on the common stock.

Q. (By Mr. KENNEDY.) How many persons are employed in your industry at Wyandotte?—A. In the neighborhood of 2,000.

Q. Is there much skilled labor employed?—A. Yes; I suppose you might say about one-eighth or one-tenth would be skilled labor.

Q. What wages are paid to your skilled labor?—A. Well, they vary. We pay all the way from 25 cents an hour up to, perhaps, 50 or 60 cents. I do not know just the amount.

Q. Can you state the amount of your annual pay roll?—A. No, sir; I can not.

Q. Is this industry carried on in any other cities of the country or at any other point?—A. At Syracuse, N. Y.; at Saltville, Va., and at Delray, a suburb of Detroit.

Q. These are the only places?—A. Yes.

Q. Is there a very extensive industry at Saltville?—A. I do not know just what the capacity is. Another works is being built at Barbarton, Ohio.

Q. In which States of the country do you find your principal markets?—A. Our principal market for the heavy ash is in the gas belts of Pennsylvania and Indiana, where they have glass factories and such as that, and for the light ash it is cities where soap is manufactured. Of course, the bicarb is generally distributed all over the country—baking soda.

Q. What percentage of your shipments go South into the Southern classification?—A. Very little under present rates. We try to keep out as much as possible.

Q. Is there a very large demand for the product there?—A. In the South?

Q. Yes.—A. I do not know of any great demand there for it, but there is nothing to stimulate a demand.

Q. No manufacturing there that demands it?—A. No; they can not, with the high rates; it would be impossible to compete with the North, with the high rates they would have to pay on the raw material, to start soap factories, or any other kind of establishment that requires our products.

Q. The railroad officials have contended that they must make high rates on goods which are carried only in small quantities in one classification as compared with large quantities in another.—A. Ours should go in large quantities. Glass makers require a vast amount of the dense ash, and the same with soap makers for the light ash.

Q. How about the territory west of you? You are in the official or Western classification?—A. We are in the official. We ship to San Francisco, and along the coast we have a 58-cent rate; but in the interior we do not try to do anything.

Q. Your shipments West are insignificant as compared with shipments to manufacturing points in the East?—A. Yes.

Q. Do you understand from the railroads that that is why the rates are high in the Western and Southern classifications as compared with the official classification—that you send very little into those parts of the country?—A. We never could have shipped any East if the rates had been as high proportionately as in the West.

Q. Do they contend they give this low rate because you have large shipments to make in the East?—A. No. They do not contend they are giving us any low rates. They fix the classification and commodity rates and all that, and we have to stand by them. They give us good rates East, but West and South they do not give us any fair rates at all, and we can do very little business there.

Q. You do have low rates in the East as compared with the other parts?—A. Yes; and we ship East and can meet the seaboard rates East, but can not West.

Q. They say that in a section where there is very little of a certain article shipped the railroad must have larger charges for it?—A. Well, but until there is a demand for the goods there, there would be no goods shipped.

Q. You contend the railroads should help make the demand?—A. By giving low rates. No matter how low the rates, unless there was a demand there would be no goods shipped. Under low rates they will start up factories—soap factories—if they had a reasonable freight rate so as to get the raw material; and in places they have got glass sand, where they could have glass factories, but if they have to pay such exorbitant freight rates as compared with the factories of the East and middle portions, they could not compete.

Q. Do products similar to yours come from European markets to the Southern ports?—A. I do not know that any great quantities do, but they have a rate of 10.7 cents on our product from Liverpool to New Orleans.

Q. There is no demand in the South for similar products coming from Europe?—A. There is in New Orleans, where they have soap factories, but coming into the interior they are in bad shape.

Q. (By Mr. FARQUHAR.) What is your tariff protection against foreign importations?—A. I do not remember.

Q. Soda, etc.?—A. Yes; we have tariff protection, but I do not remember just what it is. We have tariff protection, and until we did have that protection English ash was being laid down in the interior of this country at about what they thought was the actual cost of manufacturing it here. They had a rate of 89 cents a ton from Liverpool to Newport News, and it was distributed at a lower rate than we could get to the seaboard. That same ash if bought and, without taking it off the ship, sent back to Liverpool, the freight alone would be \$6.48 per ton. Since we have the tariff we have even shipped goods to England and Hamburg, but before that we had pretty hard sailing to get along at all.

Q. (By Mr. KENNEDY.) Do you believe the railroads would promote industries in the South if they would give the same classification as the official classification?—A. I am satisfied they would.

Q. The conduct of the railroads seems to be a sort of discrimination against the industries of the South?—A. I do not know that it is so intended, but that is the effect. I do not think they are looking at their own interest when they put such rates as they do on different products in the South. With the resources of the South there ought to be more manufactories in certain portions than there are now, and the more manufactories the more business the railroads would have. Low rates would have a tendency to build up the country and induce factories to start up where now they have to buy the finished product, such as soaps and glassware, that they might as well make.

Q. You state there should be two more departments of the Government—a department of transportation and one of commerce or manufactures. Would not the proposition to create a department of commerce, which should embrace both transportation and manufactures, be satisfactory?—A. Well, the bill that has been before Congress—

I looked over it a little, and I did not hardly think that would meet the demands of transportation and manufacturing. There is room for a department of commerce and of transportation, too, I would think, if it would not be making the Cabinet too large. If you put too much under one heading it would be kind of like getting too much under one classification. I do not think it would be beneficial to anybody. It would be a new office, and the business that would be under the classifications that they would have to look after—it would not help the country any.

Q. Would not a department of commerce naturally include transportation and manufactures?—A. It could be made to do so, I suppose, but the magnitude of manufactures and of transportation, too, I think, would justify independent heads for each. More attention could then be given to it, and better results achieved for the people and the country at large.

Q. (By Mr. FARQUHAR.) What class are your products put under north of the Ohio?—A. Soda, ash, bi-carb., and caustic soda all take the same classification to most of the cities of the North; some little difference, maybe, on bi-carb.

Q. North of the Ohio and east of the Mississippi?—A. Yes. They make some distinctions to certain points on bicarb.

Q. But, as a general thing, it is under the sixth class?—A. Yes; the commodity rate, making it equal to sixth class, though fifth is the regular classification rate on bi-carb.

Q. Suppose you are shipping on the Illinois Central to New Orleans, what is the change of classification south of the Ohio on your goods? What class are they driven into then?—A. I think it takes the fourth or fifth class. They have a different classification for each after they cross the Ohio. I do not remember it exactly. I have given the figures, but I do not remember what the classification is.

Q. Have you any knowledge that there is a uniformity east of the Mississippi and south of the Ohio, in respect to the classifications of the north and south lines? Do you think these main trunk roads are all under one classification as to freight?—A. I do not think so.

Q. Do you think that the Illinois Central or the Louisville and Nashville or the Southern would be under the same classification?—A. I think not. They have a different classification, and, as I understand it, it takes a different classification. They say that is the reason of the high rates—they do not take the same classification for these roads.

Q. The Southern railroads—the north and south roads—is their classification east of the Mississippi and south of the Ohio nearly the same on your class of goods—fourth and fifth class?—A. Ours is sixth class, except bi-carb. I do not think so. I may be mistaken.

Q. You are sixth in the official classification, but in the South is there not a uniformity also even though it is a high rate?—A. Yes; I presume they have classifications there. We try to keep out of the South on account of the high rates, and I have not paid attention to their classification. I only know the rates to certain points.

Q. For instance, in the matter of soaps, if they have to pay the freight rate as well as the prime cost of the raw material, it is cheaper for them to purchase the soap from the Northern manufacturer?—A. Yes; the soap alone; but when you come to count the labor and factories and business, you make it quite different.

Q. I presume high rates force the Southerner to buy the soap from the Northern factory?—A. That is the way I look at it.

Q. Now is there not in connection with your material something that railroads might find fault with in respect to handling the form of your packages—leakage, or anything of that kind?—A. No.

Q. You compare it with flour?—A. Yes; our ash is just about as fine as flour, some of it, and some of it is a little coarser. There would not be as much leakage with our goods as with flour, and it is more compact to the barrel—stronger barrels—and the caustic is put up in sheet-steel drums, so there is no breakage. If you wreck a car you have all the caustic; with a barrel of flour it is all gone.

Q. Do not the general freight agents and railroad men sometimes say the classifications should be made different, not particularly on account of weight but on account of the packages, the breaking of packages, and whether or not the entire cleaning of the car would be a necessity after handling your goods, whereas with flour there would not be any need?—A. I do not know of any. Ours is a clean product and easily handled.

Q. So you do not know of any real economic reason for the railroad to classify yours more than ordinary flour?—A. No; but I do not think ours should be placed on the same classification as flour, because flour is a staple commodity.

Q. I mean, so far as transportation is concerned, there are no breaks, nor loss, nor anything of that kind that would subject the railroad company to more care over its rolling stock?—A. No; and the same difference would go with the freight shipped north of the Ohio and east of the Mississippi, where it takes sixth class, as in the South—no more leakage or breakage, or anything of that kind.

Q. The reasons given in your paper are about the only reasons you know of from railroad officials why your product should suffer this discrimination?—A. Yes.

Q. You take it that possibly your product is in just the same situation as a great many other products; that there is no particular reason in the classification that yours should be made greater than any other product transported on the Southern roads?—A. No.

Q. You think all share alike in the high rates of the South?—A. I think so; I think it is pretty general with all freight.

Q. As a remedy for these things you propose a remodeling of the Interstate Commerce Commission?—A. I do not know that I would remodel that, but it should be made broader, so the classifications can be worked out to better advantage. Six railroad men, covering different parts of the country, and 6 business men ought to be able to get up a good classification that would satisfy most ordinary mortals.

Q. Have you considered the army of clerks employed by the railroads and found necessary for that purpose?—A. In our own shipping business is where I have got all my information—nearly altogether practical. I do not know anything theoretically about it or anything of that kind. I know it takes an army of clerks to make out these classifications, but with 12 men, from different parts of the country, they ought to be able with clerical hire to do all that the railroads ought to be doing.

Q. What would you say to it when the presidents of twelve or fourteen of the great trunk lines of this country come before this commission and say positively that it is their belief as railroad men with an experience of from 20 to 40 years that it is a physical impossibility for the Interstate Commerce Commission to make these classifications and rates?—A. Well, I should say they would be right if they leave it to the Interstate Commerce Commission as now provided by law, because they are picked out promiscuously, without any regard to the eastern or western coast, the Lake section, or the south or the middle interior. My suggestion is that the West should be represented both by a business man and a railroad man, and the South the same, and the East and the Lake sections the same, and the middle interior by two men from each, and I think that would pretty generally cover the country.

Q. How are you going to provide for their lawyers?—A. If they are good, sensible men, I do not think it needs lawyers. It is a matter of business to say what staff should be under a certain classification, and another under another, and another under another, until they got all through the classifications. The Southern railroad men and business men know what classifications their goods ought to take and the conditions under which their roads are operated, and all of that; the Eastern men would know their needs and the Western theirs, and, all coming together with their ideas, I do not see any necessity for a lawyer.

Q. Do you think that is the fair way, provided it is possible to have an office force big enough, well trained enough, to initiate the classifications and then maintain them and alter them as circumstances may occur?—A. Yes.

Q. You think it ought to be controlled by the United States Government?—A. I am satisfied it should be. It will never be satisfactory to the people until it is.

Q. So you would be entirely against the pooling idea?—A. Yes; I would be against that.

Q. Do you believe that under the Cullom bill, giving extra or more judicial powers to the present Interstate Commerce Commission, it would remedy any of these troubles you have spoken about?—A. Well, I do not think it would without a traffic association covering different parts of the country.

Q. You never have studied the problem far enough, probably, to believe that there is such a thing as making a uniform classification for the whole United States?—A. That is my idea, that it is possible; I do not see why it should not be possible. The main point now is, we do not know how to make contracts; we can not tell what the freights are. If we knew what classification it took, we could make a rate anywhere. For instance, from parties who are in a hurry for the goods we get a spot order. Sometimes it takes us a week to get a rate, when the goods ought to be going; but we do not know whether we can sell the goods at a certain price until we get the freight rate, as the freight rate might eat it up before it gets there.

Q. Would another plan work equally well—for all of the trunk lines to send in their classifications, and let this national association which you propose, of 12 members, codify and equalize the whole of these rates between the roads themselves?—A. I think that would be a good idea.

Q. Would not that be better than trying to make de novo a rate for the roads? If you have your plan you are making arbitrary rates.—A. Yes.

Q. There is not a particle of elasticity, no taking into consideration the conditions, and you would establish under that principle arbitrary rates. Would not this be a little too rigid?—A. Goods ought to take a certain classification independent of the conditions of the country, so we would know what classification they are in; then, if conditions come up where the rates ought to be raised, at the meeting in October, as I propose, they could raise the rate; but we would know what classification it would be under, and if the rate were raised on a certain classification, we would know what the rate would be on that product.

Q. Do you propose that the national body hear it on the prayer or petition of the parties interested?—A. On the 1st of October promulgate rates and let them be good for a year, so we would know how to contract. There would be October, November, and December, a couple of months, in which to fix up your contracts, and you would know that those rates were good for a year, and you could base your contracts on that. Glass men have to buy their goods for a year ahead in order to carry on their business successfully. All our product is sold. We are only making deliveries now on contracts made a year ago, and we have got to have time in order to know how to make these contracts, and must know what the freight rate is going to be for a certain period.

Q. (By Mr. KENNEDY.) How long have you had experience with classification?—A. Only about 4 years.

Q. Can you say whether the tendency is toward uniformity or not?—A. Well, I have seen no evidence of it.

Q. One at least of the prominent railroad officials stated before the commission that that is a fact.—A. The railroad men that I have talked with agree that there should be a uniform classification.

Q. I recollect that all the railroad officials that have been before the commission agree that there should be a uniformity of classifications, or as near an approach to it as possible. Now, if they feel that way and the shippers feel that way, what is the obstacle? Why don't they approach uniformity?—A. They want to be made to do it, and that is why I think it would require legislation by the United States Government to bring them together. It is only fair to the shippers and the railroads that they should understand one another, and the railroad men and the shippers should be closer together than they are; and if they are brought together by the Government they would understand one another better, and I think it would be better for both sides.

Q. (By Mr. FARQUHAR.) Is not the question whether the Government should equalize rates or the railroads equalize rates?—A. The party in interest is going to equalize them in his own interest; that is the trouble. The Government would be supposed to be impartial, especially where both railroad men and men representing business interests were joined together to make these rates.

Q. (By Mr. A. L. HARRIS.) If you have a uniform classification all over the United States, would you have different freight rates in different sections of the country?—A. That might be necessary.

Q. Could the roads of the South afford to give the same freight rates that those of the North or Northeast could give?—A. In time I believe it would be to their interest and they could well afford it, as it would build up industries all over the South.

Q. When you established a uniform classification, would you have this same commission have control over the freight rates?—A. Why, yes; I think so; and then every section of the country would be on a par with every other section of the country; on an equality that would tend to build up one section without tending to destroy another section, as it is now under the present classification and rates.

Q. If the classification were uniform and the rates uniform, the road having a small traffic could not live, could it?—A. My idea is it would build up the community so that it would get something to do; as it is now there is no chance.

Q. Until the community was built up and the business built up, what would become of the road?—A. If everything is on a par with other parts of the country, I do not see why a community should not build up very rapidly and make the railroad self-supporting anyway.

Q. Are not the freights higher in the South than in the North?—A. They are higher, but I see no just cause for it.

Q. Do they have the same amount of business?—A. Well, I think if you will look at the reports of the Southern roads, they report business pretty good in that part of the country.

Q. Just now?—A. Taking any time. Eighteen hundred and ninety-two was one of the good years all over the country, and during the depression you will see that the Southern roads report about as favorably in proportion as the Northern roads.

Q. Have freight rates been materially changed within the past year?—A. The 1st of January they were materially changed.

Q. About what per cent?—I can not tell as to that; different products took different rates.

Q. Was that on all classes of freight?—A. I think so, yes; that is my understanding.

Q. What was the reason assigned for increasing their rates?—A. The reason they always gave was that they wanted to share in the prosperity of the country. That is the only reason they ever gave me when I talked with them about it.

Q. They arbitrarily fixed that rate among themselves?—A. Yes.

Q. Was that done by traffic associations or something of that kind?—A. As I understand it, it was done by the traffic association.

Q. That is permitted yet?—A. Yes; they can raise the rates any time that they see proper; nothing to keep them from it, as I understand it.

Q. The cost of operating the roads has increased, I suppose, has it not?—A. Yes; but still it is reduced to a minimum, as I say somewhere in here. [Reading from paper:] "They claim the cost of equipment has been increased, but that increase is offset by the decreased cost of operation, which has been reduced to a minimum."

Q. How is that decrease in operation brought about—heavier loads?—A. Yes; and more modern methods in every respect, I suppose; in different ways.

Q. As I understand, the classification is probably the greatest grievance that the shipper has at the present time?—A. I think so.

Q. Would a classification be just where the rate continued for a year under all circumstances, or should it be to some extent elastic, under the control of this commission that you provide for, and the order of the Interstate Commerce Commission?—A. I think these men would know the conditions of the country and be in a position to know at the time they made these classifications, and there would be no reason for a change within the next year from that time. If you make them so they could be changed it would be manifestly in a bad shape; it would put manufacturers out in making contracts. The goods are sold at a very close margin sometimes, you know.

Q. Classification is one of the most intricate questions in railroading, is it not?—A. I understand so; and it is for that reason I think the shippers and railroad men should be brought together in making that classification. As it is, the railroad has been making the classification and they have no idea of the conditions prevailing in manufacturing circles. They claim we do not know the conditions of the South and West and all that, and they do not know the conditions surrounding the manufacturing interests, and they do not take that into consideration in making the classification; and for that reason I think they should be brought together and have a mutual understanding. They never ask us our opinion as to what the classification should be. They go ahead and make the classification and we are governed by it.

Q. How frequently do they change the classification?—A. They do not change it very often, except the instance I stated here—to Richmond—where they changed it three or four times in the year.

Q. (By Mr. FARQUHAR.) They did not change the classification in that instance, but the rate?—A. No; I do not think the classification was changed.

Q. (By Mr. A. L. HARRIS.) Have you any complaint to make against the roads on account of discriminations?—A. No.

Q. You get the open rate?—A. We get the open rate; that is all we ask for.

Q. Your competitors have never had any advantage, in shipping, over you?—A. Not that we know of, except to these seaboard cities—foreign goods coming in there. We meet that successfully in the East but not in the South.

Q. That is a through rate—water and land both, I suppose?—A. Yes.

Q. (By Mr. KENNEDY.) Is there any competition for your traffic among the railroads?—A. Well, not very much. There are only the three or four factories in the United States now, and another one will be in operation in the next year.

Q. Have you ever been offered any less than the public rate for your traffic?—A. The railroads have always been very firm with us. They solicit the business but never make any change in the rate. We were promised a lower rate to New Orleans, of 22 cents, and they told us we could go ahead and get contracts based on that rate. We did take some contracts to New Orleans, but they did not make the rate to us and so we got out of there as quick as we could. We could sell goods there with a 22-cent rate but not with a 33-cent rate.

Q. (By Mr. FARQUHAR.) Suppose a party in Chattanooga could get the same rate from Cincinnati to Chattanooga that you get from Wyandotte to Cincinnati, could a soap factory in Chattanooga live?—A. Yes.

Q. And prosper?—A. Yes. That would be exactly the rate to New York—8 cents to Cincinnati and 8 cents on to Chattanooga. There would be plenty of business there.

Q. Then Chattanooga could successfully compete with Cincinnati soap?—A. Yes; I think so.

Q. (By Mr. A. L. HARRIS.) Your competitors are laboring under the same disability that you are laboring under, so far as you know?—A. Yes.

Q. They have no advantage over you as far as rates are concerned?—A. I do not know of any.

Q. Then, when you sell a bill of goods, or when you have an opportunity to sell a bill of goods, you know that your competitors have not an opportunity of bidding below you on account of any advantage they have in rates?—A. Yes.

Q. What you complain of is the volume of business or increase of business that you could have if you had a better classification?—A. Yes; and being shut out of the West and South, where we should do business and where they should do business, too, on account of not being able to get a reasonable freight rate.

Q. Have you any trouble in regard to the long or short haul?—A. No; we have never been troubled with that.

Q. Railroads have dealt fairly with you in that respect?—A. As far as I know.

Q. (By Mr. KENNEDY.) Did you not just say that you got a cheaper rate to San Francisco than you did to points in the West beyond you?—A. Yes; but we expect that, for the reason of foreign competition along the seaboard.

Q. (By Mr. A. L. HARRIS.) Wherever a matter of that kind occurs, you can account for it?—A. Yes; we can account for it; but I took the question to refer to the long and short haul through the country.

Q. Do you have any trouble getting cars?—A. At present we do not, but all through the winter we had to fight for cars all the time.

Q. Why was that?—A. The railroads said they had more business than they could handle. They tried to favor us all they could, but they were short of cars all the time. At present we are getting all the cars we want.

Q. (By Mr. FARQUHAR.) By what roads do you ship from Wyandotte?—A. The Michigan Central principally, but we also use the Detroit and Lima Northern and the Lake Shore. The Michigan Central have tracks right in our yard to the different factories. We have two—No. 1 and No. 2; No. 2 on the north and No. 1 on the south. The Michigan Central has tracks to both, and the Lima Northern has tracks to No. 2, but not to the soda ash or caustic, but to the bicarb plant. Practically all goes out over the Michigan Central.

Q. Do you have ample railroad facilities for shipping?—A. Yes.

Q. (By Mr. A. L. HARRIS.) Do you have to pay exorbitant switching rates at any point?—A. I do not believe the Michigan Central will switch for the Detroit and Lima Northern, and I think they make a charge of \$5 to switch to the Lake Shore, but I will not say positively. The railroads always absorb that charge, so we have nothing to do with the switching charge.

Q. (By Mr. FARQUHAR.) Switching or demurrage—the roads themselves settle that?—A. Yes.

Q. (By Mr. A. L. HARRIS.) If you had a better classification, and thereby better rates, you could make your goods cheaper to the consumer in many points in the United States?—A. That might be possible.

Q. That would be the only way you could encourage trade?—A. Yes; but the goods have been sold at a very close margin for the last few years, and it is the freight rate that eats it up before it could go down South or West.

Q. You take your freight rates into consideration when you make your contract?—A. We have to. There is a very close margin of sale.

Q. Is that close margin on account of the competition in your business?—A. Yes; it has been and is.

Q. Does the competition approach the point of being ruinous?—A. Oh, no; it is not ruinous, but before we got our tariff on it looked like it was ruinous. We sold on a very close margin then.

Q. (By Mr. KENNEDY.) When the freight rate on coke was put up to the extent of \$20,000 a year to you, did you recoup that by increasing the price to the consumers of your product?—A. We had to put that onto the consumer in the long run. The consumer is the man that pays the freight in the long run.

(Testimony closed.)

INDUSTRIAL COMMISSION:—TRANSPORTATION.

WASHINGTON, D. C., December 10, 1900.

TESTIMONY OF PROF. EDWARD WEBSTER BEMIS,

Of the Bureau of Economic Research, New York.

The commission met at 11 a. m., Vice-Chairman Phillips presiding. At 11.05 a. m. Prof. Edward Webster Bemis was introduced as a witness, and, being first duly sworn, testified as follows:

Q. (By Mr. LITCHMAN.) Will you kindly give your full name and post-office address?—A. Edward Webster Bemis. My post-office address is Mount Vernon, N. Y.

Q. Will you give your profession or occupation?—A. For many years I was in charge or associate professor, one or the other, as the case might be, of political economy and history in various institutions of learning; 5 years at Vanderbilt University, 8 years at the University of Chicago, and 2 years at the Kansas State Agricultural College; but for the last year and a half I have been in New York in association with Professor Commons and one or two others in the organization of an independent department of investigation or research of certain monopolistic questions, such as those we are considering to-day, and to a certain extent railroad and trust questions.

Q. Is there any name to that association?—A. We call it the Bureau of Economic Research.

Q. In this study and these investigations you have given particular attention to the ownership of what are known as public monopolies by municipalities?—A. Yes.

Q. Will you in your own language give as briefly and tersely as you may the results of your investigations in that direction?—A. If the commission is willing to indulge me a moment, I think before directly taking up the results of municipal ownership I will introduce the subject by one or two preliminary statements. I want to bring out first the importance of the subject of these monopolies. I take it for granted that the commission recognize that competition has broken down as a method of solving the street-railway question or the gas question or the electric-light question or the water problem, and probably will break down shortly, if it has not already, in the solution of the telephone question. Efforts have been made in almost every important city in this country to have competing companies, and in every instance the experiment has ended, if it began some time ago, in consolidation. So that there is no city that has had for any long time competition in the supply of these services.

Q. (By Mr. CONGER.) Is that as true of electric lighting as it is of the other services that you name?—A. It is, except to the extent that individuals are able to put in private plants in their own building sometimes for the supply of light to a hotel or to a factory; but when it comes to competition for the general supply of electric light for a city—street lighting or general household lighting—this is true. There are a few cases, perhaps, where there still nominally continue to be rival companies, but in most cases you will find they have a tacit agreement and are not really competing, and in nearly every instance, unless the competition has just begun, you will find it has already ended in actual consolidation.

There are good reasons why this should be true. The economies are very great in consolidation—the saving of office force, the saving of duplication of mains, service in the street, and service pipes to the houses, economies in the collection of bills. When 2 companies are fighting with one another, many consumers will avoid paying their bills—transfer from one company to another, back and forth.

Q. I recognize the theory of the economy of it, and I recognize the fact, too, so far as all these public utilities are concerned, with the exception of electric lighting, where my information and observation has been that competing companies do exist in many more cases than in the case of any of the other public utilities or service that you mention.—A. Yes; I would agree with you that that is true, but the tendency there is also toward consolidation very rapidly.

Assuming that these are either monopolies or becoming such very rapidly, there are special reasons why they should be very carefully investigated. One reason is that the problems to be met with are somewhat similar to the problems that will shortly be met with, and are, in fact, already puzzling us in the attempt to solve the steam-railroad problem. It is recognized, I suppose, that the railroad problem must be solved, so far as it relates to the matter of discrimination to large shippers in the form of secret rates and rebates and in the ways, before we can grapple directly with the trust question.

Now the railroad question is a monopolistic problem, and it is fortunate that

before we have to tackle it we are able to look to a line of monopolies which have developed further the monopolistic feature than has the railroad, and may learn many lessons therein as to how we shall have to approach the railroad problem.

That is one exceedingly important reason to my mind why we need to study it. If we find municipalities able to regulate the charges and the service of gas companies, street-railway companies, and electric-light plants, that will furnish some hint as to how we may proceed with the railroad question. If we find they are able to own and operate these plants, or in some cases succeed and in some cases fail, that will also give us hints as to what is the line of suggestion to make as to the railroads.

The second reason why I think all these questions are linked together is that in the municipal monopoly problem we have seen the same enormous consolidation of capital and the concentration of ownership. For example, there has occurred recently a practical consolidation of all the gas companies and of all the electric-light companies of Greater New York, and these two enormous lines of business are practically owned by the same syndicate, and the same syndicate also has a controlling interest in the street railways—a consolidation with capital reaching up into the hundreds of millions of dollars.

Q. (By Mr. PHILLIPS.) Will you please state right there who are the principals in this syndicate?—A. The Consolidated Gas Company increased its stock in July, 1900, to \$80,000,000, and bought up the other gas and electric-light companies of the city. Among the trustees are William Rockefeller and William C. Whitney. The United Gas Improvement Company of Philadelphia has testified to having a controlling interest in the gas companies of over 40 different cities, some of them very large. For example, it has leased the gas works of Philadelphia, and it has a controlling interest in Jersey City, Des Moines, Iowa, Kansas City, Mo., Atlanta, Ga., and many other cities.

Q. Is that composed largely of the same people?—A. Largely of the same class of people—largely affiliated, although I did not wish to be taken as saying it is exactly the same class as control in New York. The New York companies are practically all under affiliated management now. One syndicate owns all the street railways, but the connection between that and the light and gas companies is not fully revealed to the public, but it is said by brokers to be composed of practically the same parties.

Q. (By Mr. LITCHMAN.) They are practically the same parties that have the United Gas Improvement Company of Philadelphia?—A. Largely so.

Q. (By Mr. PHILLIPS.) Also at Pittsburgh?—A. I think so.

Q. (By Mr. KENNEDY.) Does the same syndicate own the elevated railroads and the Metropolitan?—A. The surface and the elevated roads are in the hands of different syndicates. In Chicago the surface railroads and several of the elevated have at times and doubtless will be again owned by the same syndicate. In New York there is a separate ownership of these two; but it is only a question of time when they will be united. President Dolan, of the United Gas Improvement, is in many of the large street-railway enterprises of the Elkins-Widener-Whitney syndicate, which owns the street railways of New York, Philadelphia, Chicago, and a rapidly increasing number of other cities.

These matters I will not attempt to give you in exact form because I have not attempted to prepare it in that form, coming here in considerable haste, but will give you an outline of it for further investigation.

If people are not satisfied with the price of gas, and think they can go to electric light as a solution, they will find themselves dealing practically with the same company. This is true all over the country, because the electric-light interests are getting into the same hands in a given locality.

The magnitude of the problem may be illustrated in this way: In the report which is just out by the United States Department of Labor there is given the cost of the publicly owned water, gas, and electric-light plants, and the capitalization of the privately owned water, gas, and electric-light plants—

Q. (By Mr. LITCHMAN, interrupting.) For the whole country?—A. Yes; and the summary of it all is nearly \$1,400,000,000, while President Roach of the American Street Railway Association, has declared in his annual address recently to his association that the capitalization of the street railways of America, which are altogether in private hands, is even greater than the combined capitalization of the water, electric-light, and gas companies, amounting to \$1,800,000,000, or a total capitalization of nearly three billion and a quarter.

Q. Can you give the comparison of municipal ownership and private ownership?—A. Since that is asked for, I will mention it now. As I just said, of the street railways and elevated roads which were included in this, there is no public owner-

ship, except in the case of the famous railway over the Brooklyn Bridge, and that is only a short road of 1½ miles.

Q. I spoke particularly about electric lights.—A. I know; I was coming to that. The report of Carroll D. Wright, which is the most complete one we have, and is just out, gives the following figures with reference to electric lighting: The capitalization of the privately owned electric-light plants he gives as \$285,181,920. The value or cost of the publicly owned electric-light plants he gives as \$12,902,677. So that the actual value of the publicly owned electric-light plants is only about 5 per cent of the par value of the stocks and bonds of the privately owned electric-light plants in America. When it comes to gas, the disproportion is still greater. The capitalization of the gas works privately owned is \$330,346,274, while the cost of the public gas plants directly operated by municipalities Carroll D. Wright gives as \$1,918,120. When it comes to water, however, the proportion is reversed. There the capitalization of the private water companies is only about half the value of the public plants. The figures are, for the private plants, \$267,752,468, and for the public plants, \$513,852,568. This enormous capitalization of the private plants, however, does not mean that the cost of construction is as much greater than that of the publicly owned plants as the comparison of these figures would indicate. The public plants are given on the basis of their cost of construction, while the private plants are given here as they are capitalized, and they are capitalized on the basis of their earning power usually.

The connection is very slight between cost of construction and earning power in these monopolies. The bonds frequently will cover the cost of construction, and the stock represents nothing but the franchise value or the hope of additional earnings. There is, in fact, a growing tendency to the increase of water in the stocks of these monopolies. They have always had a tendency to overcapitalize, because it deceived the public as to their profits in the first place, and, in the second place, there is a psychological reason for it. People will pay more for two shares of 4 per cent stock than they will for one share of 8 per cent stock. They have an idea that if the stock is paying 8 per cent that it may be fictitious and that it will not last. It looks like too high a profit. They judge, perhaps, from competitive business, or they think there may be a possibility of a demand by the public for a reduction of charges, while 4 per cent looks very moderate, or even 5 or 6 per cent. So the stock will sell better, although mathematically you might not expect that it would.

So those two reasons have always prevailed for capitalizing up to the basis of 4 or 5 per cent stock, but quite a different reason and an additional reason has arisen during the last few years. The directors of some of these enterprises are more and more banking syndicates; or banking syndicates, if not directors, have a large influence in the management, and these banking syndicates want a profit on the floating of this stock, and the larger the stock issues the larger the commission to them.

Q. As promoters?—A. As promoters. This statement has come to me from men very high up in corporate management, and they say it has not been very much understood hitherto. There has come about a financial motive to the promoters of these enterprises to overcapitalize.

Now, as an illustration of the extent to which this has gone, I may remark that in the case of street railways we have some figures of comparison from Massachusetts. In that State there has been a restriction on overcapitalization through the action of State laws operating now since 1885, and which have prevented the Massachusetts companies from increasing their capital stock since 1885, except where it was directly for improvements and extensions. To be sure there has been an evasion of the law by outside companies getting hold of the Boston companies lately, but I am speaking now of the direct Massachusetts companies, including the Boston companies, as they stand before the commission; that is, taking the stock of the Massachusetts companies that has been authorized and issued according to the Massachusetts law, I am not speaking of the certificates based on the Boston gas companies and issued by various New Jersey and Delaware trust companies. We have these figures in the case of street railways. The average capitalization per mile of track—not of line but mile of single track—in 1897 (and it is about the same now) in Massachusetts was \$44,683. That was the actual par value of the stock and bonds per mile of track in the Massachusetts roads. In the rest of the country it is over twice that per mile of track, although the number of cars and the amount of traffic per mile of track for the rest of the country is no greater than in Massachusetts. Taking, for example, a group of States in the center of the country—Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, and Kentucky—the whole group had 2 years ago precisely the same number of cars per mile of track (3.75) that the Massachusetts roads

had, and yet they were capitalized, not for \$44,688 per mile of track, but for \$91,500 per mile of track. In another group—New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, West Virginia, and the District of Columbia—they had 23 per cent more cars per mile of track (4.56), but instead of having a capitalization of 10 or 15 per cent more—because the capitalization would not increase proportionately, the need of capitalization would not increase proportionately with the increase in the number of cars—they actually had a capital per mile of track of \$138,600, or over three times as much as the Massachusetts roads. The capitalization in Massachusetts in 1900 was only \$38,500 per mile, but in the above Mississippi valley States it was \$91,360, and in the last group of States above named it was \$153,650.

As an illustration of how this thing goes on we have an interesting case in Chicago. In 1898, I think it was, the Mutual Fuel Gas Light Company of Hyde Park, which was an ordinary gas company for lighting as well as fuel, sold out to the People's Gas Company of Chicago. This mutual company was only a few years old. Its stock amounted to only \$2.69 per thousand feet of annual sales and it had no bonds, and it made a report of what its tangible assets were which they had accumulated from surplus profits, and they claimed for the whole \$3.80, but they sold out to the People's Gas Company, which now embraces all Chicago, with one little exception, and on the basis of this \$9 per thousand feet of stocks and bonds were issued. That is, the capitalization was more than doubled—it was practically trebled. The average capitalization of the gas companies of Chicago is about \$9 per thousand; and that is about what it is, generally speaking, in all large cities, whereas \$3 to \$4 per thousand feet is thought to be ample for the real structural value.

Of course this capitalization is rendered possible by the monopolistic character of the enterprise and the enormous profits they can earn on the structural value. This Mutual Fuel Gas Light Company of Hyde Park was selling gas for fuel purposes for 72 cents prior to the transfer to the People's Company. The same company's charge for lighting was \$1, with, I think, a little discount for prompt payment. The average charge was 87 cents. They made a statement in the annual report of the actual cost, including taxes, but not including dividends or interest—they had no interest, however; there were no bonds. The actual cost in 1897 was 37.45 cents per thousand feet, and if they had been content with 8 per cent on the \$3.80 that they claimed as their tangible assets, which would have been about 11 per cent on their stock, they could have sold for 67.5 cents instead of for 87 cents. The price, however, has been raised to \$1 since the consolidation with the People's Company. That is the usual price now in Chicago, and this and higher prices prevail nearly in all parts of the country.

Q. (By Mr. CONGER.) I would like to ask if it is not a fact that the cost of coal and of other material which the gas companies use for the making of gas has materially increased in the last year or 18 months?—A. Yes; it has.

Q. So the cost of gas at present would be greatly in excess of the figures named?—A. It is somewhat in excess, but the difference is not as great as it would seem to be at first, because if it is coal gas and coal goes up a dollar a ton it only raises the cost 10 cents, because a ton of coal will make about 10,000 feet of gas. With this rise in the price of coal has in most cases come a rise in the price of residuals, such as coke and tar and ammoniacal liquors, which cuts off about half the effect of the rise in coal, leaving the net additional cost when coal is used of only from 5 to 7 cents per thousand feet.

Q. Has not the cost of other raw material that they use in making gas also risen?—A. I was speaking then of a coal-gas plant. Where they use water gas there are other constituents. They use a little coal or coke and they use oil. Oil has also risen. Four or 5 gallons of oil is used for a thousand feet of gas, according to the candlepower. In the West, we will say they have been getting their oil for 2 or 3 cents a gallon for crude oil—that is, in the Ohio district. A rise of 50 per cent in that means a rise of only 1 to 1½ cents per gallon, or a rise of 6 or 8 cents per thousand feet in the making of gas. But the last time I examined the situation, last June, when I was employed to do that by the city of Springfield, Mass., I found that oil had fallen again and was not much higher in June than it had been 2 years ago. I was out at Toledo and got the oil quotations there, and at Titusville and found crude oil had fallen to nearly what it was 2 years ago.

Q. (By Mr. PHILLIPS.) It has fallen somewhat since that?—A. Yes.

In Carroll D. Wright's report, which has already been referred to, he gives the cost of the manufacture of gas for several hundred gas companies which were willing to allow him to see their figures provided he would not reveal the names of the companies; you will find in looking that over that they admit that the cost of putting their gas in the burner in the larger companies, aside from taxes and

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depreciation, was only about 46 cents at the time he made his investigation 2 years ago. Adding say 5 cents for taxes and 7 cents for depreciation you bring it up to 58 cents. Add to that a profit of, say, 7 per cent on the structural value of, say, \$4 per thousand feet, and you will bring it up to 86 cents. Carroll D. Wright reaches the same thing in another way, and reaches about the same figure for the larger companies as the cost including all these items. But the average price of these large companies, producing over 500,000,000 feet a year, is \$1.12, or 24 cents more than the above-named cost—\$1.14 for the average, I would say, is charged by half of the companies he investigated having an output of over 100,000,000 feet a year.

It is unnecessary to dilate on this further, but it indicates the possibility of overcapitalization caused by the enormous profits in the large cities. I am not speaking of the smaller cities, where there is not so much. I might add a word there in regard to the same possibility in street railways by this consolidation.

Q. (By Mr. FARQUHAR.) Have you any knowledge of what the bonds and stock were sold for at the initiation of any of these plants?—A. I have looked it up in some cases. I have not the exact figures with me.

Q. Have you any approximation about it in your own mind?—A. I can not give any one company. I can give you the general situation that prevailed in many of them. They would go to the broker and make arrangements with him that if he would float their bonds he could have a large block of the stock as a bonus, and a commission on the whole transaction. In order to get the capital many of these companies do this, and find a necessity in a way, running things as they do, to overcapitalize, but they go beyond any necessity of the matter for the reasons that I gave above.

Q. What do you mean by overcapitalize?—A. I mean that the stock they issue is in excess of the cash that is received. In Massachusetts the law does not allow them to issue stock or bonds except in the open market for cash received. They can not give bonuses that way.

Q. That does not prevail in the other States?—A. In the other States there is no limit.

Q. Suppose you have a shrinkage in the first securities put out of 15 per cent, would you not put the 15 per cent on the next stock to cover it?—A. There is, as I indicated a moment ago, a very great temptation to do that.

Q. Is there not a positive necessity for it?—A. It is possible in Massachusetts to float their stocks without it, where the law prevents it and I think if possible there it would be possible elsewhere.

Q. The shrinkage that is sustained by the enterprises at the initiation of the company—is it not fair that that shrinkage should be made up by the issue of stock over and above the par value? You are not floating your stock at par in any new enterprise.—A. In most cases, if they were not allowed to capitalize beyond the cost of their plants, I do not think they would find it so difficult to sell their securities at par and a great deal above par. There is now much suspicion of there being a great amount of water in their stock; but if companies would issue stock only for cash equal to the par value of the stock or to the market value when above par, their ability to make money is so well appreciated that their stock would sell, I believe, at a great premium—if it were not known that they were so badly inflated. But if you come to the case of a small company in a small place, where it can not sell its stock at par, your question then is a more difficult one, but in that case it would be better to sell the stock at auction for what it would bring. Of course you have to sell enough stock or bonds to get the money to construct the plant. That is true, but I would not give stock in the form of a bonus, but would preferably sell the stock at a discount below par, if necessary, so that the public and the consumer and the stockholder would know just what the whole thing would cost.

Q. (By Mr. PHILLIPS.) Is it a fact that a large per cent of these companies issue preferred stock to the full amount of the value of the plants they take in and the common stock as a bonus, and the common stock is frequently larger than the preferred stock?—A. Yes; and frequently the bonds represent all the cost, and both the preferred and common will represent nothing but earning power.

I was going to compare the street railways and the steam railways in this matter of capitalization. We read a good deal about the overcapitalization of our railroads. Two years ago, when I made a special study of this, I found the steam railroads of the country were capitalized at \$59,610 per mile, but the street railways are capitalized for \$90,000 per mile, one-third more than the steam railroads. They do not have to pay for rights of way. They do have to pay somewhat more for powerhouses, but it is questionable whether the total cost is much greater; and the steam railroads are known to be capitalized beyond the cost of construction. The reason that this stock can be floated becomes evident when we see the

income. The net income above operating expenses per mile of road is over 50 per cent greater in the street railways than in steam railways. The net income of steam railroads that year was \$2,050 per mile, and in the case of street railways it was \$3,800 per mile.

Q. (By Mr. KENNEDY.) You mean mile of road?—A. Mile of single track, I mean to say. The entire passenger receipts on the street railways are half as much as the entire passenger earnings of all the steam railroads of the country, namely, about \$150,000,000 on the street railways and a little over \$300,000,000 passenger earnings on the steam railroads.

So the problem that confronts the investigation of city monopolies is the same that connects itself with trusts and railroads as far as concerns overcapitalization and concentration of ownership.

Then another thing usually operates—that of secrecy. There is great secretiveness in the organization of these companies. Even the United States Government has not ventured to publish the names of the private companies from which it got returns as to the cost of operation of gas and electric-light companies; that is, they could not get this information from these public monopolies except under the pledge of absolute secrecy.

Q. Is not that the course the Government has to pursue in getting information from many other corporations—manufacturing corporations, etc.?—A. Yes; but it strikes me there ought to be a difference, because of the different nature of the business, where monopolies like the railroads get the right to exist from the State, the right of eminent domain, the right to use the streets and highways, and which in fact are recognized as quasi-public corporations. It seems to me the people have a right to demand publicity, and that is one of the points I wish to make a little later—the importance of uniformity of accounts and publicity in the case of these monopolies and in the case of municipalities also.

Thus I have attempted to show the reason why these matters should be more thoroughly investigated than they have been investigated, and investigated, I am glad to say, by this Commission. I really believe here is a great opportunity to help throw light on one of the darkest phases of our public affairs, the one in which there is more secrecy than there is even in the railroad question, and one which will directly help to solve the railroad question and point the way to other things.

There have been various attempts to solve the municipal-monopoly problem. One method allows these companies to remain in private hands and attempts through city and State action to regulate them; another method, direct public ownership and operation. There is a third—ownership without operation, where the State or city owns, we will say, the track or the pipes in the streets. There is scarcely any of that in America, however, and in England it has been almost entirely confined to street railways, or tramways, as they call them over there, and has not been altogether satisfactory except as a stepping stone to public ownership. I am inclined to think—and in that I differ, I know, from some who favor the step very strongly—I am inclined to think there are engineering reasons for having the ownership and operation united, especially where the successful operation requires constant readaptation of the roadbed or of the mains in the streets; and they are coming to that conclusion in England, and are entering direct public ownership and operation. A good many in this country are beginning to regard public ownership and private operation as a very good method of satisfying the conditions of the problem. Although I do not consider it ideal, it would probably be an improvement on the present system, especially if financed as the rapid transit road now under construction beneath the streets of New York.

There are only two places in the world where, I think, we have any large degree of public regulation of private ownership. The two countries which have attempted to regulate private management without directly owning are England and Massachusetts. In both countries a considerable measure of success has been attained. I have already referred to the success in Massachusetts in preventing, to some degree, overcapitalization.

Q. Do you intend to describe that method?—A. I can describe it if desired. I might, perhaps, stop a moment to do that. The law in Massachusetts has created two commissions, one a street-railway and railroad commission and the other the electric-light and gas commission. These two respectively have control of the capitalization and, to a considerable degree, of the charges of their respective companies. They have the right to compel the companies to give reports as complete as the commissions may demand. They enforce that right. They do not always publish all the facts that they gather. They are not publishing all of the details of cost in the electric-light and gas enterprises, and they are very much criticised for that, but their friends defend it on the ground that the public is not yet sufficiently interested in the subject to enforce it against the objections of

the companies; but the commission gather quite full data for their own use. It has the right to even prescribe the methods of bookkeeping to these companies, but they have not, so far as I can learn, exercised that to any considerable degree. They have the right to send their auditors to these companies and examine their books. They do that sometimes when there is complaint as to charges. These commissions claim to be judicial bodies. They do not look around and see that a company is charging too much for its services and order a reduction, but they wait; and the law unfortunately expects them in most cases to wait, I think, although they are at liberty in their reports to give more data and be more aggressive than they are. But they are not supposed to take any direct action unless there is complaint by either the public officials of the city, mayor and council, or by 20 consumers; at least, that is the case with gas and also electric light; and then a hearing is ordered, and all the evidence is brought in by the complainant that he desires to, and the commission makes further investigation of the books of the company so far as it desires.

The results I have explained somewhat at length in a book on municipal monopolies, published in the spring of 1899.

Q. (By Mr. PHILLIPS.) How do they enforce their decisions—this commission?—A. If their decision is not obeyed, they can appeal to the attorney-general and to the legislature, and the legislature may make special orders. There are some penalties in the law itself, and the legislature can make special penalties for special instances. There had been no appeal against a decision of these commissions for a number of years until the Haverhill gas decision last year, and that appeal has been taken to the United States courts on the ground that the commission reduced the price too much.

Q. (By Mr. LITCHMAN.) I think it would be well for you to speak of the provision of the Massachusetts law that prevents municipal acquisition of electric-light and gas plants without first purchasing the private plant already existing, if one does exist.—A. Yes; that is very important. The people in Massachusetts, I was going to say, were not altogether satisfied with the working of this commission. I think the sentiment is that the commission has done good, but there is a rapidly growing demand to proceed another step and undertake to directly operate many of these plants. In fact, there are a considerable number of municipalities that have undertaken municipal operation of electric-lighting plants in Massachusetts, and there are three comparatively small places—Middleboro, Wakefield, and Westfield—that have done the same in gas, but they have been slow about going into it in Massachusetts, because the law of purchase is such that they must buy out the existing plants, which it seems to me would be entirely fair, if the law fixed the price at the original cost, less depreciation—that is, at the structural value of the plant, or even at that plus 10 or 20 per cent, or whatever may be decided upon as a reasonable addition to cover the possibility of error and to be liberal with the company. Instead the law provides that the court shall select referees to determine the price, and the law seems to imply that, while they shall not take account of the probable increasing of earnings that shall come with the growth of the city, they are to take account of the existing earnings. Practically, therefore, these referees fix a price based on present earning power. Now the State has the right in Massachusetts to reduce charges. But, although it has that right, it provides that the cities must buy those companies as though that right did not exist—that is, as if they could always continue to charge the existing rates; and there is a growing demand in Massachusetts for some amendment in the conditions of purchase. There is also a feeling that the commission should take the public more into its confidence in the publication of results that it gathers from the reports of the companies as to the cost of operation. I was employed recently in the case of the City of Springfield v. The Gaslight Company before the commission, and although a good deal of information was furnished, the commission would not order the company to report what it was paying for coal or oil, although it was conceded and claimed by the company that that was a vital matter, as it would prevent their making a reduction in the price; yet the public was not allowed to know, or the mayor or the attorney, except as we could guess by studying the situation in the neighborhood. Now, it is held in Massachusetts that this is too great a degree of conservatism and that there should be absolute publicity as to all points germane to the issues at hand.

Q. Can you speak of any instances where purchase has been attempted by municipalities and this provision of the law has operated to the detriment of the municipality?—A. There are several cities: Chicopee Falls, Chicopee, and Gloucester. But there are several others in the eastern part of Massachusetts that complain that they paid very high prices for properties that were worth practically nothing but for a junk pile, and that they had to throw away nearly all the

plants after they bought them, although they had paid not only what the plant cost originally but in excess of it. But I still think the Massachusetts commission has given us some valuable lessons, and has gone a long way toward securing the publicity which is needed even under public ownership. They have compelled both the municipal and the private plants to keep their books according to the direction of the commission, and to make uniform reports. I believe, if anything, they control the municipal bookkeeping quite as much as they do the private.

Q. (By Mr. KENNEDY.) Does the consent of the commission have to be obtained before there can be any increase of capitalization?—A. Yes.

In England there is great interest in regulation; but, after all, the tendency toward public ownership is proceeding with great rapidity, more so, if anything, than here.

In England regulation mostly takes the form of bills in Parliament at the time the company is started, or subsequent bills whenever the company wants to increase stock and bonds. The companies in England can not increase their capitalization without special permits, and they are only allowed a permit for such an increase as the wants of the company at that time call for. As the plant grows with the growth of the community, they have to come to Parliament again in 10 to 25 years for another grant of power. They can not even buy an extra foot of land without going to Parliament for permission, and then comes an opportunity to investigate their charges and their efficiency of service, and there is a club constantly held over these companies to keep their accounts in proper shape. It is a very effective one, and there is no stock watering allowed there at all. Then there is an audit of accounts—a public audit of many of these private companies by central boards. Not in all cases, but take electric lighting; in electric lighting the private companies have to submit their complete returns, and I think their accounts are subject to examination by the board of trade. These reports are not published, but are accessible to anybody who wants to go there, and are practically published every week as they are made. The accounts of municipalities are very carefully audited. There are two independent sets of auditors, an auditor elected by the city council and an auditor elected at large by the people, and these are a check on the other. The English auditor seems to have a greater reputation to maintain than elsewhere, and they are very independent. They are almost a fourth body—a fourth cog in the wheel of government. A very admirable illustration appeared of this last month in the city of Manchester, England. One of the city auditors in auditing an account came to the conclusion that the head of the board of aldermen, Mr. Higginbottom, who had been asked by the city council to be their Lord Mayor for the next year—Mr. Higginbottom was denounced by the auditor in a public statement to the council giving all the details, to the effect that in auditing the accounts of the electric-light and tramway companies—plants owned by the city—he found Mr. Higginbottom was interested financially as a director in certain companies that supplied electrical machinery to other companies that had contracts to construct track and miles of wire, and so on, for the city. That might not look to an American, who is accustomed to far worse things, as being very dishonest, because the contracts always went to the lowest bidder, and there was no evidence that any injury had been done to the municipality. Nevertheless, Mr. Higginbottom was immediately forced by public opinion to resign from the council, giving up his hope of being Lord Mayor, and was retired forever to private life; and the council passed a resolution that they considered it essential to the development of municipal activity that no city official should be found indirectly interested in any contracts for the city while he was an official. Now, the auditor rendered that possible. He knew the facts and was independent enough to bring them out. The great lesson we get, I think, from the attempted regulation of these things, both in England and Massachusetts, is the importance of publicity, the importance of public accounting which shall control both the municipalities and the private companies furnishing these quasi-public lines of work. I may say that in England the central governing body, the local government board, audits the county reports, and those of the poor-law guardians. The reports of the municipalities are not directly audited as yet by any central body, but the demand for it seems to be growing, although there is not so much need of it there as here, because these locally selected auditors that audit there, with all their independence and powers, seem to preserve the English cities from abuses that exist here. We need it, and I want to call attention to the great work that is being done in Wyoming, which is the only State in this country which has attempted to audit all municipal and county accounts. All accounts of all the counties and subordinate local bodies in the State of Wyoming have to be audited by the State auditor, who prescribes their methods of bookkeeping, and many asso-

cisions in this country, like the American Economic Association and the New England Waterworks Association and the street-railway and electric-light associations and others, are all moving in that direction. Many of them have already indorsed the demand for at least a public audit of municipal work—and the demand is also growing for similar publicity with regard to all these local monopolies even when in private hands. I was very much impressed with its importance, when some 8 years ago I was asked to go to Albany to assist, by appearing before committees of the house and senate, the passage of a bill relating to New York gas companies. They were charging \$1.25 a thousand feet. There was every reason to believe that the price should not be in excess of 75 cents, or probably should be less than that, because the average price in England is only about 75 cents. Take the companies right through, large and small together, and the cost of coal is higher in England than it is here; labor is less; material is about the same; oil is higher there. On the whole, there is no great reason to think that the cost should be very different, and yet the cost was very much higher here. Since precise data is always needed and usually lacking we put in our bill a provision giving the comptroller of New York City the right to audit all accounts of the New York gas companies, and that was stricken out by the friends of the companies as apparently one of the most dangerous things in the bill. They even felt more terrified over that than they did over the small reduction in the price, which was finally secured, of 5 cents a year for 5 years until it comes down to \$1, which it will just reach next January.

Now, turning to municipal ownership, the best place to begin, I think, is England, because they have had longer experience. The movement has been checked or kept back in the matter of water and gas by the same difficulties that have confronted the extension of it in Massachusetts, namely, the high prices that must be paid to buy out the plants. Before the interest in the subject had become very great in England all private companies had secured perpetual franchises in both water and gas, subject only to the prospect of being regulated whenever they came up to Parliament for additional borrowing powers, as I have already indicated; and the English have a very keen regard for so-called vested interests. They have not gone so far as the American people, in recognizing the legislative right to reduce charges. Consequently, without much prospect of Parliament's reducing charges, although it legally has the right to do so, the companies were protected by the high price that they could expect to get if they were bought out. In spite of that, however, within the last 10 years some 40 gas companies have changed from private to public management, and over half of the water companies are publicly managed. A little over half of all the gas sold outside of London is made and sold by municipal plants. In the case of electric lighting and street railways, which, of course, are a recent development, the public had become awake to the dangers of perpetual franchises and the high prices that would be paid in purchasing them; consequently when they were chartered 20 to 30 years ago they were only given limited franchises, for 21 years in the case of tramways, and 42 years in the case of electric light—some of them even only 21 years; and in other cases the cities decided to begin by direct construction of their own plants and not have any private plant at all. That has particularly been the case in electric lighting, which is still more recent, of course, than street railways. The result of that is that nearly one-half of all the electrical supply, both for lighting and power purposes, in England to-day is in the hands of the cities.

In England this summer, where I had special opportunities for examination, as I was over there making some special studies for the United States Department of Labor, having letters in that way to Government officials, I took occasion to visit the municipalities that were trying these various undertakings in England and Scotland, and I went to 20 or 30 of the leading municipalities, and had letters by which I was able to have interviews with some of the managers of the private companies—some of the largest, such as London, Sheffield, Liverpool, and so on. Attempting to find out just what was the real result, what both enemies and friends of municipal operation could say, I found that in the case of tramways and electric light and water there was a special satisfaction with the results of public management. The private managements claim, however, that they had been unduly handicapped by the fact that they had only had short franchises. Whatever may have been the reason, the transfer to public management had been attended with enormous development of plant and output and large reduction in charges; but I did feel that perhaps the fairer comparison would be that of gas, where there had been no complaint on the part of the private companies that they had been handicapped, so I made a special comparison of municipal and private gas works in England and Scotland, and there I found that there were both advantages and disadvantages, or advantages and difficulties, that

confronted the municipal management of these undertakings. I found on the whole that the greatest difficulty consisted in keeping the workmen quite as energetically at work in public as in private management. They were well paid; but they had not yet fully appreciated that they were working for all of us; but public employment created a somewhat higher morale—a better feeling of public responsibility than working for private companies. In some cases they might have felt that, working for the community, they perhaps could be protected by the council if they didn't work quite so efficiently. However, no great harm had come from this, because the municipal councils in England are composed of a very fine class of men, not only business men, but of labor leaders. There are very few political heelers there, and boodles are almost unknown in any direct form. I found prominent labor leaders like John Burns, Keir Hardie, and others awake to the fact that the workmen don't yet fully appreciate all the new responsibilities that were being thrown upon them, and were themselves beginning to develop and cultivate this sense of civic responsibility among them. I found also some complaint by some engineers that it was harder to get a rise of salary in a public plant than in a private, because it required so much publicity; it was discussed all over the city, and it was a little annoying to them, although it was not a very serious matter except to the nerves; but they said there was more liberality in paying engineers than there used to be.

Q. (By Mr. CONGER.) You refer to civil engineers?—A. Superintendents and civil engineers. I found that the tendency of public employment was to remove the abuses in the labor conditions, reducing hours and improving conditions every way. They did not, I think, attempt to go so far in these respects in England as perhaps in some American cities, where politics controls more than anything else. In the matter of wages they did attempt to pay the standard trade-union rate in municipal employment.

Now, in tramways it has been the case that many private tramway or street-railway companies have refused to recognize unions and work their men very long hours. When the municipality took hold it introduced trade-union rates of wages and hours, etc. They did not attempt to go above that, but attempted to attain that level, but where there was no trade-union rate they attempted to give a decent scale of living.

The advantages which have come from municipal operation over there seem to be twofold. One was the financial matter. As a matter of fact, they were charging, if anything, less to the public than the private companies were charging. There is a slight advantage in the matter of lower charges, and with the same service or even better service. I found a financial advantage, however, that was especially spoken of—they could borrow at from 3 to 3½ per cent, while private companies were expecting to earn 7 to 10 per cent, and this allowed a large profit, which could be used for the public treasury, or it could be used, as some cities are using it, to reduce the prices. I was surprised to find that what many would expect to be the weakest point in public management was the strongest over there, namely, their enterprise, their readiness to introduce the latest machinery and inventions. That was accounted for partly by the fact that they were paying higher wages and working the men less hours than many of the private companies, principally in tramways, and they therefore felt the desirability of having as much labor-saving machinery as possible. In the next place, they could borrow money much cheaper and get a good deal more of it, the city credit being much better than that of a private company, and they therefore were willing to put in the very best machinery without very much regard for expense, although they had always to have it properly recommended by competent engineers, and they had to have it submitted virtually to engineers selected by the central board of trade or local government board. There was full supervision to see that there was no abuse in the matter. Then municipalities also have the tendency to reduce prices in their undertakings, and those reductions surprise them in their results. Consumption is increased even more than expected, preventing a loss which otherwise might have resulted. The companies are a little slower about any initiative in the reduction of rates—they are getting a good thing and they do not care to run a risk of losing it. The municipality, however, is directly influenced by public opinion and reduces the charges. There is one other advantage.

Q. You said a moment ago that you made a comparison of the efficiency of the service rendered by the municipality and the private corporations, and I was going to ask if you made a comparison as to the cost of production of gas by the private and municipal plants?—A. Yes. I was especially trying to study that.

Q. What was the result of that investigation?—A. There was very slight difference in operating expenses aside from interest and dividends. There seemed to be a better opportunity for studying it in the case of gas than in the other case, and

so I especially studied it there. I found that Field's analysis, which is the recognized standard authority all over the world, groups a lot of companies together, and shows very slight differences in operating expenses. Then I made other studies, and talked with engineers in many places. They said that there might be an increased labor cost if it were not for the fact that in municipalities they put in more machinery, which counterbalanced any tendency to increase the labor cost, making a net result of slightly lower operating expenses before you get to any question of dividends at all. That was rather surprising. One might expect to find that public management would be a little less efficient. They all admitted that they had to be a little bit careful to always try to get the workmen to realize that they were now working for the public, and not working where they would not be properly supervised and could safely shirk, but although they had to face that difficulty, they had not been much injured by it, and in many cases not at all; Scotland especially not at all.

Q. I understand, then, that you found that the labor cost was slightly increased, but that the net cost in the production of a thousand feet of gas, we will say, was a trifle less than in the case of private companies, because of the improved machinery that was frequently used?—A. That was almost right; not quite. The actual labor cost was not increased. It might have been increased had not machinery often been substituted for labor. If they had kept the old machinery, they probably would have had a slightly increased labor cost, but they put in so much new machinery that the actual results, when you come to tabulate them, of the cost of labor per thousand feet was less, as well as the salary account, although the men were being paid better wages.

Q. But the net cost of production, then, exclusive of dividends and investments, was less?—A. Yes, was less; but the difference was not large; it was very slight.

Q. (By Mr. A. L. HARRIS.) Do I understand the introduction of better machinery and better appliances reduced the number employed?—A. It virtually did that. The way they frequently manage it is this: The municipal plants are growing rapidly, owing to the fact that they cheapen the price, or that the communities are growing. Now, the introduction of this machinery does not usually lead to the discharge of men, but it enables them to get along without adding to the force with the increased consumption, so that it results virtually in less labor, although it might not result in the actual discharge of anybody. They always let some men go in summer on account of less consumption of gas than in winter. In the fall they would not, perhaps, put on as many men, the machinery being gradually introduced and being accompanied with such a corresponding increase of output all the time. There is actually a less number of laborers for a given output than there would be if they had not had the machinery, of course.

I was going to speak of one other result, namely, the moral results on the council, that is, a better class of men have been willing to go into the city councils and are even eager to go in. One of the best illustrations of that that I came across was at Birmingham, although I was confronted with it everywhere. Years ago, before Mr. Chamberlain took the lead in securing public management of gas works at Birmingham, it was under private management, and the president was a very able man. His son is now, I understand, either chairman of the gas committee or is seeking to be its chairman of the gas committee. He is in the council and his great ambition is, as chairman of the gas committee of the council, to make as great a record in the city of making the gas works as his father made in running the private gas works under the old conditions. Otherwise that man never would have wanted to get in the city council at all. In general, I have discovered a tendency for the business men, the energetic and upright leaders of the community, to have an ambition to serve on these committees that manage great financial interests more than formerly prevailed, and it is beginning, I think, to reach down and affect the engineers and superintendents, and it is thought that it will ultimately reach the labor forces; but it is rather recent yet and that remains to be seen.

Now, in America the results of municipal ownership are mostly confined to water, since there is very little else except in electric lighting, which I will speak of in a moment. It is very difficult to study the water question satisfactorily, because of the enormous character of the study and the little information that we have. That is true of all municipal matters in America—the lack of uniform accounting in either publicly managed enterprises or privately managed monopolies accounts for that. But some things seem to stand out very clearly in the water question, from all the facts attained, such as the late report of the Department of Labor and other reports that have been made from time to time. One of the things that stands out most conspicuously is that the charges are lower

usually under public management. Another fact usually is the increased number of fire hydrants and the extensions of mains to suburbs to supply all the community. Following that, although it has not been very much investigated, there seems to be often some tendency to reduce fire risks, fire hazards, and all that. There is a growing desire to increase the number of municipal waterworks—the number is increasing. Not long ago I noticed that in our largest cities there was only, I think, one instance of a waterworks that originally started in public hands going back to private ownership, and that one, New Orleans, has returned to city management. In the same list of over fifty largest cities there are 20 instances of change from private to public management.

Q. (By Mr. CONGER.) Could you furnish us with either a list or summary of the number of cities of, say, 50,000 inhabitants or more which have the municipal water plant and those whose water plants are in private hands?—A. Yes; I can. Of the 78 cities of over 50,000 population in 1900 only the following 19 have private ownership of waterworks. San Francisco, Cal.; New Haven, Conn.; Paterson, N. J.; St. Joseph, Mo.; Omaha, Neb.; Los Angeles, Cal.; Memphis, Tenn.; Scranton, Pa.; Bridgeport, Conn.; Oakland, Cal.; Des Moines, Iowa; Utica, N. Y.; Peoria, Ill.; Charleston, S. C.; San Antonio, Tex.; Elizabeth, N. J.; Wilkesbarre, Pa.; Kansas City, Kans.; Portland, Me.

Q. (By Mr. LITCHMAN.) How far is the claim made by the advocates of private ownership that an advantage, which is only an apparent advantage, is given to municipal ownership by the fact that interest on the cost of construction is not reckoned as an element of the cost of the municipal plants?—A. I will take that up right now, although I had planned to speak about the electric light, having spoken of water, but I will be glad to put it in right here. The common comparisons that we come across of the charges and profits of municipal plants in this country are criticised with considerable justice. Unless the plant has been paid for out of the net earnings, as in some cases is true, like the Richmond Gas Works and Philadelphia Gas Works, and in many other cases, hundreds of them—unless the plant has been paid for out of the net earnings, interest on the cost must be included in the expenses. Then, too, there are the taxes which a private company would pay if it was managing it.

Q. If the interest is reckoned, and the taxes paid by the private corporation, does not the consumer have to pay it?—A. I think, perhaps, I had better answer this way: In comparing a public and private plant, account will naturally be taken of the difference in charges. Assume that the advantage is, as it probably would be, on the side of the municipality. Then we want to supplement that by the question whether the municipal plant has counted in its cost all its expenses. Having already put down as an advantage the difference in price, we can not count that over again. But now we will consider, in the first place, what the total income to the city from the plant was, and then how much of that went to operating expenses; secondly, how much would have been absorbed in interest; third, how much the loss is in taxes, which would have been paid if a private company had been supplying the product.

Q. Would not the private corporation have charged that cost to the consumer in the price of the product delivered?—A. That is true.

Q. Well, then, in the last analysis is not the cost piled up by the private corporation?—A. I see what you mean. I think perhaps I can explain the situation all right so we will both agree on it. If you are comparing what the public plant is charging in this city, we will say, for water, with what a private company would charge, then your point of view is correct. If you are comparing what the cost of water may be in Washington, under public ownership, with what it might be in some other city actually supplying to-day under private ownership, then you agree with me, and that is the way the comparisons are usually made.

Now, to go on with the water question one step farther. I think I have come across a great many waterworks engineers that seemed to have a great sense of public spirit in the management of the enterprise, who were very proud of the fact that they were connected with a public enterprise, and I believe are doing as good work as is done anywhere in the country. The sentiment is becoming almost overwhelming that water should be owned and managed by the community. The question at issue more relates to gas, electric lights, and street railways. I think the principles are very much the same in those cases, but it is only a question of expediency how fast to go. I do not expect we can go suddenly from one system to another. I believe, whether we like it or not, we will admit the tendency is toward municipal ownership. I do not expect, however, it will become universal in our lifetime, but that it will grow relatively faster than private ownership seems to me the teaching of history.

That is true of electric lighting. I was going to say with regard to electric

lighting that while the amount of capital invested in public electric-light plants is but a small percentage of the total, that is not quite fair evidence of the interest in the subject of municipal management of electric-lighting plants. These plants are kept back by hostile legislation. Many legislatures are so much dominated by the interests opposed to public management that they refuse to allow cities to operate plants. Especially do they refuse to allow them to sell electric light to private consumers, and that very much checks the growth of these plants; or they pass laws regulating the terms under which they must purchase private plants.

Q. Like Massachusetts?—A. Like Massachusetts; and Connecticut is still worse; but, despite all this, these plants are growing. I think some of the best electric-light plants of the country are now public plants, as in Chicago and Detroit. Under the present superintendent, Mr. Ellicott, backed up by civil-service rules, the cost of operation in Chicago fell from about \$96.76 in 1895, for arc lights, to \$55.93 in 1899. I may say the Chicago plant is the largest electric street lighting plant in the world owned by a municipality.

In Allegheny, with 1,300 arc lights, the operating expenses last year were \$47.35. Add 4 per cent interest, and even 5 per cent for depreciation, and add such taxes as a private corporation would have paid, and you only bring it up to \$71.17.

In Detroit, which has about 2,000 arc lights under public management, the operating expenses last year were \$40.30 per arc light.

Q. (By Mr. A. L. HARRIS.) Are each of the same candlepower?—A. Yes; each are of the same candlepower—about 2,000 nominally.

Interest at 4 per cent on cost adds \$12.89. Depreciation, at 3 per cent, would add \$10.12. This is from the report of the Detroit electric-light commission. And taxes, such as a private company would pay in that city, adds \$3.14, bringing the total to \$66.45. Now, I do not give these various figures to contrast the three cities, where prices of coal, etc., differ, but to contrast the charges there with the average charges in large privately owned electric-light plants in big cities.

Take Allegheny, for example. I do not know how it is this year, but until this year Pittsburg, right across the river, was paying \$95 to \$100 for the same kind of arc light that Allegheny was getting for less than \$75, including sinking-fund charges.

So take Detroit. When Detroit was considering the construction of a lighting plant 5 or 6 years ago, the best bid they could get was \$102 a year on a 10-year contract. The first year or two it cost them about \$102, after allowing for interest and sinking-fund charges. The cost was reduced steadily until, as I just said, last year, after allowing interest and depreciation charges, they brought the cost to only two-thirds of the best contract the city could get at the time when it entered upon the construction of its plant. And yet Detroit has been handicapped by not having the economies which would have resulted if it could have also sold to private consumers, and the additional advantage that many lighting plants get, particularly in England, and private companies in this country, where they are under the same management as electric street railways and where from the same power plant they furnish power for all purposes.

Q. (By Mr. CONGER.) Can you tell us by making a comparison as to the extent to which these municipally owned electric lighting plants are allowed to do commercial lighting in this country and in England?—A. In England all of the public plants are allowed to do commercial lighting; in this country but a small proportion of them, but I can not give you the exact figures upon it. I do not know that these facts are available. That is one point that would be very good to investigate. In Massachusetts they are allowed to do it.

Q. Is it a fact that a very large majority of the municipally owned electric lighting plants in this country are doing what is generally termed public lighting only?—A. That is true. It seems to be the theory that the city is not justified in doing commercial lighting; that its functions should be that of lighting its own streets; but it seems to me that it is a function of the city to look out for the interests of its people. The moment you recognize that lighting is itself a monopoly, although of course it is right to treat the private company already in the field fairly, I think it ought to be bought out. I do not believe in a city going ahead without any consideration for the existing company, although I do not agree either with the Massachusetts law, which compels such a high price.

In considering the development of the electric light, I tried to make a good many comparisons in this little book on municipal monopolies, published by Crowell; and I notice Carroll D. Wright, on a slightly larger scale, made comparisons in his last report, selecting and classifying plants, public and private, in groups according to the number of hours and according to their magnitude. I attempted to do it according to the cost of coal, too, for that is a very important

factor. Both his figures and mine indicate the superiority of municipal operations. When I classified all the plants of the large industries together, there were a few plants that had been sold and gone back to private management; but I have noticed in my attempts to study it for some years that for every plant that has gone back to private management there are probably 20 that have turned from private to public. And, further, we speak of some public plants having been financial failures, but you will see even some private companies that have gone into bankruptcy and failure.

Q. (By Mr. A. L. HARRIS.) Have you investigated the cause of these failures?—A. Generally speaking, the cause of these failures has been the spoils system in politics. I should say broadly that was the chief factor. Sometimes there has been connected with it the lack of general business sense in the council, leading to the selection of a poor engineer or to not improving the plant sufficiently and equipping it up to date. That is another factor. The two generally are apt to go together. But it is evidence of the vitality of the movement that despite these tremendous drawbacks it is still growing so rapidly. I do think its growth is greatly restricted by these handicaps, and that there will come a new interest in the improvement of municipal government when there is brought home to the people more than it has thus far been the relation between the reform in government, civil-service reform, etc., and the possibility of extending the management of the monopolistic industries. Now, I am not a socialist, and do not believe that all industries should be owned and controlled by the people. I think where competition continues that it should be allowed to continue, and I expect that competition will always continue in many lines of business; but where competition breaks down of its own weight, and monopoly comes by apparently an evolution of things, then the public must control it in some way. I do not even say they have the present capacity to own and operate all of them, but they should begin by learning through publicity of accounts what profits these monopolies are making, and by seeing what can be done through regulation and taxation. But experiments in municipal operation should be at once undertaken and the causes of success or failure should be carefully studied and widely noted.

I was going to say right here, I think the greatest trouble in the civil-service reform movement thus far in this country has been, not that the leaders of it have not had the best intentions, but they did not have popular sympathies and wanted after reforming the Government to put it on the shelf and have it do nothing. As a friend of mine said the other day, he did not see what great advantage there was in trying to get a reformed government which was not to do anything afterwards. But when people begin to see a connection between the improving of the Government and having it practically useful in a cooperative way, and in bringing them to that possibility of living more remote from the city through cheap transportation, cheap fuel, cheap light, and all that—for gas is coming more and more in use for fuel—and cheap telephone and telegraph service, which I have not touched upon to-day; and so on, there will be an increase in that popular interest in having the Government better managed.

Q. How far will perpetual franchises interfere with municipal ownership?—A. I am informed by some of the best lawyers, some of whom are still in the employ of large private companies, that if the time comes—and they believe it will—when the public is ready to treat these companies as they treat each other, or, even without going as far as that, when it is simply desired to exercise what legal rights the people have, they will find ways of both regulation and of securing a purchase at a reasonable figure. Most of these franchises have defects in them. There is many a street railway company in America that has failed to secure a franchise for some connection in the street, and they have constantly to go to the councils for some further extensions, rights to tear up the streets, etc.; and then in other cases there are reserved rights which the courts are coming more and more generally to recognize in the State legislatures to regulate charges and to tax by special forms of taxation monopolistic earnings. I have no doubt whatever that when the people really wish to take hold of this question they will find very many legal ways to get at it without any destruction of our form of government, and that the courts will find ways to sustain them.

Q. (By Mr. LITCHMAN.) It will be somewhat in the way the perpetual franchise of the steamboat route on the Hudson was, which was afterwards declared to be unconstitutional?—A. Yes; it will be that. I have heard one of the most prominent lawyers in the city of New York say that he thought a 50-year franchise was much more safe than a perpetual, and much less liable to be disturbed by the courts—or a 99-year franchise, or anything of that kind. I was going to suggest that there are certain points that a commission like this could very well study up and devote a little time to, if so disposed. One is the comparison of the

labor conditions in public and private managed monopolies in this country—the study of the wages, I mean, the hours of labor, the tenure of employment in public and private gas companies, street railways, electric-light and water works. That would furnish many opportunities of comparing the two systems. Again, municipal accounting. And third, I think it might be a very excellent thing to tabulate all the facts that have thus far been gathered in this country and Europe, where authoritative investigations have been made on this subject. What I mean is this: There has been a late committee in Parliament on parliamentary trading. It has not made a report yet, but it has taken testimony all last year—had a stack of testimony that high [indicating] that has not been accessible to American readers or to many in Europe. Now, it would be a very good thing to cull the facts out of that testimony. And the United States Department of Labor has issued a volume as large as this lower one here [indicating]. That has only a very small amount of tabulation and classification compared to the amount of data. There is a great deal more to be extracted from that report than has been done. There are other investigations that might well be put through the crucible and out of it come a digest of what has been gathered. This should be done in a perfectly scientific spirit, without attempting to prove anything, but just finding out what facts we have and what they tend to show, so far as they are authoritative. Then, if the commission care to go into it, I think it would be a capital thing to select some of the leading public and private plants in America—not all, by any means, but a limited number, perhaps 25 waterworks of each kind, and so of electric-lighting plants. You can not go beyond that, because there are not as many public street railways now as in these other departments; but have the best investigation possible of those plants as typical with regard to their enterprise, with regard to their engineering conditions, whether they are paying, which plants are most up to date considering the work they have to do, which plants have the best results in operating expenses, in treatment of labor, and all that, and in charges, and so on. A very interesting comparison could be made along that line, I am very sure, if the commission cared to go into it. Then it could work out the capitalization of these companies and the extent to which ownership is becoming consolidated. It would be a very interesting thing to make a study of the few syndicates that have such weight and such widely extended interests all over the country in these enterprises; the street-railway interests and gas interests as well being not only consolidated, as I say, in one city, but the same people controlling them in one city are controlling them in others. You will find the Standard Oil Company and its directors are having a very large interest in gas and street-railway enterprises all over the country. That would be a very interesting thing to bring out, I think.

Q. (By Mr. PHILLIPS.) You spoke of the telephone and the telegraph?—A. Yes; I mentioned that somewhat vaguely.

Q. Will you please give us some information on that?—A. I will; a little. In England this summer I found the municipal operation of telephones extending very rapidly. I visited the telephone exchange in Glasgow, where the municipality will soon begin placing telephones for 10,000 or 15,000 subscribers; and in London they are soon to begin; and the charges are going to be less, scarcely more than one-half what the private companies have been charging. The Government owns the trunk line in England connecting the various cities, and then the municipalities are going to construct, and are constructing in some cases, plants for their districts. The work, of course, has not gone on far enough yet to know what the results will be. They are looking forward with great confidence; and in some other countries where they have been managing the telephones for some time, like Norway and Sweden and some portions of Germany, there has been very much satisfaction; and that is one reason why they are going into it so much in England. I think that in this country there is quite an opportunity for municipalities to develop telephone service in connection with the police and fire-alarm system, and to extend gradually. I noticed some little tendency that way in Chicago, until a greatly reduced rate was made to the city by the company. But for the benefit of the private consumer it would be quite an advantage to develop telephone service in this way if you can not secure a reduced rate for service in any other way. In fact, I like to see municipal activity develop on general principles. I think it tends to increase the interest in government; it tends to increase, I think, our faith in democracy if a city finds it is able to manage such monopolies as those we are speaking of. Still, I am not wedded to it, and, I think, in many cases the public are not ready for it. In many cases we have got to go through a period of attempted regulation before the people are ready for public ownership and operation, and regulation will not hurt anything for any of us, and the more light we can have and the more publicity the better; then we will know more fully what we do need.

Q. (By Mr. A. L. HARRIS.) It is not universally used, is it, like water?—A. That is true; and yet it is astonishing how much the telephone will be used when it is reduced. I lived in a town in Kansas—Manhattan—for two years, where the rate was abnormally low, although it was owned by a private company. But that company was enterprising and believed that it could make more money by low charges, and it did make over 10 per cent. But the charge in that town for household use was only \$1 a month. To be sure that does not mean that they could afford to do that in an enormously large city, for this exception applies there to a certain extent, that the cost increases with the size of the plant, and in most other lines of business it decreases. The number of connections you have with others tends to increase the operating expenses somewhat per phone, but not enough to justify the large charges in general in cities. In Kansas that low price led to almost everyone having a telephone. A dollar a month for houses, and a little more in stores, led to almost every family and every merchant having a telephone. And I think that reasonable charges for telephone service in this country would lead to more than double its use. It would also lead to people of more moderate income, of \$1,000 or \$1,200, using them.

Q. (By Mr. CONGER.) Do you know how many telephones there were in that exchange, approximately? How much of a city was it?—A. It was a little over 3,000, aside from the college.

Q. Did the company make any money at those rates?—A. It did; it made good dividends.

This company that I referred to had 220 phones in that town of 3,000 population, of which 170 were in houses and 50 business phones. When you think that 3,000 population only means about 600 families, 220 phones means one phone in every three families.

Q. (By Mr. PHILLIPS.) Have you any remedial legislation to suggest along these lines?—A. I would suggest that the true legislation probably will have to be State legislation; but this commission can recommend uniformity of State legislation along certain lines, and it might very well recommend also that a Government department—I suggest the Department of Labor—might continue its investigations and systematize the bookkeeping of cities by an investigation of their accounts and a report upon them annually. The United States Department of Labor has recently made an investigation of cities of over 30,000 population. It might be urged to keep it up and extend it down to cities of smaller size.

Q. But it has no authority to dictate any form of bookkeeping—the Department of Labor?—A. No; but it would have an influence in calling the attention of the country to the need of it, the more it tries to get this information.

Q. (By Mr. LITCHMAN.) Do you find, as the result of this investigation, that the law requiring that in Massachusetts, as applied to electric-light companies, has worked satisfactorily?—A. That feature of it has, I am sure. I understand the gas people themselves and the electric-light people say that in private management it has led them to observe how much better some companies were doing than others, and has led them to introduce improvements, so that they do not object to it in that respect if it does not lead to too much agitation over reducing prices. They do not like that, of course.

As to recommendations further, there might be recommendations to the States as to the conferring upon the State auditor the power to investigate every year and audit the accounts of quasi-public corporations using the streets and also the accounts of municipalities. I think that would be a reasonable suggestion which would not frighten anybody and is right along the line of what is needed. There is nothing radical about it really, and yet it is really radical in its results and is one of the most important things that can be done. I do not know that the commission had better make any positive recommendations as to the policy of ownership. I think the people will decide that question as they get the information. But what the commission can well do is to get all the information possible and then suggest ways by which more can be gotten in every State and in the National Government.

I would bring out this point, as to me it is a very important one in considering questions of municipal activity. It is suggested, How are you going to get rid of the spoils system? I have referred to that already, but I want to say this further. We see under private management the efforts of these vastly influential and wealthy companies to keep their old franchises or to get better ones or to escape their share of taxation. They are in politics now. I was told only the other day by a very intelligent employee of a certain gas company that all the employees in that large company, although it was privately owned, had to be recommended to their places by the political boss of their precinct, and had to keep up their membership in the organization in order to retain their positions. When

the Philadelphia gas works were still under public hands, they were buying 40 per cent of their gas from the private company which afterwards leased the whole. I heard the superintendent say to an investigating committee of the Pennsylvania senate that they always took their employees at the recommendation of the Philadelphia aldermen, and that they did not keep them more than an hour if they were inefficient. In fact, they were not anxious to keep a great many of them a long time, because, he said, "The more different people we can hire in a given month the more aldermen we can please the more times." These companies are in politics, in other words, now, and they are one of the most demoralizing factors in politics; I believe it is going to be easier to convince the people of the need of civil-service reform and business efficiency than it is to get rid of the demoralization connected with this relation of private companies to legislative and administrative bodies. In directing work against the evil conditions of the present spoils system we do not encounter very much sympathy from the leading business men, the powerful interests of a community. One can express his antipathy to the spoils system, can work against it very hard, and his local opportunities for employment, the circulation of his paper and his position in any line of activity, as a merchant, manufacturer, or professional man, is not likely to be very much hurt. But let him come out with equal energy to prevent certain influences controlling the granting of franchises in the way they are granted, and demand better regulation, and, if he is a lawyer, he finds his clients of the most profitable type falling away; he is apt to find, if he is a business man, more or less influence working against him; advertising will fall away from his paper, and in every other line the results will be the same. And so I think it is really harder to improve the regulation of private management than it is to reform the abuses of public management. Still, I do not mean to say from that—and I have repeated that several times—that any change can be sudden; but I believe there are evils and dangers in public management that will have to be very fully recognized and very carefully guarded against. We need not expect that we are going to jump into the millennium; only I believe the progress will lie in the direction of municipal management in those lines, even if it only goes as far as it has gone in England, until half the cities have publicly owned gas works and half have private management. The private companies in England do not oppose the public as they do here, because of the fact that half of the cities are under public management in those things and the other companies know that they will be in danger if they do not look out. The principle of competition is an admirable thing. I think we should have a greater approach to equality in this country between the cities that are owning and the cities that are not owning at all. The Brooklyn Bridge is an admirable example of public and private management of street railways. Since it was taken over by private management there is a great deal more fault-finding and dissatisfaction than there was before. It is now practically under private management. It gave for many years one of the most admirable examples of public management we have—right at the doors of New York and Brooklyn.

Q. (By Mr. CONGER.) Do you know whether one-half of the cities of Great Britain have street railways under municipal operation?—A. Just about one-half, I should say. I can get more exact details on that. About one-half of all the electric energy supplied for the combined purposes of street railways and lighting is municipal. Local authorities in Great Britain own 520 miles out of 987 and operate 233.

Q. Those two enterprises—the street railways and the lighting—go together?—A. There is more and more tendency to have the same power stations.

Q. Is there a common universal fare on street railways there?—A. No; they have a system, which I do not like very well, of graduated fares according to distance. That is found in private management just as much as it is in public management. The tendency under public management is to increase the distance you can ride for a given fare, and a few cities are talking of soon introducing the uniform fare like the American. They have also introduced it in the private subway which has just been completed and is running in London. In Liverpool, where the city has very lately acquired the street railways, they are talking of introducing it.

Q. There is no example of uniform fare on a street railway in Great Britain?—A. I will not say that there may not be two or three instances within a year. I think there may be, but only a few.

Q. You spoke in the early part of your testimony of a system of municipal ownership of tracks and private operation of the railway. Are there any notable examples of that system in Great Britain; and if so, what are they?—A. There were a good many like Glasgow. There are still 44 such, but 17 others were

gradually succeeded by municipal operation when the franchises ran out. The companies did not seem to be as progressive as the people wanted. Now, whether it was due to this system of ownership, or whether it was due to the limited nature of their franchises, I would not undertake to say.

Q. Do you know what the time limit of those franchises was?—A. It was 21 years.

Q. For operation?—A. Yes.

Q. And that system, according to your observation, has not been very satisfactory in Great Britain?—A. No. I do not say that the English people would feel sorry they went through it. They would tell you, I think, that if they had not done that they probably would have surrendered the whole thing to a private company at the time it was undertaken years ago, and in that way would financially have been worse off. It enabled them, when they did want public ownership, to get it easier and cheaper, but purely as a system of operation I do not think they are very well satisfied with it.

(Testimony closed.)

WASHINGTON, D. C., December 11, 1900.

TESTIMONY OF MR. ALLEN RIPLEY FOOTE,

Editor of Public Policy, Chicago.

The commission met at 10.40 a. m., Vice-Chairman Phillips presiding. At that time Mr. Allen Ripley Foote, of Chicago, Ill., editor and proprietor of *Public Policy*, was introduced as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. LITCHMAN.) Please give your full name, your post-office address, and your occupation or profession.—A. Allen Ripley Foote; post-office address, 132 Market street, Chicago; editor and proprietor of *Public Policy*.

Q. As editor of the paper have you made studies of economic subjects?—A. Yes.

Q. And particularly in relation to municipal ownership of what are commonly known as public monopolies?—A. Yes.

Q. What was your profession before engaging in the editing of this paper?—A. I have been a student of these subjects and a writer upon them for about 10 years. The first work that I did in a published form was a small book issued in 1889 under the title of *The Economic Value of Electric Light and Power*. Following that I compiled the laws of each State in the Union affecting public-service corporations within municipalities. That was a very large work, and covered all the laws of each State in the United States, from the organization of the State up to the date when the work was completed, and the decisions of the courts. To do that work I employed an attorney in each State to write up the section for his State. Then I had an editing attorney who wrote a general section and edited the attorneys' work. My own part of that work was a discussion of the economic principles involved in that legislation. Since then I have been writing pamphlets and addressing different organizations on these subjects. In 1890 I drew the schedules for the Eleventh Census that had to do with the electrical industries.

Q. Now, will you kindly, in your own way, give us a statement of your views in relation to the municipal ownership or control of these so-called public monopolies?—A. I can do that in a very brief way by simply referring to some matters that will give the record exactly. In 1890, at the annual meeting, then held in Washington, of the American Economic Association, I offered two resolutions which define my position on this question then and since and now. They are very short and I will read them.

(Reading:) "Resolved, first, That a committee be appointed to designate the divisions of accounts, and the items to be included in each, that should be kept by corporations performing quasi public services.

"Resolved, second, That said divisions be so made that the effect of each essential economic factor will be shown, to the end that correct statistics may be obtained through a uniform method of accounting as a basis for intelligent economic discussion and legislation."

My remark following that is simply this:

(Reading:) "We must first agree on what items constitute cost; then we must see to it that these items are honestly included in all statements of cost. This done, we are in a position to take intelligent action, and may then award the contract to the municipality or to private enterprise, whichever in the light of the

facts so obtained may appear to be to the best economic advantage of the greater number of people—those who toil and are poor."

That is my attitude on the question and always has been—is to-day. In the discussion referred to in my law book I have a paragraph to show my attitude, which I will read.

(Reading:) "When a public need is to be supplied the service must be rendered either by the representatives of the public in the name and for the account of the public or by industrial corporations in the name and for the account of their share and bond holders. Which course shall be pursued is purely a question of public policy. The economic principle involved is that of serving the interests of every individual economically through the public service rendered. If this result is gained under the management of a political monopoly more effectually than under the management of an industrial monopoly, then the State is bound, by the sacred trust it represents, to place and keep the management under the administration of the political monopoly; but if the reverse be true, the duty imposed upon the State demands that it shall place and keep the management under the administration of an industrial monopoly."

Here is another paragraph:

(Reading:) "It may be affirmed as a fundamental economic principle for the guidance of economic legislation that no public need should be supplied under the management of a political monopoly that can be supplied with equal economic advantage to the users of the service under the management of an industrial monopoly. The best interest of the users of the service is the first object of the protection and care of the State."

Here are two propositions:

(Reading:) "First. That an industrial corporation organized to supply a perpetual municipal need shall have the exclusive right to supply the need perpetually.

"Second. That all accounts shall be honestly and correctly kept; that economic thrift shall be insisted upon in every department, and that charges for the use of services shall bear a fixed relation to the necessary cost of production."

This, I judge, is sufficient to indicate my position on the question.

That work was done in 1892. Since then I have been studying these questions in every form in which I came in contact with them, and I have no occasion to change my position in the matter. My last work was in connection with the Ohio legislature last winter (1900). I attempted to draft some bills to bring my views into practical use. You will see at once from the attitude I take that I say a uniform system of accounts is fundamental to any settlement of the question, whichever way it is settled. The facts must be known; you must act upon the basis of fact or you can not act intelligently. Therefore I have concentrated all my work these 10 years directly to that point, working up to that point. It is now getting to be quite well understood, and there is a great deal of work being done toward starting a system of uniform accounting.

The best work that has been done in that line is in the State of Wyoming. That State has an examiner who has been in office about 10 years. His powers are ample and his work is good, and the benefits derived from the work in that State are sufficient justification for the representation that has been made. I have in my hands a paper that the State examiner, Mr. Henderson, is to read this week before the League of American Municipalities. (Charleston, S. C., December 12-15, 1900.)

Q. (By Mr. CLARK.) Is this gentleman a State officer?—A. Yes; he has held this position of State examiner for about 10 years, and this paper gives his experience of the practical workings of it. Mr. Henderson is known as the State examiner. We would call him auditor, but they use the title "examiner." The law under which he acts gives him authority to enter into any office where there is a public account kept and examine the accounts. He examines the accounts of all the State institutions, the State University, the State corrections establishments, the insane asylums, and all public institutions. He examines all the accounts of the county commissioners—I do not know whether they have townships or not; but the law is very broad. It lets him examine every account that affects the public interest. He reports to the governor. The law gives him the authority to enter the office, make an examination at any time he pleases, without notice, and if he finds a condition that justifies it, it empowers him to take possession of the office in the name of the governor of the State and turn the incumbent out instantly, making his report to the governor, of course, and having his action justified afterwards. It is broad enough to cover every contingency of that kind. He can compel the attendance of witnesses, the production of all books and papers, put people under oath, and take evidence, etc.

Q. (By Mr. PHILLIPS.) Does he do this through expert accountants, or do it all himself?—A. He does it himself.

Q. Is he able to do it all?—A. You know that State is small; that is one of the advantages. There has been an opportunity where the system could be experimented with on a small scale; but the work is ample justification; and in the light of the advantages mentioned in the statement Mr. Henderson makes, I can not see how any State legislature can refuse to put this system in operation in any State.

Q. (By Mr. LITCHMAN.) You think there is nothing that would prevent the application of this system to a larger State—examining the accounts in a larger State by the use of an additional number of examiners?—A. The principle of the law is all right. Of course, when you come to your adjustments, it takes a different form. In some States you would call your man the controller or the auditor; you would want the work done through one office or another, or you might create an independent office for it, but that is all detail.

Q. But the main point is the system of public accountants?—A. Yes. I have been in close touch with Mr. Henderson for a number of years and he has furnished me the pages of all his forms of accounts and everything of that kind, so I am about as familiar with it as I could be, not being in the State and working with him. And I get his reports.

Q. (By Mr. KENNEDY.) His duties relate to the quasi-public or so-called municipal monopolies only, and not to all the corporations of the State?—A. The law does not apply to the corporations; it applies to all public accounts.

The title of this paper is this: "The benefits derived from uniformity and independent auditing of public accounts."

Q. (By Mr. LITCHMAN.) And this leads up to the position which you take on this question, and is in detailed explanation of that?—A. Yes.

Q. (By Mr. A. L. HARRIS.) I suppose Mr. Henderson, of course, gives full authority for that paper to be used by you in your testimony?—A. It is in my hands, to be used in my discretion.

(The paper above alluded to was thereupon read by the witness, as follows:)

THE BENEFITS DERIVED FROM UNIFORMITY AND INDEPENDENT AUDITING OF PUBLIC ACCOUNTS.

[A paper by Harry B. Henderson, State examiner for the State of Wyoming, read before the League of American Municipalities at its fourth annual convention, held at Charleston, S. C., December 12-15, 1900.]

In discussing this subject it must be assumed that a uniform system of accounting has been adopted; that the State or States, as the case may be, have provided by statute for the creation of the office of examiner, and that he has entered upon his duties.

HIGHER STANDARD IN ADMINISTRATION.

A plan for uniform accounting can not be made operative without the machinery necessary, i. e., a statute providing in general terms for the creation of an office or commission that shall be vested with power to provide the necessary forms to be used in establishing the system.

The creation of the office of examiner or of a commission indicates clearly the desire of the people to rise to a higher standard in the administration of public affairs. This statement you may question, but I hope to be able to show conclusively that uniform accounting and public auditing or examination bring a higher standard of intelligence and morals among office seekers and officeholders and that the burden of taxation borne by the people and taxpaying public is lessened.

BEGINNINGS OF THE SYSTEM—WYOMING'S LEAD.

Uniformity in accounting and State examination by an authorized officer or commission, in so far as it relates to State, county, and municipal affairs, is of recent origin. I believe that the then Territory of North Dakota was the first to provide for a Territorial examiner, whose duties were briefly prescribed and were of a superficial nature.

Minnesota next followed Dakota's example and included with the duties prescribed by the Dakota statute the examination of accounts of building associations.

Wyoming was first to provide for the examination of the accounts of State and county officers and accounts of State institutions and State banks. Later the law

was so amended that at the present time the examiner has full and complete supervision of every public account within the State, whether State, county, municipal, or school district.

In more recent years attempts by other States to enact a law having provisions similar to the law in effect in Wyoming have almost all, for various reasons, failed of enactment. The opposition to the passage of such a law has come from all sides except the taxpaying public.

SOURCES OF OPPOSITION TO THE SYSTEM.

Among those opposing such a measure may be found designing officeholders, schoolbook companies, bridge companies, and others, including individual members of boards of trustees, regents and faculties of universities, colleges, and historical societies, none of whom have any material interest in the economical administration of the affairs of public government. I regret to make a statement of this nature, but it will be an advantage to those whose efforts will be directed during the coming winter toward securing the favorable consideration of such a law by their legislatures to know where their opposition may be found.

MEANING OF THE TERM "UNIFORM ACCOUNTING."

To determine the benefits we must ascertain what is meant by uniform accounting. Uniform means regular, unvaried, alike, consistent.

Uniformity in accounting provides that all records shall be alike; that is to say, records of all county treasurers shall be alike in form; their reports shall be alike; in fact, the method of keeping accounts shall be so similar that the treasurer of one county might enter the office of any other county treasurer within the State and at once be able to keep the accounts of the office and perform the duties as successfully as the true incumbent. This is what we term uniformity in accounting.

ALL PUBLIC ACCOUNTS SHOULD BE INCLUDED IN THE SYSTEM.

How far should it extend? To every county, city, town, borough, village, school district, or other political subdivision, and last, but not least, to every officer of the State and all of the State institutions. It should be so complete as to embrace every department of government within the State. Each department should have records and report blanks especially prepared and should report upon call to the officer having supervision on a date already passed. Under this plan it will be possible to compare the receipts and disbursements in every department of government with those of the previous year, and the finances of one county or city may be compared with a neighboring county or city. Further, the report will show the sources of receipts and the purpose of disbursements.

ADVANTAGES OF SUPERVISION. DEPARTMENT SELF-SUSTAINING.

But, you ask, are there any benefits to be derived from such a system of accounting without the supervision of some one charged with the duties of an examiner? Yes, there are advantages, but the statistics are not recognized as being reliable; they have not been under the scrutiny of a disinterested and unprejudiced person.

Permit me to say that superior advantages will be derived if there is supervision by an officer having authority to ascertain whether or not such reports are correct. Such an officer should be free from all alliances with any other office; he should have no superior officer save and except the governor. The expense of maintaining his department will be amply repaid through the system he will enforce and the funds illegally disbursed that he will recover. From one source alone I derive for the State 50 per cent more per annum than is necessary to meet the cost of my department. The duties of a State examiner are not confined to merely checking up and examining the reports of officers; they embrace a thorough examination of the accounts and checking them into the proper charge columns.

DUTIES OF AN EXAMINER.

A technical and detailed examination of the accounts of all fiduciary officers must be made; an examination of this character leads to an inquiry into the several causes for the creation of certain lines of expense. The examiner must report truly and intelligently, without fear or favor, and it is his duty, and he will, if he is a proper officer, ascertain whether or not the expenditure of public funds has been economical.

"He must be a business man, having the ability to manage and direct one of the greatest business interests of our country. He must be able to confer in an advisory capacity with the officers whose accounts he supervises. Too often individuals are elected to public office who have no adaption to the business to be performed; their education and training have been along other lines. Then it is that the impartial counsel of an examiner becomes of value to the public. It is then that his business experience operates to the benefit of the governed."

LAVISH EXPENDITURES IN THE ABSENCE OF SUPERVISION.

Having defined uniform accounting and briefly enumerated the duties of an examiner, I will now endeavor to set forth some of the benefits to be derived. I can not give you the experience of a predecessor, Wyoming's system having been developed under my supervision. I want to give you facts, not theories, and trust that you will bear with me in my remarks, that are necessarily of a personal character.

During the early period of settlement in the West the value of money was not as carefully considered as at the present time. Individuals were lavish with their own funds and oftentimes with borrowed money, and they subsequently found that in a remarkably short time a competency had been squandered, and that their liabilities largely exceeded their assets.

This condition was not confined to individual interests or private enterprises, but was manifest in a greater degree, perhaps, in public affairs. It would seem that in every new county created or municipality organized the first effort made by the persons having charge and control of public affairs was to create an indebtedness evidenced by warrants or other securities, and to lavishly expend the proceeds without regard for the interests of the taxpaying public or future generations.

I have referred to this condition as existing in the West; perhaps it is not confined to that particular locality: in fact, if reports are to be relied upon, I am disposed to believe that there are at this time just such conditions existing in many municipalities and other public governments of States located east of the Mississippi River.

WYOMING'S CONDITION BEFORE ADOPTING THE SYSTEM.

Wyoming, in common with other States, suffered from the negligence and lack of business methods that prevailed among public officers. Her county indebtedness had increased from year to year, while there was no perceptible increase in the value of her improvements.

Our constitution provided that any indebtedness existing at the date the Territory was admitted to statehood might be bonded, provided the bonds issued should not exceed 4 per cent of the assessed valuation of the county or municipality, as the case might be. The counties availed themselves of this privilege, but, with perhaps two exceptions, immediately proceeded to create new indebtedness, contrary to the provisions of the statute, that would subsequently have to be legalized and cared for or repudiated. The ultimate result attending the creation of such indebtedness was not a matter of serious consideration of the officers who assisted in creating it.

BEGINNING OF BETTER CONDITIONS.

In 1892 I found that the expense of our county governments amounted to \$412,000, a large amount of which could not be and was not paid from the revenues then collected.

In 1893 I endeavored to curtail expenses and abolish the system of creating an indebtedness that had no legal standing. In this I succeeded, with a few exceptions, and subsequently secured the enactment of a provision of law making it an offense to create any indebtedness in excess of the actual receipts of the current year for public account, the current year, as defined, being from the first Monday in January last past to the first Monday in January next ensuing.

AN EFFECTIVE REMEDY FOR UNTHRIFTY ADMINISTRATION.

This law further provided that any indebtedness created in excess of such receipts should be null and void, as against the county or other corporation, but that it would operate as a lien against the officers creating the same and their bondsmen. This restriction had the desired effect.

EVERY COUNTY ON CASH BASIS. TAXATION REDUCED. TOTAL COUNTY EXPENSES
\$117,000 LESS THAN IN 1892.

In 1892 there were two counties in our State upon an approximate cash basis. County scrip was sold at from 50 to 90 cents on the dollar. To-day every county of the State is on a cash basis and has a surplus to carry over to the succeeding year. This condition has existed for two years, notwithstanding the fact that our rates of taxation have decreased annually. The expense of maintaining our county governments in the year 1890, compared with 1892, shows a decrease of \$117,000.

NO INDEBTEDNESS IN MUNICIPALITIES, COUNTIES, OR STATE THAT CAN NOT BE
DISCHARGED FROM CURRENT REVENUES.

Our towns and municipalities generally are upon an absolute cash basis and in none is there any indebtedness created that can not be discharged from the revenues that are levied and collected for the current year. In State affairs the same degree of excellency obtains. No indebtedness is created in excess of the revenues, and no warrant is issued that can not be paid upon presentation to the State treasurer.

HOW THIS CONDITION WAS BROUGHT ABOUT.

The question arises, How was this condition brought about?

First. The examiner's reports are written and are open to the public. The criticisms passed or the compliments expressed are published by the newspapers and disseminated among the public in general.

Second. The standard of integrity and competency of those nominated and elected has been materially elevated, and in securing business men and taxpayers to administer the affairs of government the interests of all have been protected.

PUBLIC AFFAIRS SHOULD BE ADMINISTERED AS CAREFULLY AS PRIVATE INTERESTS.

I maintain that it is the consensus of opinion that public affairs should be administered as carefully as private interests; that the individuals delegated to conduct public affairs should have as much ability as the men employed by our business corporations.

AN EQUIVALENT SHOULD BE RENDERED FOR EVERY DOLLAR EXPENDED.

Those in charge of the various departments of government in my State believe that the interests of all are best served by a rigid enforcement of economy; that for every dollar expended there should be its equivalent rendered either in labor or material. Every dollar expended under our present system is worth \$1.33 as expended before we had uniform accounting or State supervision. This accounts in a measure for the decrease in our expenses. We have closer tax collections, and it can be positively stated that every dollar collected is accounted for.

STATE SUPERVISION ELIMINATES OPPORTUNITIES FOR EMBEZZLEMENT AND CORRECTS
INNOCENT MISTAKES OF FIDUCIARY OFFICERS.

We have had but one default that was not paid in full without a suit at law. The amount involved in that case, which was compromised, was about \$400. As a matter of fact, State supervision eliminates the opportunities to embezzle public funds. The officer knows that his acts will be thoroughly investigated, and this knowledge lessens temptation.

Fiduciary officers will make mistakes; in fact, we are all liable to err, but such mistakes are not willful, and when attention is called to them they are at once rectified and will not occur a second time.

The examiner is valuable to the administration when difficult problems are presented. His experience enables him to reach conclusions readily, and he is keen and quick to discover the loopholes and dead falls that are embraced in every proposition of magnitude. It is through his efforts that prejudice and personal quarrels in public affairs can be overcome. His interests is for the good of the people at large and not for any clique.

VALUE OF ONE EXAMINATION A LESSON FROM EXPERIENCE.

Recently I examined the records of a small town upon two matters that required personal information. The examination was voluntary, the necessity not being apparent to the town officers. After 2 days of hard work I called the council or board of trustees together and brought to their attention conditions unknown to them that were of vital importance to the people of the town and its property interests. No deficiency of funds was shown, yet the meeting of the board was an important one, and after talking with them for 1 hour, advising them of their duties and calling their attention to certain ordinances, I was informed that the meeting had been most profitable; that the advice was worth \$500 to the city in the administration of its affairs. If the advice was worth \$500, the examination, with its disclosures, was worth more.

A RELIABLE BAROMETER FOR THE GUIDANCE OF PUBLIC POLICY.

With uniformity in accounting you will have a barometer to guide you in public affairs; you will have a definite knowledge of what percentage of your income is from taxation and what from other sources; what percentage of the taxes levied are collected and the class of people who escape the collector, willfully or otherwise.

Without uniform accounting, how many know the purposes to which the general revenues of governments are diverted? Practically none except the disbursing officer and the auditing board. Comparative and uniform statements, with all expenses properly classified, are not prepared and the administration has only a general knowledge of its expenditures.

UNIFORM ACCOUNTING NECESSARY TO A CORRECT DETERMINATION OF THE POLICY OF MUNICIPAL OWNERSHIP.

Permit me to call attention to our public-service industries and the popular theme of municipal ownership. Upon what basis can it be determined whether or not such industries would be self-supporting? What plans or methods would you employ showing the entire cost of ownership and operation? How will it be known whether the city is receiving its just earnings? If you believe in business principles, you must believe in uniform accounting.

CORRECT ACCOUNTING THE RIGHT OF EVERY TAXPAYER.

Uniform and correct accounting go hand in hand and are inseparable, and I affirm that the best results can only be obtained through these two principles.

In correct accounting we believe in the proper classification of all receipts and disbursements. It is the right of the taxpayer and the officers of every public government to have the accounts show truly and correctly the expenses of operating and controlling such governments, and yet in no other department of business do the people give so little attention to the application and use of their funds.

A man employs a steward in his household and intrusts him with the purchasing of all supplies, but when the accounts are presented for payment he carefully scans every item on the bill, and should there be an overcharge upon any article charged he immediately registers a complaint. Does the same rule apply in public affairs? Do the individuals who pay taxes carefully scan every account?

If it is necessary for the head of the household to scan the accounts of the steward, is it not fully essential that he shall scan the accounts and inquire into the various expenditures made by those who occupy the position of public steward?

UNIFORM ACCOUNTING REDUCES TAXATION.

Uniform accounting and State examination will reduce taxes. In making this statement I am prepared to substantiate it by the results in my own State. It leads to public economy in every department of government.

Someone has said, "One felt like apologizing to an intelligent people when he recommended uniform accounting and State examination." In this I heartily concur.

A FUNDAMENTAL PRINCIPLE OF PROGRESS.

The necessity of the system is so apparent that it needs no recommendation. It is a fundamental principle that should be embraced in every department of government. It is not a reform idea. It is progression. It is the matter of

enforcing a system so complete and yet so simple that every taxpayer may understand what it means. It forms a basis upon which the revenues for the support of any government can be estimated with a reasonable degree of positiveness. I take it that we are not gathered together with the intention of establishing any reforms whatsoever; rather that this convocation is for the purpose of diffusing knowledge and formulating plans in government that have a progressive tendency.

MUNICIPAL OWNERSHIP WITHOUT UNIFORM ACCOUNTING IS LIKE BUYING "A PIG IN A POKE."

Municipal ownership has been recommended by this league as one of the principles looking toward more perfect equalization of burdens, and relieving the taxpayer in a measure at least. It matters not whether or not I am in favor of this principle, but it does matter whether or not we have a full and complete knowledge of the cost and operation of such industries, whereby a reasonable conclusion of the value of the property can be determined. With haphazard methods of accounting, there is absolutely no way of arriving at this conclusion, and I maintain that the purchase of public-service properties, where there is neither uniform accounting nor State supervision, is like buying "a pig in a poke."

A couple of years since a friend of mine was urged by a house handling a large bond business to purchase some street-railway bonds in a city in the Middle West. The securities were recommended as gilt-edged, and a small block of the bonds was purchased. In less than a year thereafter he received a letter from the bond house to the effect that it had been found that the plant was in a poor physical condition, that the statement of the company showing receipts and disbursements and general expenses had proved unreliable, and the securities were much depreciated and there was practically no opportunity for him to realize fully upon his claim. All of this within less than a year.

Engineers and experts had reported upon this property, but it seems that their first report did not correspond with the second. That the engineer should have discovered the condition of the property is unquestioned, but the chief cause for criticism was the system of accounting. I mention this fact to call attention to conditions that may be encountered in the purchase of public utilities by municipal corporations.

AN IDENTICAL SYSTEM FOR PUBLICLY AND PRIVATELY OWNED AND OPERATED PUBLIC-SERVICE UTILITIES.

Let us have a period of uniform accounting and State supervision, provide that the accounts of quasi-public corporations shall be subject to such State officer or commission, and that the form of records he shall prescribe shall be the form of records employed in keeping the accounts, and we will then have a reasonable basis upon which to establish our calculations.

After this method has been employed for a few years I believe that instead of municipal ownership a better plan will be devised. The public-service company will be permitted—

First. To retain from its earnings the interest on its bonded debt.

Second. A reasonable interest on the investment.

Third. A reasonable profit upon the investment.

Fourth. A sinking fund for the redemption of the bonds as they mature.

Fifth. A reasonable amount to be set aside annually for maintaining the physical condition of the property.

Sixth. Dividing the residue, if any, between the company and the municipal corporation.

HONEST AND INTELLIGENT MEN WANTED IN OFFICE.

In a convention that I attended not long since I heard a great deal about dishonest public officials, in that they were controlled by quasi-public corporations and that such corporations controlled primaries in both the great political parties and secured the nomination of men to office whom they could control. I am not a corporation man. I do not own a share of stock in any corporation in the United States, but I wish to say that general statements like the foregoing are erroneous and misleading.

Corporations are anxious that men should be elected to office who possess a high degree of business ability and who are honest and will furnish an economical administration of the affairs over which they preside. They are not fearful of an

honest and intelligent body of men, but capital and corporations alike are fearful of officers who represent dishonest principles; and if such men are nominated to office by people who vote blindly and without consideration of their own interests as taxpayers, it is altogether probable that corporations will do what they can to protect their own interests.

THE LEAGUE OF AMERICAN MUNICIPALITIES SHOULD JOIN FORCES WITH ALL WHO ARE WORKING FOR THE ENACTMENT OF LAWS TO ESTABLISH UNIFORM ACCOUNTING.

Resolutions adopted in 1893 by the League of American Municipalities not only recommend that a system of uniform accounting and State examination shall apply to public accounts, but that it shall reach and embrace public service corporations.

This league stands committed to the principle of uniform accounting and State examination, and it would be impolitic to recede; yet, so far as I am informed, no action has been taken toward the enactment of the provisions of its resolution into State laws.

However, bills providing for uniformity in accounting and State examination have been introduced in several State legislatures during the past two years, and I believe that the educational plan adopted since by some of these States will finally result in the enactment of a law that will commend itself to every honest and liberty-loving citizen.

It is possible that if this league and all the other associations now working along these same lines could join forces, satisfactory results would be more surely and speedily realized.

NOTE.—After the above paper had been read, in closing its proceedings, the League of American Municipalities adopted the following resolutions:

Resolved, That uniform municipal accounting is desirable, and that the executive committee of this league is authorized to cooperate with other organizations to that end through its president and secretary, or in such other manner as it sees fit."

MR. CLARKE. I would like to make the remark that the paper is interesting from the point of view of a new State, but in all our older States systems of accounting and public examination, quite similar to that described in the paper, only necessarily diversified, have long been in vogue. We could not have successfully run our States without them.

THE WITNESS. There is no State in which there is any uniformity in the system of the public accounts of the State. Every town and every county keeps its own records, and they may be correctly kept, but there is no uniformity with the records of the other towns and counties in the State.

Q. (By Mr. PHILLIPS.) Have you examined into all the States in that regard, so that you can make such a broad statement?—A. That statement is made upon the same sort of information that comes to one studying the subject and hunting for just such information. In the last two sessions of the New York legislature there was an attempt to enact a bill to have uniform accounting between the cities of a certain class in the State. It did not apply to all of the cities in the State. The State of Minnesota has a partial system, but it is not complete. An effort was made in the Indiana legislature last session to introduce the system, but it was not made law. The bill that I have published in this little pamphlet [here indicating] was introduced in the Ohio legislature at its last session (1900), but it was not enacted.

Q. (By Mr. FARQUHAR.) I would like to ask a question about a statement made in the paper—that municipal ownership is the equalization of burdens. Is there any practical proof that municipal or political monopoly has done or can do better work than a properly supervised industrial monopoly?—A. The two things are not comparable. For instance, take waterworks that have been operated under private ownership. When the waterworks were under private ownership, everything had to be paid for by private capital, in the way of extending lines and making improvements and connections and that sort of thing, and the rates had to be sufficient to pay all their operating expenses, and at the same time whatever profit made by the operation. It was all collected through their rates. You take these same works and let the municipality buy them; they will frequently reduce the price to the consumer, but they will make up the deficiency from taxation. They will extend the service lines and charge it as a special improvement and have it paid for by taxation, and then, of course, the two things are not comparable at all.

Q. (By Mr. LITCHMAN.) Is it not a fact that the consumer in the case of the

private enterprise pays all that cost, and in addition to it, pays the profit on whatever stock is held by the private corporation?—A. That should be the fact. It is a fact if they get any profit.

Q. (By Mr. KENNEDY.) Do they not get profits?—A. Some do and some do not.

Q. (By Mr. LITCHMAN.) Is it not also a fact that in the case of the private corporation the unearned increment goes to the private corporation and not to the public at large?—A. As the business has been done, that is a fact.

Q. Then that being true, and the elements of cost by whatever computation being the same, and assuming honesty in both cases, is there not an advantage in municipal ownership, at least to the extent of the profit obtained by the private corporation?—A. I will state that to you, I think, very clearly. As an economic proposition, as I said in the resolutions which I first read, we must agree on what items must be included in the cost, and then we must know that they are there. I advocate that the accounts of all public-service utilities, whether they be owned by the municipality or the public, or whether they be owned by a private enterprise—I claim that the accounts for either class of ownership should be kept by a uniform system that would be prescribed by the State and should be audited by the State; that the accounts should be identical for public and private ownership. If you get that point established, then we are where we can establish all the other points.

Now, take your statement. If we have these accounts, the showing of cost will parallel each other, if you please. Then comes the profit of the private corporation that you are asking for. I have never yet met a gentleman, no matter how earnestly he might be a believer in and an advocate of municipal ownership, who would not concede that so long as private capital is used for these services it is entitled to a reasonable profit. If private management is more efficient than public management—and that is the claim of the private ownership side of the question—then the cost under private management will be less than it will be under public management. If that efficiency amounts to—we will say 10 per cent, then the cost of management under private companies, plus 10 per cent for profit, will be no greater than the public cost. Now, if you have your contracts with the private corporation so arranged that the price to be charged by the private corporation is determined by cost so determined, plus a profit so limited, then you will have a price to the private user that will be no greater under private ownership than it will be under public ownership.

Q. (By Mr. FARQUHAR.) This is predicated on the uniform public account?—A. Absolutely so. You can not do it without the public account.

Q. The first part of the premise is that both sides shall have a public accounting?—A. Certainly; absolutely so. But we do not take the word of the corporations, nor do we take the word of the municipal politician, but we take the word of the State auditor.

In fixing a price for the service you can do it for a term of years. You can not do it every year; it would keep things unnecessarily stirred up. Make it for a term of 5 years, if you please, or 10 years. My proposition is that when we sit down to fix a price—we will say for 10 years—of gas in a town, we put our data through this uniform system of accounting, so that we know just what the cost is. We have our legal limit for our profit for the corporation, which I have said should be limited at twice the rate the city pays on the bonds where the service is being rendered—if the city has 4 per cent bonds the corporation would have an 8 per cent margin for its profits. Now, we can calculate very closely what rate will produce that on the past 5 years' business. Taking that as a basis we are able to estimate for the 5 years to come, and fix our price.

The unearned increment comes in very largely through growth of population; sometimes there are advantages gained in new apparatus, in the ways of doing business. At the end of 5 years an accounting may show that the estimate we make to-day has overrun and there is a surplus. The proposition I have made in my bill would divide that surplus equally between the city and the corporation. That disposes of the unearned increment up to that point, but you will see at once there could be no surplus unless the cost was on a lower level than you had estimated. Then you will correct that by making another price based on this new basis of cost—lower level of cost—and you go on for another period of 5 or 10 years. In this way the people, as a final result, will get practically all the unearned increment, or the benefits, or excess of benefits derived in any way. This is as I understand it.

Q. (By Mr. LITCHMAN.) In that connection you admit that such is not the condition now?—A. No, it is not the condition. I know it; you know it; it is a matter of public knowledge. We have no law that will permit this condition to be established.

Q. Under the conditions as they now exist, so far as your investigations have shown, which is preferable, municipal ownership or the private ownership of these public monopolies?—A. Well, on that point I will have to say this: You take the business of the municipalities of the country to-day as a whole, I do not think that they are to-day developed to that degree of efficiency where it would be a safe proposition for the taxpayers of the municipalities to operate their own gas works, street lights, telephone, street railroads, and waterworks, and the whole outfit of utilities. I think it would ruin the property owners of any city to have it done.

Q. (By Mr. KENNEDY.) What have you to say about the government-owned waterworks of the city of Washington, in comparison with the private waterworks in some cities with which you are familiar? I take it you are familiar with the system here and the rates and so forth, and might compare them with some cities where private individuals or corporations own the waterworks.—A. I will say this on that point: I am not familiar, as a matter of detail, with the figures that you would have me mention, but I have frequently done this: Where a private corporation had the question up of the price of its lighting—public lighting, if you please; to renew its price for public lighting—and the question has come to be as to whether or not it was better for the town to own and operate its own plant or make a contract with the private company—you know there is always some dispute as to the rates to be charged—I have in a number of cases advised the private company to offer to the municipality to fix the price at a rate that would be shown to be the cost of the service as produced by municipalities owning and operating their own works, taking for the test say three municipally owned plants, as near as they could where the conditions would be similar, making the investigation for that purpose, and, of course, adjusting the economic differences in location, number of lights, etc.

Q. (By Mr. LITCHMAN.) In the case of a municipality there is no watering of stock, is there?—A. In fact, there is no stock.

Q. There is no fictitious cost in the shape of excess of capital on which it is presumed a dividend has to be earned?—A. No; there should be none.

Q. Why is it not possible for the municipality to erect its plant as cheaply as the private corporation?—A. For the very same reason that you can not go into any municipality and pick out any piece of public work and show that it is done as economically as the same work is done under private management. I have never talked with a mayor who would not say frankly that if the business of his town was his private business he could so manage it that there would be quite a margin of saving. That is the best way I can have of establishing the point I have made.

What I want to take security against is,—I do not want to give currency to statements based on accounts that I have not audited myself or that I do not know much about. That is fair, is it not?

Come right back to the broad proposition: If municipal ownership is more economical to the public than private ownership, the very proposition I laid down 10 years ago, worked into practical effect, will establish that point. Then, that point being established, I have not the slightest objection to having all public-service utilities transferred to municipal ownership; but if, on the other hand, private managers show that their management is more efficient than public management, then there is no reason why they should be transferred to municipal ownership. My whole work is to get the accounts and laws into shape so that we can carry out this proposition.

Q. (By Mr. FARQUHAR.) What was the genesis of this municipal ownership—the venality of the municipalities, boards of aldermen, etc., or the inefficient management of the public work?—A. I think the initial point in advocating municipal ownership comes from the thought of people who feel that the public should have all the benefits; and they naturally grasp or jump at the idea—at the conclusion that if the municipality owns and operates, of course they will save the profit that the corporation makes, and they are aided in that idea by some of the grasping and injudicious things that the corporations do.

Q. You take it that the main reason for the desire of public ownership was public saving?—A. Yes.

Q. Was it because of the excess profits the private corporations made, or was it because the people thought that the public would be better served by the municipality than by a corporation?—A. I think the initial idea is that the corporations make excessive profits and that the only way to avoid that is for the municipality to own and operate these monopolies and save the profits for the people. I think that if the public knew the profits were not excessive and that there was only this margin of 8 or 10 per cent that I advocate, the demand for municipal ownership would be much lessened.

Q. (By Mr. KENNEDY.) Are there not instances where the profits are most excessive?—A. There undoubtedly are.

Q. Is it the case in this city in the matter of gas?—A. I do not know.

Q. (By Mr. FARQUHAR.) As far as you have any knowledge of the practical working of the two systems, do you believe that municipal ownership, as distinguished from corporation management, is a saving to the municipality?—A. The trouble comes in answering a question of that kind. Take Detroit, if you please, where they built a municipal plant. They were authorized to spend \$600,000 and issue bonds to that amount. The private corporation that had been doing the service had been getting what you might call the old-time price when the industry was new. The prices were a great deal higher than they are now. The corporation offered to contract with the city of Detroit to furnish the light under a 10-year contract at \$102 per year. The price they had been getting was \$130 under former conditions. Now if a comparison is made between what it is now costing in Detroit under municipal ownership and the old figures—that is the way it is usually done—of course a saving is shown. But the last time I examined the accounts in Detroit, on the basis of the records—I only took the reports and did not examine the books; I assumed the records were honestly kept, and I believe they are as good a set of records as we have anywhere—but taking the statement made in their published reports, and then making an allowance for depreciation, which does not appear in their published reports, as I think it should, and taking into consideration the taxes that the city has lost by public ownership, and the interest on the investment, and adding that to their operating expenses, the cost per lamp at that time, for some 1,700 arc lamps, was about the same as that for which I, as a private individual consumer, can go to the private company and buy the service of one lamp.

Q. (By Mr. CONGER.) What figure was that?—A. Well, say \$90 or less.

Q. (By Mr. LITCHMAN.) Did I understand you to say that this price would have been \$90?—A. This was 2 years ago that I made the examination.

Q. What would have been the condition of the city if it had made the contract at \$102?—A. It would be paying \$102.

Q. Actually more?—A. That would have been the condition.

Q. Is not that a saving to the city?—A. It is a saving to the city as against that condition, but the point I wanted to bring out is this: That if the city had been permitted by the law to make a contract with the private corporation on the basis that I have described all of that saving would have been made through the private contract just as well as through the public contract.

Q. You stated that at first they wanted to make a contract for \$102 for 10 years?—A. I said that was the offer.

Q. Now, if the city had made that contract it would have been bound for 10 years at that price?—A. It would; yes.

Q. You further state that the actual cost, including every item of cost that would have been charged up to the private corporation, was only \$90.—A. Yes; \$90.

Q. Why does not that show a prima facie case in favor of the municipal operation?—A. It does up to that point, but when you are speaking of the saving that the municipality is making during the lapse of years since the making of the contract or since the contract was offered the price to the private consumer has been reduced by the private corporation right along, until it stands, as you might say, parallel with the cost of the public corporation.

Q. But the public would have got no advantage from that under the 10-year contract?—A. No.

Mr. FARQUHAR. Mr. Foote does not advocate the 10-year contract on the basis on which it was proposed.

The WITNESS. I have not advocated anything of the kind.

Q. (By Mr. FARQUHAR.) Had that been on the basis, however, of public accounting, it would have been very well understood whether the city was getting the benefit of the later improvements and the lessening of cost in the production of light, wouldn't it?—A. Had that been on the basis of public accounting the price would not have been determined by a bid; it would have been determined by the cost, and the cost has fallen in these years. It has fallen to the private consumer.

Q. (By Mr. LITCHMAN.) Did you state that these estimates would be based on 5-year periods?—A. Well, I said that, and I said that in the case a surplus was created it would be divided between the municipality and the corporation, and then you would have—

Q. (Interrupting.) If there was a deficit?—A. If there was a deficit you would have to take one of two courses—you would have to carry that deficit forward to be made up by the hope of an increase in the next 5 years, or you would have to raise your price.

Q. (By Mr. FARQUHAR.) Wasn't there, in the first agitation of this municipal ownership, a great deal said about the amount that private corporations had to pay to boards of aldermen, city officers, etc., to get contracts, and then to hold them? In other words, was there not a charge of venality made against these local bodies, and that contractors were parties to them?—A. I want to keep one point clear in mind. I think the demand for municipal ownership originated not in the venality you speak of, but in the socialistic idea. The basis of it is socialism, and it originates with that class of people who want the city to own and operate everything. It comes from that source. Of course they take advantage of these corrupt alliances between corporations and politicians as one of their arguments, and they say that they can have better municipal governments by giving the municipal governments more to do; that if they have larger interests to be handled, they can get men of greater ability to handle them, and that this corruption, which we all deplore, would be overcome through that process. But that all seems to me like making a person virtuous by giving him more opportunities. The city of New York certainly has large enough interests to have able men. If that argument was valid, it ought to show good results there; but, so far as outsiders are informed, it has not shown such results.

Q. (By Mr. LITCHMAN.) Is it not a fair offset for that that some private corporations have been so handled as to result in large bankruptcies and disasters, thus proving mismanagement on the other side?—A. It has certainly proved it.

Q. Well, that is an equal proposition, it seems to me.—A. You can balance one against the other all the while, and that brings us right back to the original proposition, that the uniform accounting is my remedy for these evils under both forms of ownership and operation.

Q. (By Mr. FARQUHAR.) How many so-called public utilities would you bring within the operation of municipal ownership, provided you took the theory of municipal-ownership people?—A. I would put under municipal ownership and management every public utility where an economic gain could be made to the public by doing so; but in saying that I want it clearly understood that the accounts should be so handled that we would know that we were making an economical gain, that we would not be misled by accounts not properly kept. Go back to Detroit. They have a public building there—the Grand Army Building. Is that a public building [speaking to Mr. Conger]?

Mr. CONGER. I do not think so. I do not know.

The WITNESS. All I know about what I am going to tell you I read from the official report of the proceedings of the council, and it referred to a Grand Army building as though it were a public building. They wanted to wire that building up for electric lights. They called upon the lighting commission to do the work. The lighting commission reported back to the council that that work would cost \$1,200 or \$1,300, and it did not have the money to pay for the work. Well, the council wanted the work done, and it looked around and found a surplus, I believe, in the house of corrections or some institution of that kind. They found a surplus, so they ordered that work done, and had it paid for out of that surplus. How much of that goes on? Who knows? When you take that kind of an item it certainly can not appear in the report of the lighting commission. If you are going to compare the lighting commission's report with that of the private corporation you must know how much there is of that kind of surreptitious expenditure, or you do not get true information and you are misguided; you are self-deceived.

Another little case that is more laughable than serious, because it is rather small—a municipal plant in Ohio. When the equipment was bought, everything that was bought was charged to construction—the armatures and brushes and things of that kind on the dynamo went to any construction account. In the course of a short while they burned out an armature, and they had to buy a new one. The superintendent charged it to the construction account, and he kept on that way a couple of years, making a fine showing of the low cost; but the first thing he knew he had a construction account as big as any watered accounts corporations would have. Really there was no dishonesty in that at all; the man simply did not know how to keep accounts. You can not go ahead and base public policy on that kind of evidence; no one wants to. And now I think I could close this whole question right on this proposition, that wherever a government grants to a private corporation a special privilege, like the use of a right of way, or where it does it by giving it a bounty, as the Pacific railroads were aided by land tracts, the duty of the government then is to know that the people get in return for what the government gives that to which they are entitled. Now, how are you going to find that out? The government must assume the right that all of the accounts of that corporation, so far as necessary to determine the cost,

shall be deemed and kept as public accounts. You heard about secrecy yesterday (referring to testimony of Professor Bemis, *supra*). There is no secrecy in my programme. You can see that very plainly. The accounts must be kept as public accounts so far as they relate to cost. Then you establish the cost. You can not establish it in any other way. You establish it in a way that the public knows its rights. That is preliminary to permitting the establishment of a price for the service that is right. Now, you have your cost—you gather a profit. I have never known a man to say but what he was willing that a corporation should make 8 or 10 per cent profit upon an actual investment. That establishes your price of service. If that is the basis, then every growth of population, every improvement of the art, will reduce that much the cost of service, the price of service—cost and price will follow all economic changes down or up, whichever way the scale may turn. This will apply in any public service, whether it is waterworks, gas works, steam railroads, telephones, telegraphs, or what not. It should apply everywhere. If we were actually operating our public service on this basis, we would have an economic condition here that would put us masters of the commerce of the world way and beyond the ability of anybody to touch us. What we have accomplished in the unscientific way in which it has been done is great, but we have not commenced to touch the possibilities of what may be done.

Q. (By Mr. PHILLIPS.) Now, do you find any illustration of this in the examination of the national banks? You have not alluded to the theory of the examination that is given to national banks. Do you find any illustration of your theory in the examination in all public institutions?—A. The public examination is a factor in our banking system which we certainly would not be likely to want to get along without.

Q. But it would not be a panacea for all ills?—A. I think I could explain. You take a State; it has in it, we will say, a hundred municipalities. For every one of these plants in every one of these hundred municipalities, the accounts are kept in a uniform system; they are audited by a man who is absolutely independent of the corporations, the municipalities, the political parties.

Q. Any more so than a bank examiner?—A. No; could not say that; but the ideal thing is that he should be as independent as the judiciary. I always use the judiciary to illustrate my point. Now, to show you how it works, take the price of coal. If a municipality was paying more for its coal for its poorhouse than some other municipality, the publication of that would lead to an inquiry in the public mind as well as in the auditor's mind; and that thing would reduce it to a positive system, where no municipal officer would dare to enter upon his public accounts a price for coal that was out of line with what ought to be paid for it. And just so with the management—take the management as a whole. If you examine 50 gas works or 100 gas works, and the unit of cost in one is more than in another, that fact immediately tells you that that one wants to be looked after. Now, you take the uniform system, and you go through the list, and you can put your finger at once upon the principal item that has caused this rise in price. This difference may be entirely right, you understand; it may be wrong. But if it is right you know it is right, and you are satisfied; if it is wrong, you have found out where to make your improvement, and you can do that. There is no other way of getting at it. In reality independent accounts would not do it, and there is where the trust question comes in, the organization of different productive enterprises under one management, where they have a comparison of 50 or 100 works, located in different sections of the country, the economies that they create or institute through that will come just through these things, and you will find, if you investigate the thing closely enough, that a very large percentage of the failures in manufacturing establishments and municipal establishments comes exactly through the fact that the men do not know how to figure cost, and they are self-deceived. If you are in a competitive business—say you are making wagons, if you please—you know how to figure the cost and put in every element of the cost, and you put down what you need to have as profit, and you give a price. Now, you know perfectly well that if you undersell that price you are going to lose that profit. If you undersell it too much, you are going to lose some of your capital. The other man, who don't know how to compute costs, who simply says his operating expenses are so much, and that is the cost, is very likely to sell at a price that does not return him any profit at all. He may run along 3 or 3 years while exhausting his capital, but his price is a drag on you. You have got to meet his price. And there is where the combinations, what we call the consolidations, are going to save the industries of this country. In the first book I wrote I referred to, in 1889, I advocated the consolidation of the gas and electric light, and it is being done now. The operation of the street railroads, everything that is operated by electricity, and the service of light, can be done from

one central station, or at least under one management for a municipality, which would cheapen it to a great extent.

Q. Do you advocate consolidations paying for their plants in preferred stock and making a bonus of double that amount in common stock as water?—A. No, I do not; and you will never find anything of that under the system I do advocate. I want you to understand me. When I propose to make a contract with the private corporation and propose that they shall keep their accounts in this way, I commence with the investment account. Now, I provide that that investment account, the initial account, shall be determined in one of 3 ways, either by agreement between the municipalities and the corporations, as 2 men would make a bargain, or that they should leave it to arbitration to be settled, which is one of the ways of settling a dispute; and the other is that they should proceed exactly as they would if the municipality was going to buy the property, proceed under the law of eminent domain to get an award, and take the amount of that award as their initial investment. After that point has once been established, then my system would permit no addition to that investment unless it was certified to by the State auditor as having been necessary and the money actually invested for the full amount entered into the account. I have nothing to do with the watered stocks and bonds of the corporation; I let them take care of their own securities. That is their own matter; they can deal with it as they like. You will see at once my position is this, that if there is a million dollars invested, and that is determined in one of the 3 ways, then everybody is satisfied with that kind of investment; you can not complain against that investment. Now, you use that as a basis, and you calculate your profits upon that, and if that million dollars is represented in the corporation's securities by two millions, that don't interest the public, it don't disturb the public, because they are only paying on the one million; they can't be called upon to pay on any more.

Q. The gas and electric plants of the country are very largely being consolidated, and the street railroads, by one syndicate. Do you think it is beneficial to society to have one syndicate run all of these plants in all our cities?—A. It certainly would be, if you were dealing with that syndicate on the basis I propose. But if you are not going to deal on that basis, if you are going to let the syndicates take what they can get, just as they are doing now, the syndicates will take it. If I were going to consolidate the street railroads of a city, and the law gave me the option to do just what is being done to-day, I would do it that way; but if you ask me if that is the best way for the public, I would say no, it is not the best way for the public. The best way for the public is to have all of these industries handled in a way to bring to the public the best economical results. How can those results be obtained? They can only be obtained by a consolidated management. The larger, the more efficient it will be, and you can only obtain it by putting that management in a position to deal with the public on a basis whereby it can bring itself under the operation of these economical conditions.

Q. You say that the larger, the more efficient it will be; that is, the more wealth it has in it. Now, would it not be better if the whole people go into it, when it would be still larger?—A. It would be, barring this one factor. If you take the whole people in, and you can get men sufficiently patriotic to work for the people as a whole as loyally or as interestedly as they would if it was their own business, you ought then to get the same result; but that condition does not exist. When you eliminate the factor of self-interest from an industrial proposition, you have eliminated a factor of efficiency in the management. I said a little while ago, if that efficiency amounts to 10 per cent, that 10 per cent is enough to pay to the corporations their profit for managing it and preserving that efficiency. If you eliminate it and lose it, you do not grasp that 10 per cent; you simply destroy it, and the public have not benefited by it.

Q. The evidence given yesterday was that so far as it has worked out practically in England and Scotland, public ownership seemed to give more efficiency and better satisfaction?—A. Yes; your words seem well chosen. It seems to be so. Is it so? I have never seen yet an industry managed by the public but what, if you will put a set of men into the same position of the public, in the details, the private management would take it and operate it and make its profit, and give the price as low as the public management ever was able to make it. There are a great many points that need to be considered in these things. One year ago a municipal government tried to build a gas works. You do not say they shall own and operate 20 years, or 30 years, or any other period of years. They do not have to get the consent of property owners to run their lines through a street; they do it. All of those things make a difference in cost and in calculation as between public and private ownership; you see they are factors in

the calculation. Take, for instance, just to illustrate without trying to be exact, the statement made here yesterday about the difference in the cost of street railroads in Massachusetts and the cost in the Eastern States. What does that cost represent? There was no statement made to show. In Massachusetts it may represent just laying the tracks on the street and keeping them and operating them. In another city it may be laying the track through a street and paving the street for 8 feet on each side of the rails. In the city of Philadelphia it means rebuilding the street entire, and paving it from curb to curb. That makes a difference in cost, and these statements without the explanation, you see, are only seeming advantages.

Q. (By Mr. KENNEDY.) You do not give an explanation yourself in regard to it. You say something that may be operating, but you do not impeach the testimony that was given here yesterday?—A. Certainly not; I do not intend to do that. I only call attention to the difficulties we are all in, and I think Mr. Bemis is just as fair about that as I am myself. I think that he told you how he agreed to this proposition of uniform accounting. I state it absolutely, without any interest in it whatever, excepting to find that which is the best for the public and have it done. I do not own a dollar's worth—yes, I do; excuse me; I own \$50 worth of stock in one electric company, and I own that because they asked my advice, and I wanted to see how my advice turned out.

Q. (By Mr. LITCHMAN.) Is not this the logical conclusion of your testimony: With rigid accounting, the cost established being the same with the municipal plant and the private plant, by the same system of accounting, there is a margin of saving to the municipalities equal to the 8 or 10 per cent profit given to the private corporation?—A. My contention is that if your accounts are kept identical and audited so that we actually know we are dealing with identical things, that, if the theory is right that private management is more efficient than public management, that will prove it.

Q. Assuming that the cost is found to be equal in each illustration, then the margin of savings would be the profit of 8 or 10 per cent to the private corporation?—A. Then the public would demonstrate its ability to save that 8 or 10 per cent, and when it does demonstrate its ability to do it it ought to do it.

Q. Now, your fear is, or perhaps your opinion is, that the actual cost being as it is, in the way you suggest, would show that the superior efficiency of the private management would overcome the difference in the cost between the private ownership and the city ownership?—A. That is my judgment.

Q. (By Mr. FARQUHAR.) When you establish municipal ownership, what class of service are you going to put into these utilities, a rigid civil service?—A. I do not think it would be possible to establish that efficiency without civil service.

Q. Then the servants of public utilities would be in for life, during good behavior?—A. Yes.

Q. No other opportunity for any other part of the municipality to participate in the work or the wages that are paid?—A. Yes.

Q. Would you call that a monopoly?—A. I should say it would be a very strong monopoly.

Q. (By Mr. KENNEDY.) Is it very probable that under civil service or under municipal ownership as many people would be employed as under private ownership?—A. If the service was operated with equal efficiency it would not make any difference as to the number of people.

Q. What would be the difference in the disadvantage to the community of people using influence to get employment under municipal government and individuals?—A. None at all; be no difference whatever.

Q. (By Mr. LITCHMAN.) Under private ownership is there not a competition in labor, between the laborers, so that there will be assets in the less cost, as compared with municipal management, where a minimum rate of wages is established by law?—A. Very well, we will just take that proposition and deal with it in this way. If the public fixes the price it is to pay for the service upon the basis of cost, the wages of labor is a very important factor in that basis of cost, and if they desire to pay more for the service by requiring the corporation to pay the trade-union scale of prices, they could do it and the corporation would have no objection whatever to its being done—no reason for the objection.

Q. That answers the question.—A. And in that way you can settle your railroad strikes.

Q. (By Mr. KENNEDY.) Is it any argument in your mind against municipal ownership that the people who would go into the employ of a municipality would have a long tenure of office; would be assured of steady work?—A. And good pay?

Q. Yes.—A. I think it is an argument in favor of it.

Q. (By Mr. FARQUHAR.) Would it not, if you had a life-long service established in that way, put a premium on mediocrity? You would not have competition that comes from individual corporations, from changing your men, and in bringing up your foremen, and in training your men into your work and getting outside help?—A. I have tried to cover that point. I will have to refer to another bill in this pamphlet on civil service. You will notice there I am a very different fellow from most civil-service men, in this: I say, broadly speaking, it does not interest the public how a man gets his position, but it does interest the public what he does after he gets the position. I would say, let the primary appointments be made just as now, if you please, by the spoils system, but after a man has been in the service, say, 6 months or a year, given a probationary term, you know, then he goes on to the regular roll, and all appointments, all promotions and raising of grades from one to another should be made from lower to higher right along, not from the outside world, but from within the service. That preserves the self-interest principle I think so much of. It gives a man an object in life, an ambition to rise, and gives him an opportunity and well-defined way by which he may rise on his record.

Q. (By Mr. A. L. HARRIS.) Does the private ownership of waterworks stand upon the same footing exactly, the same plane, as the public ownership of other utilities that you speak of?—A. Well, there are, of course, reasons why waterworks should be managed more or less by governments, that do not obtain in other services. You must have territorial rights over the source of supply; you must have the police regulations against people throwing things into the streams from which you get your supply—powers that the private corporation can not well exercise—but at the same time there is no reason, from the nature of things, why these powers can not be exercised by the municipality and the investment and operation be carried on under the private ownership; but of the list of public-service utilities there are many more reasons for public ownership of waterworks than of the rest.

Q. Are there many cities at the present time in the United States that get their water supply through private corporations or companies?—A. I believe Mr. Bemis said yesterday about one-half. About 48 per cent of them are private companies now.

Q. Is that as satisfactory as the municipal ownership?—A. Well, there comes up the question of what you mean by satisfaction. If you mean satisfaction as to the quality of water, that must be a local condition necessarily.

My own studies have led me to this conclusion—you see I come right back to it all the time: We have a condition as well as theory to deal with. Here are corporations, and they have made their investments, and their franchises are running out; if it is not in this town to-day it is in some other town, and it is up somewhere all the time. How can we best deal with this question? As it has been dealt with, we take simply one side, showing less for municipal ownership to overcome—the difficulty that we have had in the private ownership, the watering of stock and the abuses of the people, and all that, are good cards to people on that side; but at the same time there is no evidence to show that municipal ownership is going to be any better for the public. Take the question in the State of Ohio. The municipal code commission studied this problem for 2 years, and brought in a bill at the last legislature permitting every municipality in that State to own and operate its own waterworks, its own gas works, its own street railroads, its own telegraph system, and its own garbage plant, and then any other thing they want to. That was in their bill. How did they safeguard the public in that grant of power? First, that the electors might vote bonds to acquire the properties; second, that they should be operated by the municipal government; third, that if there was a deficiency of revenue from the works as a result of the operation, that deficiency should be entered into the tax list to be paid by the taxpayer. Now, gentlemen, what kind of a condition would that create? God knows there are deficiencies enough now, but if you had all of those utilities to help create deficiencies it would be very easy to create them, especially when the public mind has been taught that one-half of this price paid for street-car fare, if you please, is profit to the corporation. How would a municipal council operating the street cars have the power to resist the demand to cut that down to 2-cent fare and the taxpayer pay the deficiency? I am basing my argument on this: This is a result of the commission which was employed by the State to study this question. It reported a bill of this kind. I suggested to the legislature that if they wanted the right to own and operate at all in Ohio they had better provide—I did not say not give this authority to the municipality at all, but I said when you give that authority to the municipality, provide that their safeguard first is that the accounting shall be kept as prescribed by the State auditor, and shall be audited by the State auditor,

and that the municipality shall not sell the service for less than cost, as determined by the State auditor. That will prevent your deficiencies. Also provide that the bonds issued, instead of being a mortgage upon the taxpayers' property, should rest for security, exactly as it does in the private corporation, upon the property, the franchises for operating it, and the income from it. This is all I ask for, and I think any business man will say that is a safe proposition.

Q. (By Mr. PHILLIPS.) Have you made a careful comparison of the plants owned by cities and those that are run by individuals, so as to be ready to affirm that municipal ownership is not the most economical way? Have you studied that by comparison in America?—A. In answering a question of that kind I must always have it understood that the accounts themselves—as long as you question the accuracy of the accounts you really have no basis to go on. The proposition in this matter here is that you take an example of, say, 10 or 15, and you measure the cost of service under municipal ownership as against the price charged by the corporation. That is the true measure, and I have done that in individual instances a number of times. I have in some instances, where I met the question of what price should be paid for public lights—I knew of a contract question of that kind being up for settlement—I have advised the private corporation to offer to its municipality to have the price fixed at a rate that would be shown to be the cost as produced by a municipal plant in some town of corresponding size, but always advised them that that price should not be determined by public report, but by an audit of the accounts to determine the actual cost. This has been done in some cases. I wouldn't hesitate to recommend every public-service corporation in this country to gauge their prices in that way.

Q. (By Mr. LITCHMAN.) Are you familiar with the law of Massachusetts covering uniform rates for electric-light plants?—A. I am somewhat.

Q. Does the law cover private corporations as well as municipal plants?—A. The law was first drawn for covering private corporations, and municipal plants were added afterwards.

Q. And the system of accounting is the same in both cases?—A. Yes.

Q. Well, so far as Massachusetts is concerned, you have a basis for comparison?—A. I said yes. That is not quite accurate. The commission required reports from all corporations, municipal as well as private. They only go so far into the question of uniform accounting that the account may be kept in a way so they can make the reports. The fault with that law is this: It does not require that the price of the service shall be based upon cost, plus the profit, as I have described. Had that been the law, the Haverhill case never would have occurred.

Q. Well, so far as the law goes the returns are exactly the same from both kinds of corporations?—A. The reports are made out the same.

Q. Well, are they not then based by comparison as far as they go?—A. As far as they go, they are.

Q. (By Mr. A. L. HARRIS.) I want to get back to the trouble of a small municipality getting the benefit of waterworks through private corporations. Is it feasible for the small municipality that has bad water and wants good water to get it through a private corporation?—A. I do not see any reason why they should not if there is water to be had. If a municipality can get that water I do not see why a private company could not get that water.

Q. Would it cost more or less, in your opinion, for a small municipality to have a private corporation supply the water rather than the municipality itself?—A. If the municipality assesses the laying of the water mains as a public improvement against the property, and then is to earn only enough to pay for its pumping station and the men to operate it, it can make a less price because it has a less capitalization; but if it would take the same process in dealing with the private corporation, the same less price would appear.

Q. The private corporation would necessarily have to have its officers, would it not, and they would have to be paid?—A. If the corporation was large enough, certainly. I am rather glad you asked that question for this reason. Take the report of the Department of Labor, and one of the claims is that under private management large salaries are paid that are saved by municipal management. Well, now, in that group of municipal electric-lighting plants in the Department of Labor report, there was quite a number of them—I won't pretend to say how many—but over, I think, 10 per cent of the whole number I have examined, even more than that, even 20 per cent of the whole number, returned less than \$100 a year paid for management. Now, I will leave it to you whether or not a book-keeper would not cost more than \$100 a year, and some of them were as low as \$25 paid for management. Now, if that is all that goes into this account paid for management that must be paid for somewhere else. If it is not paid for in the

accounts, it is paid for by some other city clerk doing the work, and his pay is being charged up to some other department, and this is the vital point; you can't get at it without uniform accounting. You have got to know what you are talking about, and you are being misled; you are being self-deceived. You certainly would not expect that a corporation could keep its accounts and not pay for its clerk. It has to pay for its clerk and it has to appear on its books.

You take the condition that occurred in Philadelphia when the municipality was running the gas works. There all of the collections of all gas bills were made through the department of taxes, and the expenses of collecting these gas bills appeared as expenses of the department of taxes and did not appear at all in the expenses of the director of gas works. Now, superficial examination would not find that point, perhaps, and you would be misled; a statement made on that basis would mislead the public.

Q. I can see how service might be obtained cheaply by private corporations—that is, large municipal corporations—but the small villages was what was bothering me—when waterworks are owned by a private corporation, whether it would cost more than it would to the small municipality owning it?—A. Of course there are such places. Right out here where I have what I call my home when in Washington, at Takoma Park, they are putting in waterworks. That waterworks is not large enough to be an investment for a private corporation—it could not handle it at all; but I was looking over my tax bills last night, and I noticed an increase in the tax bills. If I get water at a certain price, that is one thing, but what I don't pay for in that price I pay for in my tax bill. If I would pay a private corporation the same amount that I pay in both of these accounts, the private corporation might be willing to do the work, but we don't do it that way.

Q. But if you are going to submit to a vote of the people a proposition to establish a municipal plant, the sum would be so great that it would probably prevent the taxpayer voting to adopt the municipal waterworks system, would it not?—A. Yes; we have this advantage: We make the unimproved property, whether it uses any water or not, pay this tax.

Q. (By Mr. LITCHMAN.) In the establishment of a system of waterworks it is the custom for the city to issue bonds, is it not?—A. Generally the custom.

Q. And a provision is made for a sinking fund to cancel that debt eventually?—A. Not always.

Q. Is it always the case in Massachusetts?—A. That is the case in Massachusetts; yes.

Q. Where that system prevails, the first cost is provided for, and will be ultimately wiped out, will it not?—A. Well, the sinking fund would mean—.

Q. (Interrupting.) The ultimate wiping out of the bonds?—A. Yes.

Q. Then, with each succeeding year the amount paid on account of the sinking fund reduces the first cost of the plant, does it not?—A. The amount paid by the consumer is stationary.

Q. Not necessarily.—A. Until your bond provision is wiped out.

Q. Well, the point I want to get information on is how far the establishment of the sinking funds offsets the position which you seem to take that under municipal ownership the real cost of the plant is not made manifest. Now, of course, I only speak from experience in Massachusetts, with which I am most familiar. In all cases of public ownership there the law compels the setting aside of a certain percentage, usually 5 per cent every year, which in 20 years will wipe out the cost of the plant—less than 20 years.—A. The construction cost of the plant is one thing; the operating cost, the cost of ownership and operation, the contingent cost, is another thing. Now, the construction cost would be known and incurred by bond issue and provided for by the sinking fund; but the operating cost, the cost of ownership and profit, is not so provided for. That has to come from the rates; and if a large share of that is raised by taxation, then the rate can be lowered. You will find that that condition exists in a great many cases. I think you will find in that book there [indicating], with the red paper around it, where I quote from the editor of the Boston Herald a statement that he made about the Boston waterworks a few years ago, showing how much more the work had cost than the accounts were showing.

One thing that I would like to have the commission take seriously into consideration—we have had a good deal of by-talk, you know—but the real proposition that I want this commission to consider is this: The principle to be applied to all public-service utilities, and I mean that from the highest to the lowest. I started 10 years ago to study this question, and I have put in all my time on the municipal question, for the reason that it is the question that stands nearest to the people; and I stated in the preface to my law book that the public policy which is finally

the accepted policy of the municipalities on these questions will become the national public policy. You can do this thing just as in the small State of Wyoming, where there is, you might say, a virgin soil to start the system of accounting in. We can start it there and get our illustrations, etc., but it is a very different problem to go into Massachusetts and do it, where they have their system already. But these questions will keep on pressing for solution, no matter what any of us think about them. And what will the solution be? That is the practical question. I have stated the problem as related to municipal affairs, hoping there to find a solution of the question that would be not only for municipal affairs, but for national affairs. I have reached the conclusion that the public service, in the first place, can not exist unless it has some privilege from the public. Wherever the public grants the privilege it should safeguard itself to secure the advantages to be derived from that privilege. How can it do it? It can do it only through taking hold of the accounts, knowing absolutely the true condition. If you do not know that, you can not legislate intelligently; I don't care what your opinion is, you can not legislate intelligently. Now, you declare those accounts to be public accounts. You put in your auditor; he prescribes them; he audits them. If you have a dishonest or incompetent auditor, you are going to fail. You can not hedge against that; that is impossible. Then you know what you are doing. Now, you want to legislate on rates, telegraph rates, telephone rates, steam railroad rates—it don't matter what service it is, the principle applies. Now, you want to legislate; you know your cost. As long as you are employing private capital and private work in carrying on that business, every intelligent and sane man will say that it is entitled to a profit. All in the world that the public want to know is that the profit is fair and not unjust. Now, then, you state that profit. I tried very long to find some way of finding the standard by which you could gauge that profit; I have stated that principle in the bill drawn for the Ohio legislature. The profit should be gauged at twice the rate of interest the nation, State, or municipality is paying on its bonds. If there was a condition to-day such that United States bonds would sell at 6 per cent, and they once did, then under that rule the private corporation would be earning 12 per cent. If you get to a change in the general conditions, and the Government bonds are sold at 3 per cent, then the private corporation would be earning 6; but the 6 per cent under the conditions under which it is earned is as good an investment to the investors as the 12 per cent under the other conditions. And so you go in the small towns where the rate is 5 or 4 per cent, in the large towns where it is 3; there is an adjustable standard; it is fixed by competition in the open money market; legislatures can not change it if they want to; it is known already; there is no dispute about it; and I have never seen a business man who would say it would give an unreasonable rate. Now, the problem all comes right down to this: If the Interstate Commerce Commission, to illustrate, in a large sense, had the authority to go into the accounts of the railroads as this system of accounting would require somebody to do, auditing itself the accounts under the cost feature of it, you can just draw in your own imagination how the railroad tariffs would be affected.

In this connection, permit me to suggest that I consider it to be a matter of the highest importance that the Congress should require a uniform system of public accounting and independent auditing for all public accounts in the new possessions for which a system of government is now in process of formation. I hope this commission will so recommend.

Q. (By Mr. PHILLIPS.) You have stated that there can be no intelligent legislation without such a system of accounting as you have described?—A. Yes.

Q. Then the conclusion is that in a great majority of cases, practically all, thus far there has not been any intelligent legislation?—A. I would say that—with all due respect, you understand. The point is right here. We say the legislators who have enacted these laws have done the best they knew how. I do not want to give them any other reputation than that. But if they did not know it all, they could not do any better. And the man who does not know what the cost of an article is can not fix a price on it based on cost and do it intelligently. He may guess at it, and in the general shake-up of things and the competition, one thing rubbing against another, you may get at what we call the substantial adjustment, but you have not got it done scientifically.

Q. Now have you any other matter to speak of, Mr. Foote?—A. That is all so far as the uniform accounting goes. It might interest you to know this, that within the last 2 or 3 years the movement in this direction is growing very rapidly, and that there are some 12 or 14 organizations, representing gas works, water-works, street railroads, and different organizations of municipal reformers of different kinds, that have put themselves on record in favor of initiating this kind

of a system, and they have to-day committees appointed studying the question; and there is a very great hope of its taking effect in practical legislation soon.

Q. You have the bills written out?—A. The bills are in this book.

Q. You will leave a copy of them with us?—A. Yes; and I hope to see those bills presented—if I could have my own way about it, I would have them presented in every legislature there is in session, put them on their passage, and see what comes of it. Some legislatures might adopt them. And I want to say one word in regard to my own position in reference to these bills. I want to be clearly understood on one point: If in my proposition there is anything that is not sound, if any gentleman will make an amendment, will suggest an amendment to any of my propositions that will make them sounder business propositions for the public, I should be very glad to accept the amendment and to acknowledge it. But if he can not do that, why then I would like to have him stand with me for their enactment as they are drawn. That is the logic of the situation.

(Testimony closed.)

WASHINGTON, D. C., January 4, 1901.

TESTIMONY OF PROF. FRANK PARSONS,

President National Public Ownership League.

The commission met at 11 a. m., Vice-Chairman Phillips presiding. At that time Prof. Frank Parsons, 11 St. James Avenue, Back Bay post-office, Boston, Mass., appeared as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. CLARKE.) Will you please give your name and post-office address?—A. Frank Parsons; 11 St. James Avenue, Back Bay post-office, Boston.

Q. Are you connected with Boston University?—A. Yes.

Q. In what capacity?—A. I give a course of lectures on insurance law.

Q. How long have you been a lecturer there?—A. Nine years.

Q. Have you given special study to the subject of railways, telegraphs, telephones, and public-service corporations generally?—A. Yes.

Q. The commission will be pleased to hear you upon those subjects, and will be glad to have you proceed in your own way.—A. Thank you. That is what I would like to do. I have blocked out a line of thought on those subjects that your letter invited me to speak about, and would like to follow that line in dealing with them. They have been in my mind and under my study more or less for 25 years, at first chiefly from the attitude of a civil engineer. I graduated from the civil engineering course of Cornell University in 1873, and my mind in those years was mainly occupied with mathematical and economic ideas. A little later I began to study law, and then the legal and political elements of the problem became the predominant ones, and later yet I got still more deeply interested in general social philosophy, ethics, and sociology, and the ethical and social aspects became predominant over the others. I would like to present my line of thought, if you are willing, under the title—

PRIVATE MONOPOLY IN TRANSPORTATION CONTRASTED WITH PUBLIC OWNERSHIP AND COOPERATIVE OPERATION.

The fundamental test of any institution, method, or service must be its effect upon the public good, its relation to morals, manhood, government, industry, civilization, and progress; and in applying this vital test the principal emphasis must be placed not upon the financial results, but upon the human results, not on money, but on manhood. Final values—real values—must be measured in terms of life and progress, not in terms of dollars and cents. Dollars and cents are important, of course, but life, liberty, justice, virtue, and intelligence are infinitely more important. Material wealth is an excellent thing, rightly obtained and properly used, but it is not an end in itself—it is only one of the raw materials of civilization. Justice, character, and human development, happy homes and noble lives, are the real ends for which railways and telegraphs and telephones and all other institutions, whether industrial, political, or social, exist, and only so far as they conduce to these ends is their existence justified. So that even when we are dealing with questions of material wealth it will not do to consider simply the amount; we must consider also the method of production, distribution, and expenditure, for material wealth, wrongly obtained through bad processes of production, or unjustly distributed, or corruptly or injuriously used, may be opposed to the public good, and so become illth instead of wealth. Wealth is simply that which produces what is well; illth is that which produces what is ill.

THE AIM—PRIVATE PROFIT OR PUBLIC SERVICE.

In applying these tests, or this compound test with particular emphasis, the first thing that I note is the *difference of aim* between the two systems that I have spoken of. Private monopoly aims at dividends for stockholders; public ownership, as a rule, aims at service for all. I mean that a normal public institution aims at the public good, while a normal private monopoly aims at private profit. It serves public interest also, but such service is incidental, and not the primary purpose. It serves the public interest so long as it runs along in the same direction and is linked with private profit, but when the public interest departs from or runs counter to the interests owning or controlling the systems, then the public interests have to take a back seat. And not merely is the aim of private monopoly material wealth, subordinating the higher elements of wealth and even disregarding them, but the aim is material wealth for the few, not for all; and still further, the aim is material wealth for the few now. A private monopoly ordinarily can not expend money and develop a great system of transportation, looking for its pay in the next decade, or through the collateral development of other industries and of the country as a whole, but it must have its profit now; the stockholders and bondholders want their dividends and interest, and they want them immediately.

Public ownership, on the other hand, under normal conditions can and does aim first at the public good, making profit and material wealth a subordinate, incidental matter. And so far as it deals with material wealth on the financial plane, public ownership aims at wealth for all and not for the few, and due regard is paid to the future and to the collateral development of other industries and of the country.

In regard to this difference of aim which appears to me to be the fundamental distinction between the two systems, public ownership and private monopoly, I would like to read a passage from a speech of Bismarck, and another from the argument of the Prussian Cabinet, at the time they were considering the change from private ownership to a complete system of public railways in Germany.

On April 26, 1876, in a speech in the Prussian Parliament advocating the consolidation of railways under Government control and ownership, Bismarck used the following words. He was comparing the railways in Germany, which were public property and operated by the States, with the systems that were still private. He said in regard to the State railways:

"They serve chiefly the public interests of traffic, of commerce, of the circulation and transport of commodities and passengers; besides, as a secondary consideration, they aid the public treasury."

Please notice how distinctly he places the money question second. First, he said, "They serve the public interests of traffic, of commerce, of circulation," and afterwards he notes as a subordinate matter, "as a *secondary* consideration, they aid the public treasury."

Then he continues: "*And in all events promote only public interests.* It is the misfortune of private railways that a privilege granted by the State, and a privilege that could not be made use of without the help of the State—we may say a monopoly granted by the Government—should be legally exploited in behalf of private interests and private pockets."

Bismarck, one of the greatest minds and one of the greatest statesmen that ever lived, has stated in this speech, as clearly as it would be possible to state it, the vital difference between the two systems.

Let me turn now to another great document, the argument of the Prussian Cabinet, which was sent by them to the Reichstag in 1879 along with the bill providing for the absorption of the private railways, the transfer of them to the State. The argument for nationalization of the railways is concentrated on two great points. First, the benefits, economies, etc., that would result from the consolidation of the system under a single general management, and, second, "direct attention by the Government to public interests, which do not permanently find sufficient furtherance and protection where the railroads are in the hands of private corporations whose object is gain." There again we see that fundamental distinction clearly drawn and emphasized as one of the two vital reasons for the transfer of the railways.

The Federal Council of Switzerland in 1897 put out an argument to the people when the proposed taking over of the railroads of Switzerland to the State was being considered, and in that argument one of their main points was this same matter—that the transfer of the railroads to the State meant that they would be administered primarily for the public interest and not for the mere financial benefit of a small class of owners; that a public system would aim at advantage to the whole people, while private companies look mainly to the advantage of the stockholders or a small part of the people, and that a public system aims not only

at the benefit of the whole people instead of a part, but at the benefit of the people in the higher sense as well as in the commercial sense—the public good—not merely on the financial plane, but on political, social, and ethical planes also. I speak from memory about the Swiss arguments, giving the impression they made upon me. I haven't the documents with me. I have, however, a little quotation from a discussion of the vote of the people afterwards in Switzerland at the time when they overwhelmingly adopted the measure for making the railroads public. It is a summary made by Horace Micheli in Appleton's Popular Science Monthly for September, 1898, in which he says:

"The majority of the electors evidently regarded the railroads as a public service of the same kind as the post-office, telegraph, etc., and sought to remove all private influences and sense of personal benefit from their management."

The mere fact of changing the aim may not make the administration perfect, of course, but nevertheless, as these high authorities have recognized, it is of the greatest importance to change the aim. With equally good management and equally good intentions in those who have control, the aim makes all the difference in the world. If they aim at private profit, good management will get it; if they aim at public good and the higher wealth, good management will get that.

I have not by any means exhausted the evidence that public systems consciously aim at the public good and the higher wealth as superior to questions of mere financial gain. A few further items on this point may be useful here.

In Hungary in 1889 the Government changed from the old system of tariff to what is called the zono system, and they gave their reasons for the change in a document issued at the time.

Q. (By Mr. CLARKE.) When you say tariff there, you mean for transportation?—
A. Yes: the transportation rates. The Government gave their reasons for the change, and among all those reasons there is not one word about profit or financial gain in any way. The reasons are the facilitation of communication, the development of the country, the consolidation of the country politically by creating better communication among the people, breaking down prejudices and antagonisms by fuller intercourse, the development of civilization through the educational value of communication—"it was essential to consider the great economic and civilizing effects of such a reform," said the Government. Where is the private railway management that has reduced rates 40 per cent to 80 per cent for the sake of the civilizing effects of easy communication? To reduce rates and facilitate intercourse, and to do this by a system which, while *inducing a large increase of traffic*, would admit of *great simplicity* in its management, "so reducing the cost to the lowest practicable limit; the aim being to demand of the country the smallest financial sacrifices possible, and yet to inaugurate upon the Government railroads a radical reduction of rates" by "methods which would place the offered reductions within the reach of all, and adapt them to the requirements of all ranks and classes of the entire population," thereby securing "the great economic and civilizing effects" and other benefits above mentioned; such was the purpose of the Government railway management in Hungary. Social, political, and educational benefits supply the dominant motives; and so far was the State from subjection to the money motive that it was ready to make "financial sacrifices" in order to use the railroads for higher interests; seeking, however, with due regard to material economy, to make the financial sacrifices as small as possible. This noble railroad policy has been rewarded not only by large attainment of the benefits sought by the Government, but by such an astonishing growth of business and simplification of management that, instead of the financial sacrifices expected by the Government, the *net receipts were enlarged* by the change.

Again, in New South Wales, where the railroads are also public property, the head of the railroad commission says: "We do not run the roads to make money, but for the convenience of the public and the good of man." It is the human element they are considering, and not the financial.

So in New Zealand, probably the strongest illustration of all, Premier Seddon, and Minister of Railways Cadman, and his successor, Ward, have all definitely announced it as their settled policy, the settled policy of the State, to run the railroads in the interests of the public, to develop the country, to help labor, to encourage education, entirely subordinating questions of financial gain, and, in so far as they do consider material wealth, they consider it chiefly in the way of collateral benefits through the development of farms and factories and the growth of business throughout the country. They understand that every dollar spent in wise railroad construction means \$5 at least added to the value of land, and they take care that the State shall receive that value by keeping the land in the government's control as far as possible. They know also that the development of the railway system means the development of commerce and industry, and that the

indirect results even to the public treasury, without considering the higher benefits, will be ample remuneration for all they spend on the railroad system.

The same thing is recognized by the English telegraph. In one of our consular reports (United States Consular Reports, vol. 47, pp. 565, 566) I find the following statement: "The English Government does not consider the telegraph service as a means of revenue for the treasury, but as a means of information for the whole country, giving facilities of all kinds for its use and extension in all the social classes. In favoring increased trade by this instrument of commerce it well knows that the treasury will benefit indirectly from augmentation of the general wealth."

These illustrations could be extended, but the point is sufficiently emphatic now, perhaps, to offer and invite fair recognition, so I will pass to the consideration of the question.

HOW THE DIFFERENCE OF AIM WORKS OUT IN ACTUAL PRACTICE.

Discriminations.

From the theory to the fact, and first in regard to discriminations. Discriminations, usually more or less secret, between one person and another are perhaps the greatest evils of our railroad system. The Senate committee of 1885 found enormous evils in our railroad system in this regard, and stated the facts in emphatic terms in its report. On page 7 of their report they say that our efficient service and low rates—i. e., the low average of our freight rates—"have been attained at the cost of the most unwarranted discriminations, and its effect has been to build up the strong at the expense of the weak, to give the large dealer an advantage over the small trader, to make capital count for more than individual credit and enterprise, to concentrate business at great commercial centers, to necessitate combinations and aggregations of capital, to foster monopoly, to encourage the growth and extend the influence of corporate power, and to throw the control of the commerce of the country more and more into the hands of the few."

On page 40 the committee say: "Railroad companies are not disposed to regard themselves 'as holding a public office and bound to the public,' as expressed in the ancient law. They do not deal with all citizens alike. They discriminate between persons and between places, and the States and Congress are consequently called on to in some way enforce the plain principles of the common law for the protection of the people against the unlawful conduct of common carriers in carrying on the commerce of the country."

On page 188 the following example is given:

"One reference to the testimony must suffice to illustrate the universality of individual favoritism, the reasons which influence the railroads in favoring one shipper to the ruin of another, and the injustice of the system. Mr. C. M. Wicker, of Chicago, a former railroad official of many years' experience, was asked if he knew anything of discrimination upon the part of transportation companies as between individuals or localities, and testified as follows:

"Mr. WICKER. Yes; I do. And this discrimination, by reason of rebates, is a part of the present railroad system. I do not believe the present railroad system could be conducted without it. Roads coming into this field to-day and undertaking to do business on a legitimate basis of billing the property at the agreed rates would simply result in getting no business in a short time.

"Senator HARRIS. Then, regardless of the popularly understood schedule rates, practically it is a matter of underbidding for business by way of rebates?

"Mr. WICKER. Yes, sir; worse than that. It is individual favoritism, the building up of one party to the detriment of the other. I will illustrate. I have been doing it myself for years, and had to do it.

"Senator HARRIS. Doing it for yourself in your position?

"Mr. WICKER. I am speaking now of when I was a railroad man. Here is quite a grain point in Iowa, where there are 5 or 6 elevators. As a railroad man I would try and hold all these dealers on a "level keel" and give them all the same tariff rate. But suppose there was a road 5 or 6 or 8 miles across the country, and these dealers should begin to drop in on me every day or two and tell me that that road across the country was reaching within a mile or two of our station and drawing to itself all the grain. You might say that it would be the just and right thing to do to give all the 5 or 6 dealers at this station a special rate to meet that competition through the country. But as a railroad man I can accomplish the purpose better by picking out one good, smart, live man, and, giving him a concession of 8 or 4 cents a hundred, let him go there and scoop the business. I would get the tonnage, and that is what I want. But if I give it to the 5, it is known in a very short time.

* * * * *

"When you take in these people at the station on a private rebate you might as well make it public and lose what you intend to accomplish. You can take hold of one man and build him up at the expense of the others, and the railroad will get the tonnage.

"Senator HARRIS. The effect is to build the one man up and destroy the others?

"Mr. WICKER. Yes, sir; but it accomplishes the purposes of the road better than to build up the 6.

"Senator HARRIS. And the road, in seeking its own preservation, has resorted to that method of concentrating the business into the hands of one or a few, to the destruction of the many?

"Mr. WICKER. Yes, sir; and that is a part and parcel of the system."

On page 189 the committee says:

"The practice prevails so generally that it has come to be understood among business men that the published tariffs are made for the smaller shippers, and those unsophisticated enough to pay the established rates; that those who can control the largest amounts of business will be allowed the lowest rates; that those who, even without this advantage, can get on 'the inside' through the friendship of the officials or by any other means can at least secure valuable concessions; and that the most advantageous rates are to be obtained only through personal influence or favoritism, or by persistent 'bulldozing.'

"It is in evidence that this state of affairs is far from satisfactory, even to those specially favored, who can never be certain that their competitors do not, or at any time may not, receive even better terms than themselves. Not a few large shippers who admitted that they were receiving favorable concessions testified that they would gladly surrender the special advantages they enjoyed if only the rates could be made public and alike to all."

Again, on page 191:

"Universal complaint has been made to the committee as to the discriminations commonly practiced against places, and as to the conspicuous discrepancies between what are usually termed 'local' rates and what are known as 'through' rates."

In summing up the testimony on pages 180-182 of their report, the committee presents this tremendous indictment:

"The complaints against the railroad systems of the United States expressed to the committee are based upon the following charges:

"1. That local rates are unreasonably high, compared with through rates.

"2. That both local and through rates are unreasonably high at noncompeting points, either from absence of competition or in consequence of pooling agreements that restrict its operation.

"3. That rates are established without apparent regard to the actual cost of the service performed, and are based largely on what the traffic will bear.

"4. That unjustifiable discriminations are constantly made between individuals in the rates charged for like service under similar circumstances.

"5. That improper discriminations are made between articles of freight and branches of business of a like character, and between different quantities of the same class of freight.

"6. That unreasonable discriminations are made between localities similarly situated.

"7. That the effect of the prevailing policy of railroad management is, by an elaborate system of secret special rates, rebates, drawbacks, and concessions, to foster monopoly, to enrich favored shippers, and to prevent free competition in many lines of trade in which the item of transportation is an important factor.

"8. That such favoritism and secrecy introduce an element of uncertainty into legitimate business that greatly retards the development of our industries and commerce.

"9. That the secret cutting of rates and the sudden fluctuations that constantly take place are demoralizing to all business except that of a purely speculative character, and frequently occasion great injustice and heavy losses.

"14. That the differences in the classifications in use in various parts of the country, and sometimes for shipments over the same roads in different directions, are a fruitful source of misunderstandings, and are often made a means of extortion.

"15. That a privileged class is created by the granting of passes, and that the cost of the passenger service is largely increased by the extent of this abuse.

"16. That the capitalization and bonded indebtedness of the roads largely exceed the actual cost of their construction or their present value, and that unreasonable rates are charged in the effort to pay dividends on watered stock, and interest on bonds improperly issued.

"18. That the management of the railroad business is extravagant and wasteful, and that a needless tax is imposed upon the shipping and traveling public by the unnecessary expenditure of large sums in the maintenance of a costly force of agents engaged in a reckless strife for competitive business."

The interstate-commerce law was passed and the Interstate Commerce Commission was established to abolish the evils of unjust discrimination, but the work has not been accomplished. The Interstate Commerce Commission has told us year after year that the discriminations are still going on; that they can not be stopped, under present laws at least; and I think we might say that no law that could be passed of a regulative character could possibly put an end to these preferences given to the favorites of railroad management and to great shippers. These discriminations result from a law higher, I believe, than any that Congress can make—the law of industrial gravitation toward the center of highest profit. There is more profit to the railroad management in dealing with one man than in dealing with many. It is a simpler matter and safer; they can control things better; they can ship in larger quantities; in every way it is better for the railways. It is also better for the railroad manager in another sense, for he frequently has some stock or interest in the company or firm which is given the privilege, and so he secures a personal profit; not always, but many times. So that, considering all the influence tending in that direction, especially the pressure brought to bear by great companies and firms through the threat to withdraw their traffic entirely unless the rates they demand are given them, we can understand that our railways are practically compelled, under existing conditions, to give preferences to the great trusts and corporations; and they will do it secretly if they are not allowed to do it openly.

The Interstate Commerce Commission states in their report of 1890, and reiterates in the report of 1900, that—

"Tariffs are disregarded, discriminations constantly occur, the price at which transportation can be obtained is fluctuating and uncertain, railroad managers are distrustful of each other, and shippers all the while in doubt as to the rates secured by their competitors. * * * Enormous sums are spent in purchasing business, and secret rates are accorded far below the standard of published charges. The general public gets little benefit from these reductions, for concessions are mainly confined to the heavier shippers. All this augments the advantages of large capital, and tends to the injury and often to the ruin of small dealers. These are not only matters of gravest consequence to the business welfare of the country, but they concern in no less degree the higher interests of public morality. * * * It is often said, in substance, that if any carrier gives discriminating or preferential rates it is the duty of the commission to prevent or punish such misconduct. Unfortunately, the commission is powerless to perform any such duty."

The commission then states that even criminal prosecutions have failed to secure the enforcement of the law. And in regard to the regulation of charges, it says:

"Any railroad company can charge for its services whatever it pleases, and as much as it pleases, without any real power in this commission or any other tribunal or court to limit the amount of such charge."

Interstate Commerce Commissioner Prouty, in a paper on Railway Discriminations, published by the American Academy of Political and Social Science, makes the following statements:

"It is well known that for years past a large portion of the competitive railway traffic of this country, especially those articles which are moved in large quantities, and in the handling of which a small amount in the freight rate is of great consequence, have not been moved upon the published rate. It is an equally well-known fact that during the same time the tendency has been to center the handling of these articles in the hands of comparatively few persons. The United States exports annually enormous quantities of grain, but you can count upon your fingers the concerns which bring the bulk of it to the American seaboard. We are told that grain upon the Chicago market is handled by a half dozen concerns. It is brought from the fields west of Chicago into that city by as few. One company buys upon one line of railway and nobody else can buy there; another upon another line. Exactly the same thing is true of beef, pork, lard, provisions, and almost all those commodities which are the necessities of life.

"Is there any connection between these facts? Is the discrimination in the freight rate responsible for the concentration of business in the hands of the few? There can not be the slightest doubt of it. No person at all familiar with the situation has any other opinion. Freight-rate discriminations are the most potent factor in the establishment and continuance of great combinations of capital at the present time. It may be doubted if a single one of those monopolies which

have fastened themselves upon the country in recent years could have done so in the face of absolute equality in the freight rate."

In granting preferences and making discriminations "many devices have been adopted. These sometimes take the form of an elevator commission; sometimes an excessive car mileage; sometimes the shipper pays the full interstate rate, in consideration that he shall receive preferential rates within the State, to which the interstate-commerce act does not apply."

How completely the law has failed to stop discrimination is further illustrated by a statement on the subject by the president of a large system, quoted approvingly by Mr. A. B. Stickney, himself a prominent railroad president, in his book on the Railway Problem, page 307: "If all who have offended against the law were convicted, there would not be jails enough in the United States to hold them."

One of the great points made by Bismarck and the Prussian cabinet was that Government ownership would get rid of these discriminations, and the Germans had suffered from them severely; not quite so much as we have, perhaps, but very greatly. They spoke of it in their argument several times, and emphasized it as the greatest and most objectionable feature of the private railway system—the abuse of the powers of the managers in giving preferences to favorites or large concerns. The German Government, with all its imperial power, had tried year after year to stop these discriminations, and in the argument of the cabinet they said that it had proved totally impossible to prevent them, and that this impossibility made it also impossible for the Government to control or regulate the system of transportation.

There is no necessity for me to go into details or give illustrations of discrimination. The commission has had plenty of them, I presume.

Q. (By Mr. PHILLIPS.) Have you anything of late in regard to discrimination?—A. The latest I have is the Boston and Albany investigation. Has that been presented to the commission?

Mr. PHILLIPS. No; I think not.

The WITNESS. While the leasing of the Boston and Albany to the New York Central was under consideration the road was investigated pretty thoroughly, and one of the things brought out was that the published rates were not followed to any large extent. Various shippers, merchants, manufacturers, etc., were visited, and it was found that the local rates were not followed; that shippers were receiving widely varying discounts from the published rates, and that shippers did not know at all what rates their competitors and neighbors were getting. They were not satisfied with the system, but they were afraid to complain; that is, if they made complaint they would lose whatever advantages they possessed and become marked men for railway persecution. The railroad commission of Massachusetts advertised for shippers who were not satisfied to come and make complaint; but they did not do so, for the reason that any shipper who complained of a railroad would be apt to fare a good deal worse afterwards than before; his goods would be delayed, his facilities would be cut off, and whatever reductions he was getting would be stopped, and he would have to pay the full published rates; he might also be involved in costly litigation, and he did not dare to say anything.

The railroad commission was asked by the legislature about these discriminations on the Boston and Albany, and a report was handed in by the commission last year (1900), saying that the reductions from the published rates averaged 40 per cent, and that in different cases they ran from 10 to about 73 per cent—fully confirming what the shippers had said. It was admitted, however, that this report was not written by the railroad commission. They had passed the question over to the Boston and Albany, and a high official of the road had written the reply. The railroad commission admitted that they did not know anything about it. They, however, handed in the report of the railroad official as being true, and it was admitted, both by the railroad and by the commission, that these discounts on local rates were being given, and they are being given now. The railroad official claimed that the special rates were "open to all shippers sending freight under similar circumstances and conditions," which may be true if we understand "circumstances and conditions" to include the relations of the shipper to the managers, and his pull with the railroad, but can not in any other way be made to square with the statements of shippers and the other evidences in the case.

The effects of railway favoritism are well illustrated in the case of oil. The Standard Oil trust was formed on railway discrimination, and though strong enough now to defy the railways, the union between the railways and the combine still continues to bear rich fruit. For example, it is well known that at the

present time the rates on oil are such as practically to shut out West and wasteful, and everybody but the Standard Oil Company, almost, from New England public by the think that testimony has been given to you, though, so it is not necessary force of

Q. Not very specifically. Have you direct testimony on that, taken year, that shows that to be the fact?—A. I got my information from Commissioner Prouty's statement of the facts, shown by the records of the Interstate Commerce Commission. It appeared in testimony before the Interstate Commerce Commission in 1898 that the Standard Oil is helped by the railroads of New England in two ways. In the first place, their tank cars, which usually weigh from 35,000 to 50,000 pounds, are ordinarily billed at 24,000, according to the testimony of the agent of the Boston and Albany Railway in East Boston, the great center of the Standard Oil business in New England. Out of 14 cars sent over another road from East Boston to Newport, R. I., at least half were billed and paid for on the basis of 24,000 pounds to the car, although their average weight was shown to be 48,550 pounds per car. It was claimed that these underbillings were clerical errors. In considering the motives and reliability of such a claim we must not forget the curious habit shown by these clerical errors of piling up in great bunches in the Standard Oil business, and the still more curious fact that all the errors are in favor of the trust—none against it.

Again, the practice of adding the Boston rate to the local rate on shipments of oil into New England puts the independent refiners at a great disadvantage. The rate on corn from Cleveland to Boston is 15 cents per hundred pounds, and to New Haven the same, but the rate on petroleum from Cleveland to Boston is 24 cents, and to New Haven it is the Boston rate, 24 cents, plus the local rate, or a total of 38 cents from Cleveland to New Haven. Now the Standard Oil has got large warehouses in East Boston, and they bring their oil by boat and store it there, and then they get the freight rates simply from Boston down to the Connecticut point, whereas the Western refiner who has no storehouse has to pay first the Boston rate and then this local rate also to the other point, even though the oil may go direct, so that the rates are practically prohibitive, almost prohibitive to the Western refiners, the Cleveland men.

The same thing in another form exists as between Chicago, or the refinery of the Standard Oil at Whiting, near Chicago, and the Cleveland men. The rate on oil from Chicago and Whiting to New Orleans is made 25 per cent lower than it is from Cleveland to New Orleans, so that the independent refiners are practically shut out from the southern territory. Illustrations might be multiplied to any extent, and I can put more in evidence if the commission desires.

Q. Have you the written testimony to which you have alluded?—A. Yes.

Q. Could you furnish a copy to the commission?—A. The testimony before the Interstate Commerce Commission, and Commissioner Prouty's statements are available. On the Boston and Albany matter, my information comes from direct knowledge of the investigations and from the report that was handed in from the railway commission to the legislature. That would give you one of the main points or several of them. I can send you a copy of that.¹

¹At a subsequent date Mr. Parsons submitted a copy of the report above referred to. So much of it as relates to freight discrimination is given below.

[House, No. 1090.]

COMMONWEALTH OF MASSACHUSETTS,
BOARD OF RAILROAD COMMISSIONERS,
No. 20 Beacon Street, Boston, March 14, 1900.

HON. JAMES J. MYERS, *Speaker House of Representatives.*

DEAR SIR: By direction of the board of railroad commissioners I have the honor to send you herewith the report of the board transmitting the information obtained in reply to the questions contained in the orders of the House of Representatives dated, respectively, February 13, 1900, and February 15, 1900.

Yours, truly,

WM. J. MCCULLOUGH, *Assistant Clerk.*

COMMONWEALTH OF MASSACHUSETTS.

To the Honorable the House of Representatives:

The board of railroad commissioners respectfully transmits the information obtained in reply to the questions contained in the orders of the House of Representatives dated, respectively, February 13, 1900, and February 15, 1900.

INFORMATION RELATING TO QUESTIONS CONTAINED IN ORDER OF FEBRUARY 13, 1900.

* * * * *

Question 3. Do shippers of large quantities of freight by the Boston and Albany Railroad receive lower rates than the published tariff rates?

Answer. What is known as the published tariff of freight rates upon the Boston and Albany Railroad was issued in 1881, and has never been revised since that time. Rates lower than published tariff

have hastened to the face of a [redacted] (AR.) You state that that report was made by an officer of

In granting [redacted] any that was handed in through the commission?—A. Yes; I adopted. [redacted] commission admitted that it was made by an officer—they did not

an excess [redacted] there was a difference of from 10 to 73 per cent. Is that discrimination in the class of goods or over the whole tariff?—A. All over the tariff—on the [redacted] of goods.

But suppose you take one classification—the second class. Did you find a difference of 10 to 73 per cent between shippers in that class, or was that 10 to 73 per cent scattered over the whole classification?—A. Scattered over the whole classification.

Q. Did you prove any discriminations as between the same class of shippers for the same goods?—A. Yes; some shippers pay nearly or quite the published rates,

rates are charged on nearly all articles of freight moved in large quantities, owing, it is explained, to changed conditions of business, competition, and the establishment of new industries.

Question 4. If so, is there any standard schedule of discount by said railroad in proportion to the amount of shipments or do individual shippers get such discounts as they can?

Answer. There is no standard schedule of discount proportionate to the amount of shipments. It is the practice to make special rates varying according to the nature of a commodity and the distance it is carried. These commodity rates are open to all shippers sending freight under similar circumstances and conditions. Special rates are also made for the benefit of persons who carry on a business that calls for the transportation of a variety of goods and commodities. This rate is made applicable to all goods shipped by such persons, regardless of particular commodity or tariff rate. The benefit of a rate so established for any one person is given to any other person carrying on a similar business.

Question 5. What is the largest discount, if any, below the published tariff rates given by said railroad to any shipper, and what is the average discount and how is this average computed?

Answer. The largest discount below published tariff rates is made for the shipment of the product of a trap rock quarry at Westfield. This is carried from Westfield to Brighton at 65 cents per ton of 2,000 pounds, while the tariff rate is \$2.40 per ton. Discounts vary from this one of 72.9 per cent, which is an extreme case, to that of 10 per cent, according to conditions. As an example of discounts made from the published tariff rates, the following figures may be taken, applicable to shipments from Boston to Springfield:

	First class.	Second class.	Third class.	Fourth class.
Discount.....	Per cent. 15	Per cent. 24	Per cent. 24	Per cent. 33½

The average rate of discount from the published tariff upon local freight carried on February 28, 1900, shows a discount of 40 per cent. This particular day was taken at random and gives a fair average of discounts generally made.

This percentage is arrived at by carrying out at the regular published tariff rates all local freight on that day carried at less than published tariff, the difference between the amount thus obtained and the amount actually charged, showing the discount to be 40 per cent of the regular published charges.

The above statements apply to freight which originates at and is shipped to a station on the line of the Boston and Albany Railroad.

The through rates for freight business done in connection with other railroads are subject to agreement between the interested roads, and upon this class of business the proportionate rate received by the Boston and Albany Railroad as a rule is less than local rates. So far as these through rates relate to interstate business, they are necessarily subject to frequent changes.

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INFORMATION RELATING TO QUESTIONS CONTAINED IN ORDER OF FEBRUARY 15, 1900.

* * * * *

Question 2. Does a person in the habit of making large shipments of freight on said railroad have the benefit of a lower rate for one shipment of certain freight than the rate required of a person not in the habit of making large shipments for one shipment of similar freight?

Answer. All shippers receive the same benefits where a tariff has been established on certain articles as commodities. Where a tariff has been established for a particular business, based upon the conditions attaching to that business, all persons engaged in such business are given the advantage of this tariff. We are informed, in other words, that whether under the public tariff rates or special rates, no distinction is made between shippers, based upon the quantity of shipments, except that made between the shipment of carload quantities and those less than a carload, the unit of freight shipment being a carload.

The period of time to which statements in this communication are applicable, where not specially mentioned, is the period ending September 30, 1899, that being the period adopted in one of the questions submitted, and one which would seem to answer the purposes of the inquiry.

An opportunity was given to any person having within his knowledge facts or information relating to differences in freight rates to present them at a public hearing. Although notice of this hearing was widely given by publication in the principal cities along the line of the Boston and Albany Railroad, no one appeared at the appointed time.

JAMES F. JACKSON,
GEORGE W. BISHOP,
HERSEY B. GOODWIN,
Commissioners.

MARCH 14, 1900.

while others, dealing with the same class of goods, obtain concessions running anywhere from 10 to 70 or more per cent.

Q. (By Mr. PHILLIPS.) That was generally in favor of the large shipper as against the smaller one, was it?—A. Yes; that is my impression. And the railway officer said that "rates lower than published tariff rates are charged on nearly all articles moved in large quantities." In answer to a question "Is there any standard schedule of discount in proportion to the amount of shipments, or do individual shippers get such discounts as they can?" the Boston and Albany official said: "There is no standard schedule of discount proportionate to the amount of shipments." He also stated, as already noted, that while these secret discounts were made, the same discounts were always made under the same circumstances; but our investigations lead us to feel quite positive that he was punning. He used the words "under the same circumstances" and so framed a true statement if you make the meaning of "same circumstances" broad enough—the same circumstances in relation to the management of the railways, the same pull, the same desire to favor this man as to favor the other, or this one as large a shipper as the other, and so on.

Q. (By Mr. CLARKE.) It was your opinion, then, that the attorney was not quite frank about that, and that he used the word "circumstances" in too broad a sense?—A. In a very broad sense.

Q. A sense broader than the mere surroundings of the freight problem itself?—A. I think so. He did not swear to the statement, nor even sign it. But if the words "fair and lawful" or the phrase "properly essential circumstances" had been added, and he had been asked to subscribe and swear to the document, I doubt if he would have done so, although it is possible, of course, that he would have thought even the most subtle difference of relationship of the shipper to the manager or the railway was one of the fair and essential circumstances, and it is also possible that even a high railway official might be willing to tell what he knew to be untrue, although I believe most railway men are honorable men according to present business standards, and prefer to make their statements in such form that they are capable of a truthful interpretation if the reader has wit enough to read the true interpretation.

Q. Was that official Mr. Samuel Hoar?—A. We were not informed what official of the road was responsible.

Q. (By Mr. LITCHMAN.) Is it your opinion that these discriminations were sufficient to create a monopoly in favor of any individual shipper?—A. According to my understanding of monopoly, yes. I understand monopoly to be any advantage which tends to shut out competition, and therefore any discrimination in freight rates would be a monopoly more or less complete according to the degree of discrimination. For example, the difference brought out in the Hepburn report, between A. T. Stewart and other shippers of dry goods—he was given a rate of 13 cents a hundred and everybody else had to pay 20 cents. That was sufficient of itself to give A. T. Stewart an enormous margin of profit and a great power to control the market; and while others were able to do some business, I believe in a very true sense A. T. Stewart had a monopoly.

Q. Did your investigation go far enough to locate the kinds of goods outside of oil which you referred to?—A. Many kinds. The majority of merchants interviewed were found to have discounts, more or less.

Q. Covering substantially all branches of industries?—A. A good many of them.

Q. Of the leading branches?—A. Of the leading branches.

Q. (By Mr. FARQUHAR.) Did the Boston and Albany have a competing line?—A. The Boston and Albany is competing to some extent with the Fitchburg, and to some extent, I suppose, with the New Haven road.

Q. Well, these discriminations you speak of are on local deliveries of the road?—A. Local rates.

Q. Entirely local to the Boston and Albany itself?—A. Yes; the investigation I have been speaking of related to local rates.

Q. So you believe it is a matter of personal favoritism, then, the advantage of the rates given?—A. Not wholly personal favoritism. I think the railway managers are driven to these discriminations largely. I think they are of two classes. Some rates are made and advantages given through favoritism. Sometimes the purpose is to let the favored person realize a large profit. Sometimes the managers share in the profit themselves, as was originally the case in the building of the Standard Oil trust; it was built up by letting railroad managers in on the ground floor to share in the profits. But the other and by far the largest class, I believe, consists of discriminations that are practically forced upon the railroads by the threats of large shippers to transfer their traffic.

Q. Do you think they could advantageously transfer their traffic from the Boston and Albany to any other road in Massachusetts?—A. I think that they would transfer their traffic, perhaps, if they did not get what they wanted, even if it was not advantageous for a time. I am not sure about that. That is only impression as to the cause. I am inclined to be very charitable in my feelings toward railway managers. I think they are under tremendous pressure.

Q. (By Mr. LITCHMAN.) Could not that pressure be relieved by legislation?—A. Relieved a little, perhaps, but not overcome. If the enormous power of the German Government could not do it, I do not see how we could do it, especially as the railway managers can give preferences, not merely through rates, but through car service, through their car mileage allowance, through elevator commissions and subsidies of various kinds, and if they were driven to it, they could give the preference by private arrangement, the same way that men meet legislators, and pass money without any record of it at all. I do not see how in the world it can possibly be wiped out by legislation so long as the roads are in private hands. I believe the only way it can be prevented is to do away with the cause of it, which is the antagonism of interest between the owners and managers of the railways on the one hand and the public on the other, and the only way to remove that antagonism of interest, so that the public interest shall be the interest of the owners, is to make the owners and the public identical.

Q. (By Mr. FARQUHAR.) I would like to ask another question on this Boston and Albany matter. Did you, in your investigation, find there had been discrimination made on the Boston and Albany to build up manufactories on their own line? Did any manufacturers get special rates there to build upon the Boston and Albany line?—A. I think to a certain extent that is true. I think that is one of the causes; yes.

Q. (By Mr. CLARKE.) How did you obtain the evidence of discriminations by the Boston and Albany? Did you and your associates go around and interview the merchants?—A. Personal interviews with the merchants were one source of information.

Q. Nobody representing the Boston and Albany was present at the interviews?—A. No.

Q. It was entirely ex parte, then?—A. Yes.

Q. And witnesses were not under oath?—A. No.

Q. You have every reason to believe they told the truth?—A. Yes, I think so; especially as the account given in by the official of the Boston and Albany agreed with the generalizations derived from facts from the merchants and other sources.

Q. (By Mr. LITCHMAN.) Did you make an investigation as to any other road than the Boston and Albany?—A. No.

Q. Have you any knowledge as to whether it would apply to the other roads?—A. No personal knowledge; no. Mr. Cowles, of Connecticut, has investigated the New Haven and Hartford, and has found even worse discriminations down there than have been found in Massachusetts.

Q. (By Mr. PHILLIPS.) At whose instance was this investigation made?—A. Well, there were a number interested in it. Mr. W. J. Abbot was one of the first; Mr. McNary, of the Massachusetts legislature, took a leading part; Professor Bemis and Professor Commons, of New York, rendered excellent service; Hon. George Fred Williams, of Boston, took a strong interest in the movement, and a number of others who thought it was a shame to have the Boston and Albany leased to the New York Central.

The other phase of discrimination I would like to speak of a moment was brought out very prominently in our studies in New England, and the best source of information, perhaps, is the report made by the Massachusetts Railroad Commission a few years ago (1894), in which they compared the average freight rate on New England roads, individual roads—and the average of all roads there—showing that our rates were about double the average freight rate in the Middle States, or in the Middle West, and that it was nearly double what the average freight rate was for the whole United States, and they argued with much force that it was really a discrimination against New England as a whole, especially against Boston. Now, one of the pleas put forward in this Boston and Albany matter was that the giving over of the Boston and Albany to the New York Central control would intensify instead of relieve that sectional discrimination against New England as a whole, because the road would come under the control of those interested chiefly in the development of New York City, and not in the development of Boston and the New England States. This phase of discrimination also is much diminished under public ownership. I ought to have said, before leaving that other phase of secret discriminations, that since Germany has taken her roads under public control personal discrimination has been completely wiped out, according to all the

testimony I have been able to get, and also in New Zealand and Australia, where the roads are public, there is absolutely no question that personal discriminations against small shippers in favor of big shippers or favorites of railways do not exist at all. I think there has not been even a suspicion on the part of the most bitter opponent of the public system in any of those countries to that effect. Professor Bemis has even gone so far as to state that in no one of the 30 countries owning and operating their railroads has any opponent of public ownership ever made a complaint in regard to personal discriminations. That is a pretty strong statement. I can't make as strong a statement as that, but I can say that so far as my information extends it is true that no complaint of any grievance or personal discrimination of this kind has been made in any of those countries.

Q. (By Mr. LITCHMAN.) In that connection you speak of 30 countries controlling their railroads—by government control I take it you mean?—A. Yes.

Q. Can you tell the mileage covered by that control?—A. I have not got it in my mind.

Q. Could you get it and supply it in your testimony?—A. Yes.

Q. I wish you would do so.—A. I will do that.¹

Now, I would like to leave the subject of discrimination, interesting as it is, and pass to the topic of rate making in general.

Q. (By Mr. KENNEDY.) Before you do that I think I would like to ask you this question right here: Do you believe if we had Government ownership of railroads in this country there would be any danger of sectional discrimination taking place on account of parties—by parties in control of the Government?—A. I think that would be one of the difficulties to be guarded against, and I am going to deal with that question under this next topic.

RATE MAKING IN GENERAL.

I have divided it in this way because I wanted to consider the two phases, the dishonest or secret phase of rate making, and the open, above-board part of the business. I believe from my studies that the tendency of private monop-

¹ In compliance with the above request Mr. Parsons subsequently submitted the following table, stating that it was prepared by his secretary from the Statesman's Year Book for 1900.

	Owned and operated by private companies.	Owned by Government.	Operated by Government.
COUNTRIES IN EUROPE.			
	<i>Miles.</i>	<i>Miles.</i>	<i>Miles.</i>
German Empire (Imperial and State railways)	2,825	28,205	28,325
Prussia	2,159	30,191	30,191
Württemberg	33	1,114	1,114
Baden	110	871	962
Saxony	None.	1,823	1,849
Bavaria	573	8,908	8,908
Alsace-Lorraine	96	991	991
Hesse	46	664	664
Oldenburg	None.	331	331
Schaumburg-Lippe	None.	15	15
Austria-Hungary	6,684	9,576	14,275
Russia	9,365	16,414	16,414
Roumania	None.	1,895	1,895
Servia (12 new lines being constructed by the Government)	None.	354	354
Switzerland (the people voted in 1896 to make roads public in 1903)	2,316	None.	None.
Belgium	798	2,069	2,069
Holland	761	961	961
Denmark	460	1,108	1,108
Finland	50	1,596	1,596
Norway	93	1,120	1,120
Sweden	4,067	2,283	2,283
England (public ownership agitated)	21,659	None.	None.
France	21,624	1,700	1,700
Spain	8,020	None.	None.
Portugal	857	507	507
Italy	3,681	15,700	None.
Greece	591	None.	None.
Turkey	2,953	None.	None.
COUNTRIES IN ASIA.			
Bokhara	None.	186	186
China	514	None.	None.
India, British	3,690	18,727	6,728
Japan (contemplates purchase of)	3,420	768	768
Persia	6	None.	None.

a Ninety-two miles owned jointly by the Government and companies.

oly is exactly contrary to the tendency of public ownership in this matter of open rate making, as well as in the matter of secret rate making. A public plant tends in the long run to make lower rates than private monopolies make in the same country under the same conditions, and it tends to make a just, impartial tariff, intended to develop the country and not aimed principally at profit; whereas the private monopoly tends to make comparatively high rates and an unjust, partial, complex tariff—even the open rates constitute an irregular, unsymmetrical, inharmonious, ill-adjusted, complex system to develop profit, instead of a simple, symmetrical, harmonious, well-adjusted system to develop the country. Private monopoly will develop the country so far as that development can aid profit and no farther.

THE LARGE SHIPPER V. THE SMALL ONE.

To illustrate these propositions take first the matter of justice. It seems to me unjust to favor even by open rates the very large shipper as against the small man, not unjust on the economic ground of cost, just upon that ground; but unjust upon the higher ground that we should seek the development of the community and the diffusion of wealth, which is one of the greatest objects to which the statesman can devote himself. If we are to favor anyone, we should favor the small man who needs the favor, rather than the large shipper, who does not need it nearly so much as the small man. The truest policy is to equalize opportunities, give the small man just as good rates as the large man, and no better, as in the postal service. And that is the tendency under public ownership of railways. For example, in New Zealand 400 pounds is carried at the same rate as a ton or a carload or a train load, and one bale of wool goes at the same rate as 1,000. In Russia the Government goes even further and carries 100 pounds on the State roads at the same rate as a carload or a train load, and in Germany the same principle is applied for the definite and avowed purpose of giving the small man a reasonable chance and enabling him to get a foothold and develop his industry.

Footnote¹—Continued.

	Owned and oper- ated by pri- vate com- panies.	Owned by Govern- ment.	Operated by Govern- ment.
COUNTRIES IN AFRICA			
	<i>Miles.</i>	<i>Miles.</i>	<i>Miles.</i>
South African Republic (Transvaal)	None.	774	774
Orange Free State	None.	392	392
Natal	None.	505	505
Cape Colony	350	1,990	1,990
Congo Free State	None.	250	250
Mauritius	None.	105	105
Sierra Leone	None.	60	60
Tunis	17	866	None.
Egypt, British	136	1,392	1,392
COUNTRIES IN AUSTRALASIA.			
New Zealand	163	2,257	2,257
New South Wales	None.	2,707	2,707
Queensland	None.	2,742	2,742
Western Australia	495	1,355	1,355
Victoria	None.	3,123	3,123
South Australia	None.	1,870	1,870
Tasmania	None.	508	508
COUNTRIES IN AMERICA.			
United States	186,810	None	None.
Canada	16,870	None.	None.
Newfoundland	None.	638	None.
Porto Rico	None.	137	137
Jamaica	None.	185	185
Mexico	8,040	None.	None.
Argentine Republic	7,415	2,470	2,470
Chile	1,439	1,223	1,223
Peru	67	844	844
United States of Brazil	3,420	5,242	5,242

THE CITY V. THE COUNTRY.

In the second place, as between the city and the country, I believe that our railroads have been forced by competition to put the freight rates down to a very low figure between the big cities, while they have left the local rates very high, so that the country districts have not received their due share of the benefits of railway development; they have not obtained the proportionate facilitation of intercourse and power of development that they ought to have received through these great new means of transportation. The cities have been favored as against the country, the big shippers as against the small men, and sections which have the large cities and the main currents of traffic have been favored as against the sections that lie a little out of the central current, like New England.

Exactly the opposite plan, or diffusion of benefit instead of congestion of it, has been adopted in all the systems of public ownership that I have studied. They aim to reduce the local rates in a fair degree at the same time that they reduce the rates to the cities. They even make the effort to make local rates very low, especially low, in order that the men in the country may develop the country somewhat on equal terms with the men who live in the cities. Our cities are built to fight in and not to live in. The houses are built close together to save rent and time and transportation cost—stores, factories, warehouses, depots, and docks—everything pressed together in one giant mass, whereby in the fight for wealth the city has a great advantage over the country. It is this that makes our cities the battle grounds of industrial war, masses our people in narrow streets and unwholesome houses, and crushes the conquered into the slums. Now, the railroad system in the hands of men who aim at the public good would seek to break up the slums by making low passenger rates, so that workmen could live in the country; they would aim to make local rates low, so that industries could live in the country and compete with those in the cities, instead of making the whole industry of the country center in the cities. One of the greatest dangers in this country to-day is the rapid growth and immense massing of industrial power in the cities. True statesmanship, I believe, would use the railroad system to counteract that tendency and to diffuse benefit. But on the Boston and Albany and on the New York, New Haven and Hartford we find that, while through rates have fallen very much, the local rates are in many instances almost as high, and, in some cases, quite as high as they were in 1881. For example, dry goods and boots and shoes, representing two of New England's greatest industries, pay the same actual local rates on the Boston and Albany as in 1881. The same is true of flour, glassware, cement, etc. Coal, the greatest necessity of the manufacturing business of the State, pays the same carload rate as in 1881, while for less than carload lots the rate has been increased. Thus in respect to a number of things that are of vital importance to the industries of New England there has been absolutely no reduction of local rates since 1881. And the freight statistician of the Agricultural Department, in Bulletin 15, page 65, has shown that even since 1865, if you reduce the rates to the gold basis, as is only fair, there has been little or no reduction in local charges; the average fare on the Boston and Albany, for example, was precisely the same then that it was in 1898. So that while there has been a great reduction in the rates between competitive points, and a consequent great reduction in the average freight and passenger charges, the local rates have been kept up. On the New York, New Haven and Hartford it was found that rates have been advanced. Mr. Cowles has investigated that subject, and he finds that from Hartford to New York, from Boston to New York, and from intermediate points between those two, the rates are higher now than they were in 1850. (See *A General Freight and Passenger Post*: Putnam's Sons.) This is very different from the policy of the public systems, and it is a matter of astonishment to the railroad student when he sees to how great an extent this difference has gone. I will return to that in a moment. Before I take it up definitely on a diagram I want to speak of a point or two more.

PUBLIC RAILWAYS AIDING LABOR.

In New Zealand and Germany, which are among the principal examples of railroad management by the State, there is a definite use of the railroads not merely to develop the country but to aid labor. They make very low rates for laboring men in New Zealand; they carry them at actual cost or even a little below it in order that they may go where work may be had. In other words, the railroads are used at cost or less to redistribute the unemployed, and to settle them on the land. They also make rates to enable city workmen to live in the country instead of clustering in crowded tenements. They carry workmen at 50 cents

a week in and out of the big cities; and in Germany workmen are carried in and out of Berlin on the public railways at 17 cents a week, about 1 cent and a half a trip. The same tendency is manifest in Austria-Hungary and in Belgium, though I do not have the figures in mind.

Q. (By Mr. CLARKE.) Have they the zone system in Germany around Berlin?—
A. Yes; a workman or anyone else can live 5 or 10 miles out and buy a ticket for a year at \$4.50 to go in and out as many times a day as he chooses—10 miles for a cent, at a very low estimate, with a moderately possible average of 20 miles for a cent in and out of Berlin.

EDUCATIONAL SERVICE.

The public roads also aim to develop education. They make very cheap excursions for school children—4 miles for a cent they average in New Zealand, and the minister announces definitely in his report that although they are losing money on their school excursions, and those for the factory people who are also carried at very low rates, yet the educational value far outweighs the cost to the treasury. The State railways of New Zealand carry the school children of the primary grades to and from school free of charge, as do also the State roads of New South Wales, Queensland, and South Australia. Such are some of the ways in which the managements of public railways manifest their beneficent intent to aid labor and education.

FAVORING AGRICULTURE, ETC.

They also specially favor agriculture and other rural industries that form the basis of civilization, industries that under our system are anything but favored, I think. For example: There was a great snowstorm in New Zealand that killed the sheep on very many ranches and threatened the ranchmen with ruin, but the public railroad management put down the sheep rates so that the farmers and ranchmen were able to restock the sheep runs and save themselves and the industry. The State roads of New Zealand carry lime free and make very low rates on fertilizers, as they do also in Germany and Russia, with the avowed purpose of developing the agricultural interests of the country.

LOW RATES.

Turning now to the question of low rates, allow me to call attention to this table (No. I), containing the average ton-mile and passenger-mile rates, which I obtained last spring (1900) from the reports of the different countries, except in the case of Great Britain (see note beneath the table), whose average rates are estimated. The United States, Switzerland, France, and Great Britain have private roads; Germany, Austria-Hungary, and Belgium have public systems.

The table referred to follows:

TABLE I—Average ton-mile and passenger-mile rates.

[Germany, Austria-Hungary, and Belgium have State systems; the rest have private systems.]

	Rate per ton- mile.	Average haul per ton.	Rate per passen- ger-mile.	Average haul per passen- ger.
	<i>Cents.</i>	<i>Miles.</i>	<i>Cents.</i>	<i>Miles.</i>
United States	0.75	130	2	26
Germany	1.40	60	1.1	20
Austria-Hungary	1.44	57	1	23
Belgium	1.30	40	.88	12
Switzerland	2.80	35	1.55	12
France	1.48	88	1.21	20
Great Britain	a 2.10	.....	a 2	10

a As the English companies do not report ton-mile or passenger-mile data, the British figures are not official, but are based on the estimates of the great English authority, Jeans, and the eminent American engineer, Dorsey, who gives 2.5 cents and 2.33 cents as the probable ton-mile and passenger-mile rates for the United Kingdom in 1887, which, with due allowance for sinking averages in later years, at the ratio indicated by the experience of other European countries, affords the figures in the table for 1898.

The average rate per ton-mile in the United States, you see, is much less than in any other country, public or private. That average rate is often adduced as proof positive that the private system in such a country as America produces very

low rates. It is proof that it produces a low average rate; but underneath that low average lie several facts that must be noted. In the first place, the average haul in the United States per ton is 130 miles, while the average haul in Belgium is 40 miles. Now if the terminal expenses at one end are taken at 20 cents (which is probably about what they are on an average), at the two ends they would be 40 cents. In Belgium if we divide that terminal charge by 40, we will have 1 cent a mile for terminal charges, leaving a third of a cent for the actual transportation charge per mile. Dividing the terminal charges by 130, for the United States, we will have about three-tenths of a cent, which leaves a little less than half a cent per ton-mile for transportation in this country, so that the actual average transportation charge in the United States is really not as low as in Belgium probably, if the terminal charges are allowed for.

On the other hand, we are not to forget that the wages in Belgium are much lower than they are here, less than half, and in Austria-Hungary they are only about one-third and in Germany only about a half what they are here. So that turns the scale again the other way. But, again, the number of employees in Belgium and Germany per ton and per mile is very much greater than here, which tends to push the actual cost the other way. In respect to the efficiency of labor, we have to agree that the argument is much in favor of the United States; which, however, proves nothing for or against either public or private ownership, because the efficiency of labor in European countries is inferior to ours in private business as well as public. For example, the average mason in Germany lays fewer bricks in a day and fewer bricks for a dollar than the average mason here.

Again, we must consider the influence of grades, capitalization, cost of fuel and iron, density of business, and many other elements, which together make up a problem too complex to justify any definite inference from average rates. Mr. Fink, who is one of the highest authorities in the country, in his report of the Louisville and Nashville road for 1875, proved that the average cost per ton-mile varied 700 per cent on the different branches of that system under the same management. The ton-mile cost on one line was 8 times as much as on another line of the same system. So that it is clear that when all the factors are taken into account we can not draw any definite conclusion as to economy or efficiency of management from a comparison of average freight rates.

Then, again, under this general average freight rate of ours lies a very low tariff between competitive points, with comparatively high rates between local points, and many personal and unjust discriminations, so that I believe it is not just to make any comparison one way or the other on the basis of the average freight rate.

I thought at first, and used to argue, that the general average of passenger rates in Europe under the State systems, in Germany, Austria-Hungary, and Belgium—an average of about a cent a mile, did prove something, as compared with the very much higher rates on all private roads, 2 cents in the United States nearly, and in Switzerland a cent and a half, or a little over, and in France 1.2 cents, and in Great Britain estimated to be 2 cents—I thought it did prove a good deal in favor of the State systems; but as I look more deeply into it I believe that we can not make any definite judgment from the average rates alone, because so many elements enter into them, elements which differ so greatly in different countries.

I do believe, however, that some conclusions may be reached by a thorough examination of the details, and that it is easy to draw a solid conclusion when we find a definite purpose back of the averages in these public systems to facilitate freight and passenger traffic by the reduction of rates; and I also believe it is fair to compare railways under public management with the same railways under private management. For example, when the roads were made public in Germany, rates were reduced very greatly. The same thing was true when the roads were made public in Austria-Hungary, or soon after the system was arranged under public control. They made a tremendous reduction of 40 to 80 per cent in the passenger rates. In New Zealand also they are continually reducing just as fast as they can. Whereas our roads reduce when they are forced to by competition, or when they are driven to it or persuaded to it by their tendency to make special rates to favored shippers. Where these forces do not operate, as in ordinary local rates, we find the rates kept up as high as they were 20 years ago, and in some cases 40 years or even 50 years ago, and sometimes we even find an increase in the local rates.

So we are not without means of information in respect to the tendency of the two systems as to rates, although I do not feel that we are able to draw reliable inferences from the broad averages. But if we could, if it were a valid argument to say that the low average freight rate in the United States under private ownership proves the case as against the higher average freight rate under the public

systems, then why is it not fair to say that the high rates in Great Britain and Switzerland and France under private ownership in their turn prove the case for public ownership? The argument works both ways on its face; but I believe when we get down to an analysis of the facts it does not work either way merely on the broad averages. You must get down to the details, or look at the intent and policy of the two systems, or compare them under similar conditions.

Q. (By Mr. FARQUHAR.) Before you go further, let us have your argument on the average freight haul per ton and the average passenger run, in the United States, for example, as compared with Great Britain. [Referring to Table I.] Do not talk in averages.—A. Great Britain has also private ownership, with rates much higher than in the United States.

Q. Take Germany, or any one that you want to.—A. If you divide the 2 cents by 26, and the 1.1 by 20, you will get about 8 here and 5.5 here [pointing to Table I].

Q. (By Mr. CLARKE.) That is, you get about 8 in the United States and about 5.5 in Germany?—A. Yes; and here [pointing to Austria-Hungary] you get 4 and a fraction.

Q. (By Mr. LITCHMAN.) Does not my question come in very pertinent there—the contrast between the mileage as between 1 country and another—the large number of unproductive miles over which a passenger has to be hauled in the United States as compared with the compactness of territory in Germany?—A. Exactly; that is one feature of the mileage rate. When you compare the haul and the rate, the result is still in favor of the public systems on the passenger question.

Q. (By Mr. FARQUHAR.) In your analysis of that table is it not a fact that the whole cost of the road is the one you must consider, without eliminating the cost of the terminals?—A. The cost of the terminals is not eliminated in the table; the average rates per ton-mile and passenger-mile include the terminal charges and all other expenses of the railways. It is certainly true that in a good and valid argument you must take into account not merely the terminals, but the haul and the grades and the cost of construction, etc., and the number of laborers and the requirements as to safety and every element of the railroad system. Now, I simply say that that makes such a complex problem that no man on top of the earth can cipher out from the averages that rates are higher in one country than another.

Q. (By Mr. LITCHMAN.) Have you gone into the question of the difference in labor?—A. I have to some extent—I have said that wages in Germany, for example, are about one-half of ours.

Q. (By Mr. FARQUHAR.) They have more servants in Europe?—A. Yes; certainly.

Q. Did you ever figure out the grade matter, to know what effect the difference of grade has on rates?—A. In Germany and here?

Q. Anywhere. In Germany—do you take out the grades there?—A. I have made estimates of the effect of grades in my engineering days. I am familiar with Wellington's Economic Theory of Railway Location, which I suppose is still the best book on railway economics, and that only confirms me in the opinion that the whole problem is too complex to draw from rate averages any definite and reliable inferences as to the nature or efficiency of the management. That is only one of many factors affecting the rates, and in any case of differing averages we can not tell how much of the difference is due to different methods of control except by calculating and subtracting the effects due to all the other causes in the case. That is a very difficult and practically hopeless problem except where the comparison lies between a road under private ownership and the same road subsequently under public control, or where two roads are substantially alike except in the matter of the management, if it were possible to find such a case.

Q. (By Mr. CLARKE.) Did not Mr. Fink's report shed light on that subject of grades?—A. Yes; differences of grade and differences in the density of traffic were among the elements that made the ton-mile cost vary eight fold on different lines in Fink's system, all under equally good management—700 per cent more in some cases than in others. In view of that fact, what use is it to try to draw inferences from the average rate? I think none. I simply introduce this table to bring out the facts, call attention to the unreliability of the usual inferences from them, and show that I do not, for one, attempt to draw any conclusions at all from a comparison of average rates.

Q. (By Mr. A. L. HARRIS.) Before we pass from Table I, I would like to ask one question. What is the difference in the quality of the service between the United States, with private ownership, and Germany, Austria-Hungary, and Belgium, with public ownership?—A. The service here is better. The service in Great Britain, however, is inferior in many respects to what it is in Germany or

Belgium; at least their own writers say so. The railway journals in England are full of complaints, and have been for several years. The fact is, however, that that difference is not probably due to the difference in management of the two systems, but to the differences in the countries. Private concerns over there are just as much inferior or more inferior to private concerns in this country. Take, for example, the street railways of Great Britain. The street-railway system of Glasgow is public, and it has been one of the most progressive and one of the best administered of all the tramway systems in Great Britain. Yet it is far inferior to our private systems; but the private systems in England are still more inferior to ours. When we eliminate the effect of nationality by comparing systems of transportation in the same country, the public systems prove to be the best.

Q. What is the service in New Zealand?—A. In New Zealand the service is not as good on the whole as it is either in the United States or Germany, which is attributed by Mr. Reeves, Mr. Lusk, Mr. Henry D. Lloyd, and other authorities to the newness of the country. The service is being rapidly improved, and Mr. Lloyd says we have nothing in this country equal to the "bird-cage" car of New Zealand.

Q. (By Mr. LITCHMAN.) Have you any means of giving us information on the longest passenger haul in Europe?—A. I have not the figures in mind.

Q. As compared with the haul, for instance, between New York and Chicago?—A. No.

Q. Is not that a factor in the cost?—A. Yes; they are all factors in the cost; every difference is a factor in the cost. Now, where is the brain that can sum up all these differences and reach an accurate result—tell us what is due to the difference in civilization level in two countries and to grades, fuel, length of haul, wages, efficiency of labor, capitalization, density of business, and all the economic elements of railway construction and operation, and what is due to the difference between public ownership and private ownership? My point is simply this: That the only fair comparison of average rate levels is between private ownership and public ownership in the same countries, and not between public ownership and private ownership in different countries;—so far as the average rates are concerned the fair inference seems to me to be this: That we can see the tendency and direction of motion produced by public ownership in various countries and in this country, and then we have a right to argue that the movement will be in the same direction and of the same kind under the laws of human nature, of psychology, and social movement, that the same sort of change will produce a movement of the same nature in the same direction, although, perhaps, of different degree; that if public ownership in Glasgow lowers the rates, as compared with private ownership in Glasgow, and raises wages and serves the public better, and puts the profits in the city treasury instead of in the pockets of a few managers and stockholders, then, although we start here at a point further up the hill and the rates will not go as low as in Glasgow, nevertheless they will be lower than they are now, and wages will be higher than they are now, and public ownership will produce a better service of public interests than private ownership does here, and the profits will go to the public treasury.

Q. (By Mr. FARQUHAR.) Are the rates lower in Glasgow than they are in Philadelphia or New York?—A. Yes; the average rate is under 2 cents.

Q. What is the rate per mile?—A. I have not been able to get the average rate per mile, either there or here.

Q. Are not the rates in Glasgow for the distance run?—A. Yes; they have such rates.

Q. Have you ever figured it up to see if that figured up more than the cost here?—A. As I said, I have been unable to get the average mile rates on either side of the water. The density of traffic is greater there. They have 12 passengers per car mile in Glasgow; in Boston, 7 per car mile; in New York, on Broadway, 12 per car mile, and in Chicago 5 or 6, and the railways carry the passengers farther in Boston and Chicago, as a rule, than they do in Glasgow for a single fare. There is no doubt about that, but how much farther I do not know. Fares are nearly threefold here, but wages are almost double. I do not think our systems could carry for the Glasgow fare; perhaps in the future they may, when the cities take the street railways and pay off the capitalization, but they can not do it now. Whatever may be the truth about our rates as compared with Glasgow's, I think it is fair to conclude that the same kind of effect would be produced by a change to public ownership here that was produced by a change to public ownership there.

Q. (By Mr. A. L. HARRIS.) Taking into consideration the superior service in this country, what have you to say in regard to the relative rates for transporta-

tion?—A. I simply say that it is one more factor in the complex mass of factors which it is perfectly impossible to cipher out. If you want to find out about that, get Mr. Fink's statement of the various items of cost on the various divisions, the average of the various divisions of his Louisville system in his 1875 report, and it will convince you beyond a doubt, I believe, that no man on the face of the earth can figure the thing out from a comparison of rates; it is too complex.

Q. Then we are somewhat in the dark, as I understand, and will be probably as to the better of the two systems?—A. I think not. As I said at the beginning, I think that financial matters, as a whole, are infinitely subordinate to the human elements. Intelligence, virtue, justice, good government, diffusion of wealth, and civilization must take precedence of profit; and if the aim of a system under public ownership is to develop the country, to develop education and aid labor, and make just and impartial rates instead of unjust and partial rates, and in every way forward all public interests and the higher wealth, while private monopoly aims primarily at profit, subordinating these higher interests, and even opposing good government and the public welfare, the question at once—

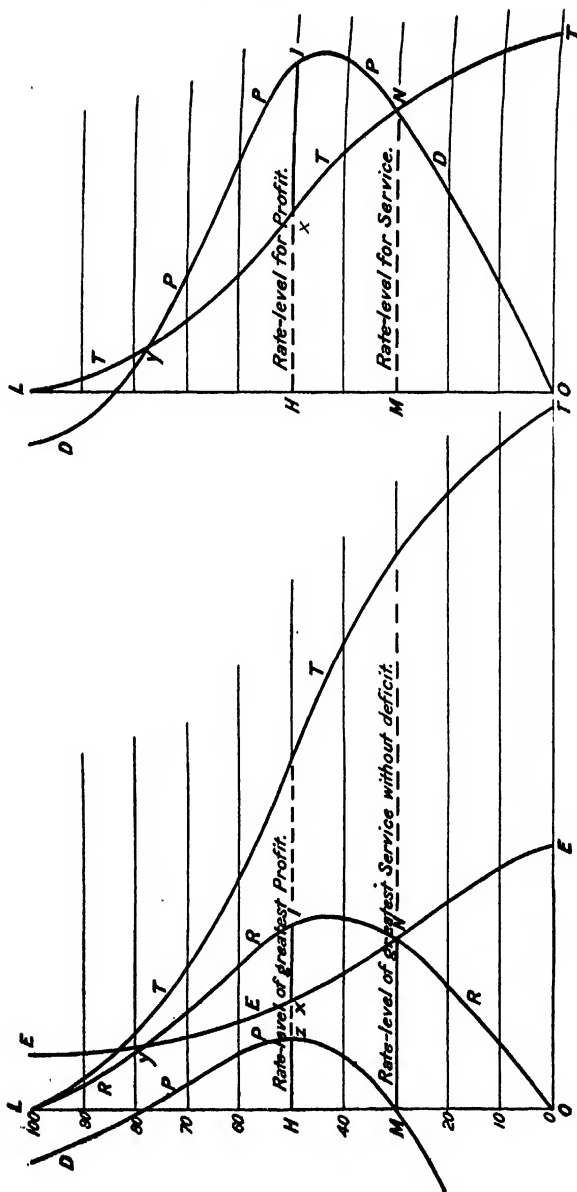
Q. (Interrupting.) I was asking my questions from a business standpoint.—A. Yes; but I can not admit that the business standpoint has any business to take rank with the other standpoint. It is important in its place, and I think we can reach some clear results even from the business standpoint, but even if we could not do this, there would still be considerations of vastly greater moment than any question of money. While we may not be able to solve the problem from the business standpoint as between two different countries, we can solve it by studying cases where both systems have been tried in the same country. In Austria and Germany and New Zealand they tried both systems. Germany tried private railways for 25 years and Austria tried it over a quarter of a century, and they have tried the two methods side by side ever since the public system was organized. In New Zealand also and Australia the two systems have been tried side by side. And in every one of these countries where they have thoroughly tried both systems the conclusion by an overwhelming consensus of opinion is that public railways serve the public interests best, and also make lower rates and serve the people at less total cost. Switzerland, after a careful study of both systems in various parts of the world, has come to the same conclusion, and her people have voted 2 to 1 to transfer the railways to public ownership and operation. All this is very strong evidence, and if we turn from the tangled web of an international comparison of averages and look at the *principles and causes* at work in the case it will be clear that public ownership tends to lower rates as well as to conserve the higher wealth.

If you will examine Diagram II a little, I think it will make the matter much clearer than is possible by any effort to deal with the average rates and the infinite mass of detail behind them.

In figure 1 (p. 142), L O is the rate line with zero rates at the bottom and at the top rates so lofty as to be *prohibitive*; T T T is the *traffic curve* expanding rapidly as the rates are lowered; E E E is the *expense curve*, beginning with the minimum of fixed charges and operating cost which must be incurred even with the smallest traffic, and expanding with the traffic, though not in the same ratio. A considerable traffic can be handled at a slight advance upon the minimum cost (the fixed charges being nearly the same with 60 passengers per car as with 1, while the operating cost is only slightly increased), and for the later ranges of the traffic curve the expense account expands at so much less a rate than the traffic that an enlargement of 100 per cent in the traffic frequently increases expenses only 30 to 50 per cent, and sometimes scarcely at all, as when Hungary adopted the zone system in 1889. R R R is the *curve of receipts*, which is a function of the rate and the traffic, and can be easily platted from them; y R N, the part of the curve of receipts that extends beyond the expense line, represents profits. This *profit line* is platted again at P P z M on the rate line as a base. H I is the *rate level that yields the greatest profit*, and M N is the *rate level that yields the greatest traffic without incurring a deficit*. It is the level at which the line of receipts crosses the expense line, so that there is neither profit nor deficit, but service at cost. M N, the line of greatest traffic without deficit, is always a considerable distance below H I, the line of greatest profit. As you go down the rate line from H the traffic increases and the profit diminishes, until you come to a point where the rates are so low that profit vanishes, and there you have the rate level of greatest traffic without deficit.

Now, private monopoly aiming at profit tends to establish rates at the level H I, the rate level for profit, while public ownership aiming at service tends to bring rates down to the level M N, the rate level for service.

In fig. 2 (p. 142), to emphasize the essential facts, the traffic curve is drawn on a narrower lateral scale, and the profit curve, on an expanded lateral scale, is platted



upon the traffic curve as a base. The profit curve crosses behind the traffic curve at N, the line M N representing the largest traffic that can be secured by lowering rates and yet escape a deficit; while H I, as before, is the line of largest profit, with higher rates but much smaller traffic, H x, than is the case on the level M N.

Private monopoly aiming at profit tends to put rates at H with the traffic H x and the profit x i, while public ownership aiming at service tends to put rates several flights of stairs lower down, at M, with the very much larger traffic M N and no profit. I say "tends," because actual rates may not be on the lines H I and M N—public ownership may place the rates above M N (though rarely or never as high as H I) or below M N, even down to the zero level, and private ownership may, through miscalculation, put rates above H I or below it (though rarely or never so low as M N). The significant fact is that *private rates gravitate to the high level H I with large profit and comparatively small service, while public rates gravitate to the low level M N, with large service and no profit, and in later stages of development may seek a lower level still and even cultivate the zero line.*

The curves in these figures would vary, of course, with the location and character of the business. Under some circumstances a 50 per cent reduction of rates would double traffic and increase expenses 30 per cent perhaps, while in another case a 50 per cent reduction would increase the business 20 per cent and the expenses 10 per cent or 15 per cent. In some cases the traffic curve becomes concave toward the left as it nears the zero level, while in other cases it might be concave toward the northeast and strike the zero level at a great distance to the right. But through all the various phases of these curves the essential facts remain the same, viz: (1) The rate level that yields the greatest profit carries a relatively small traffic and lies above the rate level that yields the largest traffic attainable by lowering rates without incurring a deficit, and (2) *private ownership seeks the high-rate level with maximum profit, while public ownership seeks the low-rate level with maximum service at cost.*

The great point is that the private system looks at this profit line while the public system looks at the traffic line. Private managers regulate this business simply in reference to the profit line, trying to establish rates at the level which will produce the greatest profit regardless of whether it produces the greatest movement in the country or not, or the greatest development of industry; whereas the tendency of the public system is to look to the greatest development of traffic so long as it remains within reasonable cost, and not always that. We make our public highways—not our iron highways, but our stone highways and common roads—absolutely free for the development of commerce and civilization.

Q. (By Mr. CLARKE.) Is that diagram based on actual experience, or is it mere theory?—A. It is based on the results of experience, the laws of movement indicated by actual cases. For the extremes—top and bottom—we have, of course, only general indications from what scientists call "adjacent cases" and from the results of selling water below cost and of making roads, parks, and schools free, and carrying school children and some fertilizers free in New Zealand and Australia. But the middle sections are carefully platted according to principles established by the experienced results of lowering rates on railroad and street railway systems. Telegraph and telephone experience, and actual reductions in rates for water, gas, and other similar services, illustrate the same general truths that business increases rapidly with lower rates, while expenses, as a rule, increase in smaller ratio, and that the rate level yielding the greatest profit is above the rate level yielding the greatest traffic without deficit—this is the universal and essential truth on which I base the proposition that public ownership aiming at service tends to make lower rates than private ownership aiming at profit. However much the shape of the curves may vary in different systems of railroad, street railway, telegraph, or telephone, *their relations* will always be such as to harmonize with and illustrate the fact that the line of greatest profit is at a higher rate level than the line of greatest traffic at cost. So that this diagram is not only accurate but universal in respect to the truth for the illustration of which it is added.

Q. Now, at some stage I would like to have you answer the question, and now, if this is the time when you wish to do it, whether or not there is not, in your opinion, sound economics in the principle that every tub should stand on its own bottom—that is, that every system should produce a good financial result, even a little profit, rather than a deficit?—A. No; I do not think it is a sound economic principle, not as a universal principle, for this reason: morals, intelligence, and civilization are just as vitally related to economics as dollars and cents, and the development of education is just as much a part of the business of an economic system, of a railway system, or any other industry, as the making of profit—in short, the serving of the public good is the only admissible purpose of all public utilities; and if the public good requires that the roads of the country should be

free, I think there can be no sound economics in requiring them to pay cost or make a profit; or if, considering all interests of the higher wealth as well as the lower, the public good requires that the public schools should be free, then any principle that requires them to make a profit can not be sound economics. It is right that the elevator in the building should be run free and the charge put upon the party who rents the building, because of the simplicity of the thing. And if it should turn out with the railways as it has with these other things, that it is best to make them free, there is no economic principle to prevent it so far as I know. There may be a *prima facie* presumption that each service should be self-supporting till good reason appears to the contrary, but when such reason does appear, sound economics requires that it should be heeded. Sound economics will do whatever is best for the community, and if it promotes the public welfare to carry mail, or school children, or fertilizers below cost, and make use of our streets, roads, hospitals, and fire departments free, then sound economics will do it. In most countries, as far as the mass of the business is concerned, the public railways are managed so as to make a little profit, but there is no sound economic principle that would require them to continue on that basis after it became clear that public interests would be better served by running them below cost to secure the education, intelligence, character, harmony, development of industry, etc., accompanying the increase of traffic that results from lower rates.

Q. Now, suppose the nontaxpayers are in control of the Government and seek to have the railways and their public conveniences run at cost, or less than cost, for their convenience and make up the deficit by taxing the people on their property. Does that seem to you to be an improbable result of that system?—A. In the light of the past I should say that it was a very improbable result with the railroads, so far as the near future is concerned, but I should not say that it was improbable in the far future. Let me give you a little summary by Professor Seligman, of Columbia University, which throws much light on this matter.

THE FIVE STAGES OF DEVELOPMENT.

"In all the media of transportation and communication there seems to be a definite law of evolution. Everywhere at first they are in private hands and used for purposes of extortion or of profit, like the highways in mediæval Europe or the early bridges and canals. In the second stage they are 'affected with a public interest,' and are turned over to trustees, who are permitted to charge fixed tolls, but are required to keep the service up to a certain standard. This was the era of the canal and turnpike trusts or companies. In the third stage the government takes over the service, but manages it for profits, as is still the case to-day in some countries with the post and the railway system. In the fourth stage the government charges tolls or fees only to cover expenses, as until recently in the case of canals and bridges, and as is the theory of the postal system and of the municipal water supply with us at the present time. In the fifth stage the government reduces charges until finally there is no charge at all and the expenses are defrayed by a general tax on the community. This is the stage now reached in the common roads and most of the canals and bridges, and which has been proposed by officials of several American cities for other services, like the water supply."

The extent to which public ownership and cooperative effort have replaced individual and private action in any community is one of the surest tests of the degree of its civilization. And the final stage in the case of a great universal utility, such as transportation, is free service, but in the nature of things this final stage is not likely to come or be closely approached very soon, and even if voters should call for such a system before the better wealth diffusion of the future has made them all taxpayers, still the change would not be nearly so unjust as it may seem at first sight, because the property of the large taxpayers has been chiefly produced by nontaxpayers and taken from them by an unjust system of wealth distribution, wherefore the railroad tax would in very large part be merely one step toward a fairer adjustment of wealth and burdens, like a progressive income or inheritance tax.

To come back to Diagram II: We have seen that in the same country and under similar conditions otherwise than in respect to ownership and control public ownership tends to make lower rates than private ownership. *The line of greatest profit is on a much higher rate level than the line of greatest service, and since private monopoly aims at profit it seeks the higher rate level. Public ownership aims at service, not at profit, and therefore gravitates to the lower rate level, where traffic and service are greatest.*

I regard this as a practical demonstration of the generalization as to the tendency of public ownership to lower rates.

ILLUSTRATIONS OF THE TENDENCY OF PUBLIC OWNERSHIP TO LOWER RATES.

A few illustrations of the vigorous manner in which this law works out in practice may be of advantage here.

The Hungarian Government at a single stroke in 1889 reduced State railway fares 40 to 80 per cent. Austria and Prussia have also made great reductions in railway charges. Belgium started in the thirties with the very low rate of four-fifths of a cent on her public railways. In New Zealand and Australia also the government managements have adopted the settled policy of reducing railroad rates as fast as possible. For example, in the New Zealand report for 1899 Mr. Cadman, the minister of railways, announced reductions of 20 per cent on farm products and 40 per cent on butter and cheese, concessions amounting to one-seventh of the railway receipts and equivalent to a reduction of \$150,000,000 in the United States. Following this, Mr. Ward, the new minister, announced a general lowering of passenger fares. In the United States, on the other hand, by reclassification, etc., rates on many products have recently been lifted instead of lowered.

When England made the telegraph public in 1870, rates were lowered 80 to 50 per cent at once, and still further reductions were afterwards made.

When France took over the telephone in 1889, rates were reduced from \$116 to \$78 per year in Paris, and from \$78 to \$39 elsewhere, except in Lyons, where the charge was made \$38.50.

Private turnpikes, bridges, and canals levy sufficient tolls to get what profit may be possible; but when these same highways, bridges, and canals become public the tolls are often abolished entirely, rendering such facilities of transportation free, and when charges are made they are lower than the rates of private monopolies under similar conditions, and generally reach the vanishing point as soon as the capital is paid off or before. The difference between public and private management of such undertakings is strikingly illustrated in the following comparison of the Brooklyn and St. Louis bridges:

The Brooklyn Bridge is owned by the cities of New York and Brooklyn. The St. Louis Bridge is privately owned. The contrast in the management of the two bridges is very great.

CHARGES FOR CROSSING.

St. Louis Bridge (cost \$13,000,000, bought by Gould interests for \$5,000,000):

On steam cars, 25 to 75 cents per passenger.
Street-car fare 10 cents, 5 cents for bridge.
Foot passengers..... 5 cents.
Vehicles, with 1 horse..... 25 cents.
Vehicles, with 2 horses..... 35 cents.
Bicycles..... 10 cents.

Brooklyn Bridge (cost, \$15,000,000):

On L roads 3 cents (2 fares for 5 cents), if you simply wish to cross the bridge—if you come from a distance or are going beyond the bridge it costs nothing to cross it, either in the L cars or the surface cars—the ordinary car fare takes you over without extra charge.
Foot passengers..... Free.
Vehicles, with 1 horse..... 5 cents.
Vehicles, with 2 horses..... 10 cents.
Bicycles..... Free.

Before the recent lease giving the companies the use of the Brooklyn Bridge the public operation realized more than enough to pay expenses and interest, on a 24-cent fare, etc (as above), paying the car men \$2.75 for an 8-hour day. The elevated railway companies running over the bridge pay \$2 for 10 hours, and some of the men receive less and work longer, so I am told by the men themselves. On the electric running over the St. Louis Bridge the men work 12 hours, for which the conductors get \$2.25 and the motormen \$2.

Under the lease the elevated roads pay about \$100,000 a year for the use of the bridge, and the trolleys 5 cents a car, a fraction of a cent per passenger. The franchise charges were made very small in order to arrange matters so that no extra fare for crossing the bridge would be collected from those paying the ordinary 5-cent car fare, thus making the bridge free for passengers coming from or going to a distance, and more than free to those who simply cross it in the bridge cars, since a ride in the cars anywhere else for any distance, no matter how short, costs a nickel instead of the 24-cent bridge rate—nothing for the bridge and half price for the car ride. The arrangement is good for the people and good for the companies, as it increases their traffic. It could only be improved by a larger payment from the companies, or lower fares in general, or, best of all, public ownership of the street railways as well as the bridge.

The net earnings of the St. Louis Bridge are one and one-fourth millions a year, or 25 per cent on the Gould investment, and 12 per cent on the impaisable capital (the excavating of the tunnels, etc., will never have to be done again). The St. Louis charges may be objected to, not only as extortionate, but as discriminating. A passenger who buys a ticket in New York or Philadelphia to go to St. Louis has to pay 75 cents for crossing the bridge, whereas if he buys a ticket to East St. Louis and then crosses the bridge in a railroad train, it will cost him only 25 cents.

The St. Louis Bridge is managed for private profit; the Brooklyn Bridge is managed for public service, the aim being to make the bridge as useful to the people as possible.

When Glasgow took the management of her street railways in 1894 fares were reduced at once about 83 per cent; the average fare dropped to about 2 cents, and 35 per cent of the fares were 1 cent each. Since then further reductions have been made, and the average fare now is little more than a cent and a half; over 50 per cent reduction in 6 years, while we pay the 5-cent fare to the private companies in Boston and other cities of the United States the same as we did 6 years ago, instead of the 24-cent fare we would pay if the same percentage of reduction

had occurred here as in Glasgow. At the same time that rates have been cut down in Glasgow wages have been raised, hours reduced, and the service greatly improved; and the profits of the business go to the people instead of a few stockholders. In the early nineties, when the private tramways of Glasgow were collecting an average fare of 3.84 cents, they declared that only 0.24 cent was profit. Now the public tram lines, with less than half the fare, still realize nearly a quarter of a cent clear profit and put \$200,000 a year in the public treasury above all cost of operation and fixed charges.

According to Baker's Manual of American Waterworks, the charges of private water companies in the United States average 43 per cent excess above the charges of public waterworks for similar service. In some States investigation shows that private water rates are double the public rates. (See City for the People, pp. 20, 195.)

For commercial electric lighting private companies charge 50 to 100 per cent more than public plants. (See Municipal Monopolies, p. 156.) What public ownership can do toward lowering the cost of street lighting may be seen from the following table:

TABLE II.—Cost of electric light before and after public ownership.

[Total cost per lamp year for electric street lights before and after public operation, the "after" service being as good or better than the service it replaced.]

	1.	2.	3.
	BEFORE.	AFTER.	AFTER.
	Price paid private company per lamp year just before public operation began.	Cost per arc, including operating expenses, taxes, insurance, depreciation, and interest.	Cost under complete public ownership, including operating expenses, taxes, insurance, and depreciation, but not interest, there being no interest to pay when public ownership is complete, i. e., when the people own the plant free of debt.
Aurora, Ill.....	\$325	\$72	\$61
Elgin, Ill.....	228	65	56
Fairfield, Iowa.....	375	95	80
Marshalltown, Iowa.....	125	40	30
Bay City, Mich.....	100	67	58
Detroit, Mich.....	132	83	68
Allegheny, Pa.....	180	86	75
Bangor, Me.....	150	58	48
Lewiston, Me.....	182	58	52
Peabody, Mass.....	185	73	62

Column 2 is made up of the operating cost plus 5 per cent on the investment for insurance, taxes, and depreciation and 4 per cent for interest, except where the actual interest is known. With Aurora, Fairfield, Marshalltown, and Bay City the real contrast is between columns 1 and 3, for there is no debt to allow for in those cases. Perhaps the same is true of Bangor and Lewiston. The data in my possession leave that point in doubt in those two cases. The true contrast is always between columns 1 and 3 if you wish to compare private ownership and operation not merely with public operation of a plant the capital in which is still privately owned, but with public operation and ownership complete.

When we are trying to ascertain what it is fair for a private company to charge we must add interest, but when we are trying to discover the effect upon the people of a change to complete public ownership there is no interest on the public side of the account.

The number of lights was greater in several cases under public ownership than with the private supply. On the other hand, the actual candlepower in the public lights is usually higher and the public plants are handicapped by lack of permission to engage in commercial lighting. This more than balances the advantage of a large number of street lamps—300 street lamps plus 20,000 private lamps makes a much larger business and lower cost per unit than 350 or 400 street lamps with no commercial business. Setting this handicap against the increase of street lamps, it seems fair to conclude that the above figures obtained from the reports and officials of the municipalities involved do not overstate the saving power of public ownership.

In the early years before the cost of electric lighting was understood and the companies were charging speculative prices, as in Elgin, Aurora, etc., the change to public ownership caused an amazing reduction. And even in later times the saving through municipal ownership is sufficiently marked. In Detroit, for example, one of the latest cases, the city, when considering the change to public ownership 5 years ago, could get no bid for its street lamps lower than \$132 per arc year; it saved nearly \$50 per arc at the start, and has now reduced the total cost, interest, depreciation, taxes, insurance, and operation to about \$70 per arc, and could cut it down to \$50 or less if the commercial lighting of the city were united with the street lighting in one system under public management.

THE ECONOMIES OF PUBLIC OWNERSHIP.

In addition to the fact that public ownership aims at service rather than profit, and therefore tends to a lower rate level than private ownership, gravitating to the level of greatest service without deficit—in addition to this we must note that public ownership permits economies which pull the expense line nearer the vertical and bring the line of greatest service without deficit to a lower level than it would have in the same system under private ownership. Thus public ownership favors low rates in a double way, first, by tending to bring rates down to cost, and second, by lowering cost.

Some of the reasons for the superior economy of public ownership are as follows:

(1) The public plant has no lobby expenses or corruption funds to raise, as many of the private monopolies have.

(2) It has no rebates or commissions or other secret concessions to favored customers to provide for.

(3) It has no dividends on watered stock to pay.

(4) It has no overgrown salaries or monopolistic profits to provide for. The principal salaries are apt to be smaller under public ownership and the wages of ordinary labor somewhat higher than under private ownership.

(5) Litigation expenses and lawyers' fees are likely to be less under public ownership than with private systems.

(6) The public plant generally is able to save on interest charges. The public credit is better than that even of very strong private companies, the government being able to borrow often at 3 per cent or less when a private company has to pay from 4 to 6 in the same locality. The government also saves on insurance, insurance being simply intended to diffuse loss, the government acting as its own insurer—diffusing the loss directly without paying the commissions and agents' fees.

(7) Public ownership gains through superior coordination of industry, which is impossible under private ownership except through incurring the dangers of a concentration of wealth and power in the hands of a few, the evils of which would be likely to outweigh the benefits of coordination.

(8) The public also gains through the civic interest of the people, which increases and facilitates the business. It is a fact of experience that the people patronize their own institutions, their own water plants, their own electric plants, and their own telegraphs and telephones to a far greater extent than they patronize a private institution. A man does not hesitate to increase the income of a public plant; his civic pride leads him to favor its prosperity; it is his plant; he is a partner in the concern; but the majority of men do not enjoy increasing the profits of a private monopoly.

(9) In the next place, the public plant escapes the costs and burdens of costly strikes and lockouts.

(10) Public ownership saves the cost of numerous regulative commissions and investigations into the secrets of private monopoly. Everything is open and public, and there is no necessity of those tremendous investigations. It also saves in the cost of legislation, since the time and attention of our legislators are very largely given to these great private monopolies, making laws they want and making laws to control them.

(11) The superior diffusion of wealth and elevation of labor resulting from a normal public system tend to diminish the extent and the cost of the criminal and defective and unfortunate classes; as in New Zealand, where they have practically wiped out the unemployed agitation through the administration of public utilities.

(12) The elimination of the antagonism between the owners of vast industries and the public carries with it all the useless activities and wastes of conflict which result from that antagonism.

SAVINGS THROUGH PUBLIC RAILWAYS.

How great are the savings that may result from the elimination of conflict and a thorough coordination of industry under wise and impartial public management may be seen by comparing the economy of such a system with the wastefulness of present railway methods.

While 800 or 1,000 companies carry on their business more or less separately, it is manifest that there must be duplication of management, of general officers, and duplication of railways, and of competitive agencies, duplication of depots, multitudinous ticket arrangements, competitive advertising, the carrying of empties, etc. I need not enumerate all the details; it is clear that the wastefulness of the present system is very great. In England careful estimates have

been made by leading railway authorities—the secretary of the London and North-western Railway Company, the manager of the Lancashire and Yorkshire, and the late eminent railway engineer, Sir Edwin Chadwick—and it is estimated that in Great Britain and Ireland the preventable wastes amount to 20 to 24 per cent of the operating expenses. In this country we have nothing like the union that exists in Great Britain. We have 863 independent systems, while the United Kingdom has only 133.

The whole railway system there is based on an understanding between all the companies, so the current railway literature affirms. The wastes of severance may, therefore, be greater here. But suppose we take it at 20 per cent. we shall find then that the wastes of severance in this country on the basis of the English estimates would amount to \$180,000,000. If we add to this the sums that go to legislative and legal expenses, and the amounts that are given away in free passes which still obtain to some extent, and the rebates that are still given in large measure, our present system of railway management probably costs the people not less than \$250,000,000 to \$300,000,000 more than it ought to cost—\$250,000,000 to \$300,000,000 partly waste and partly unjust increments to private pockets at the expense of the public. All this would be saved to the people by public ownership, and more, for the profits that now accrue to the companies would go to the people in lower rates, or lessened taxation, or added millions in the public treasury.

Moreover, if we had a system owned by the public clear of debt, as is the purpose of a number of the European governments, such as Germany, Belgium, Austria-Hungary, and France, which are aiming to secure a system of railways owned by the public with the capital all paid off, so that the railway system will be in the same condition as to capitalization as the public-road system is now, then rates may be reduced to the lowest possible figure, just large enough to cover operating expenses and depreciation and necessary extensions and improvements from year to year. That seems to me to be the ideal from an economic standpoint. Such bottom rates are of the greatest moment to the people for the improvement of social conditions, the relief of pressure upon the slums of the great cities, and so on. Politically, socially, and economically, low rates of transportation are of the utmost importance. Therefore it was of vast importance for a nation to have so nearly as possible a free-road system, only the expense of keeping it up falling upon the people. So it is of vast importance that we should get as near as possible to a free-railway system, putting upon transportation only the burden of operating expenses and maintenance charges and getting rid of the capital charges. If that were done the people might save about 600 millions of railway charges every year, adding the waste and misappropriation I have spoken of to the interest and dividends and surplus.

Here is an itemized account of the possible savings under a wise public management of railways. It is a statement prepared by me in 1895 for the *Arena* magazine, and is based on the estimates of railroad men:

TABLE III.—*Savings under coordinated public ownership.*

	In mil- lions.	Authority
1. By abolishing 599 presidents, with their staffs.	25	C. Wood Davis.
2. By abolishing the high-priced managers and their staffs.	4	Do.
3. By abolishing attorneys and legal expenses.	12	Do.
4. By abolishing merely competitive offices, writers, etc.	12	Do.
5. By abolishing five-sevenths of the advertising account which is incurred for competitive purposes.	5	Do.
6. By abolishing the traffic associations which are employed to adjust matters between competing roads.	4	Do.
7. By exclusive use of the shortest routes.	25	Do.
8. By consolidation of working depots, offices, and staffs.	20	Do.
9. By uniformity of rail, cars, machinery, etc., cheapening their manufacture; by avoiding freight blockades, return of "em- pties" belonging to other roads, clerks to keep account of foreign cars and adjust division of earnings among the roads; by making simple, easily understood tariffs, saving the time and labor of clerks and the public; by all the numberless little economies of a vast corporation under a single management, and no competitive warfare to waste its energies.	15	The present writer.
10. By avoiding strikes and developing a better spirit among the employees.	10	Do.
11. By abolishing the corruption fund for influencing legisla- tion, etc.	30	Thos. V. Cator.
12. By abolishing the <i>pass</i> evil.	30	C. Wood Davis.
13. By abolishing unjust rebates and commissions.	50	Thos. V. Cator.
Total.	242	

TABLE III.—*Savings under coordinated public ownership*—Continued.

FURTHER SAVINGS BY PAYING OFF DEBT AND EXTINGUISHING CAPITAL CHARGES.

	In mil- lions.	Authority.
14. By having no rent or interest to pay.....	286	By report, 1891.
15. By having no dividends to pay.....	82	Do.
16. By putting surplus in the people's treasury.....	52	Do.
Total savings per year by public ownership free of debt...	662	

I took the year 1891 in order that all the estimates might refer as nearly as possible to the same year. The people paid the railroads in 1891 about \$1,200,000,000. They could have had the same or better service for half the money if they had owned the roads free from debt and under good management, with a well coordinated public system.

We have now well toward a thousand different managements in place of 600, so that some of the wastes in the table have increased, while others have probably diminished. There are other items of saving not mentioned in the table. For example, adoption of the zone system and of cooperative methods in construction, etc., fuller use of safety appliances, a careful system of training railway employees, thorough coordination with the telegraph, telephone, and postal services, street railways, roads, police, and other departments. There is still abundant reason to believe that railway charges (\$1,480,000 this last year) could be reduced about one-half if the nation owned the system free of debt. In view of the fact that traffic is greatly increased by low rates and that the expense per unit both as to operating cost and fixed charges diminishes with the growing density of business, it is probable that rates and fares could be reduced considerably more than half under public ownership with the capital paid up. Even with the higher wages that ought to be paid and would be paid to brakemen, switchmen, and other workers, large reductions in rates would still be possible.

CONSOLIDATION.

In this country there have been about 5,000 railway corporations. About 3,000 of them have ceased to operate, and there are now a little over 2,000 railways—2,047, I think—and of these, there are 863 independent operating companies and about nine hundred and seventy-odd subsidiary companies leased or controlled by the independent companies. Two hundred odd of these—about 213, I think—of the subsidiary companies keep separate operating accounts, so that they are not entirely merged. Now, you see in those few figures that a tremendous movement toward concentration and coordination under private ownership is going on, and there is much at the same time that the figures do not show, for vast combinations are being formed among the independent companies. Coordination is good and ought to go all the way. It would result, as we have seen, in the very greatest economy if the whole railroad system of the country could be run under one harmonious plan and one management, in full coordination with the telegraph, telephone, and postal services.

In the transfer of empty cars, in getting rid of unnecessary stations and accounting offices, etc., great savings can be made—union of depots and all that. This concentration—which is so valuable that the German Government in arguing for public ownership of railroads put it as 1 of the 2 strongest arguments that they had—this concentration and coordination can be obtained under private ownership, but to bring it about under private ownership would result in establishing a power so colossal in the hands of a few men that the present dangers to free institutions resulting from monopolies would be intensified very many fold—intensified to such a degree that it would appear better for the country, perhaps, to forego the advantages of coordination than to have absolute or complete union of these enormous systems under private control. So that if we are to have the benefits of coordination with justice and safety to the Republic, we must attain them through public ownership. A consolidated system of railways in private hands would be a monopoly so vast, so powerful, so irresistible in its influence on legislation and administration that it would constitute too great a danger to republican institutions to be permitted. With private management we have either a lack of coordination or inharmony, or dangerous consolidation—harmony and coordination, together with safety and justice, can only be secured through public ownership.

Moreover it must be remembered that less than a third of the six hundred odd millions of possible public railway savings would be attributable to the element of coordination, over a hundred millions would be due to the abolition of corruption funds and discriminations in favor of privileged individuals, corporations, trusts, and combinations, and several hundred millions more belong to the capital accounts, rent, interest, and profits, and could be realized only by the extinguishment of railway capitalization and the making of rates on the basis of operating cost without profit, things that no private company, or consolidation of private companies, could be expected to do, so that far the larger part of the possible diminutions of railway taxes can only be secured through public ownership, not being attainable under private management, even if we were willing to risk the dangers of complete consolidation in private hands.

Q. (By Mr. FARQUHAR.) If 600,000,000 are taken out of the net returns of railroads, what would be left?—A. I did not say out of the net returns; I said out of the gross returns.

Q. Even say out of the gross returns; how much would that enter into the net results as at present constituted?—A. The \$600,000,000, according to those estimates, would be saved to the common people through the lessened cost of operation and the doing away with discriminative rates and corruption funds, and so on—all the losses of the present system—and the elimination of profits. Without touching profits, the possible reductions might be in the neighborhood of \$250,000,000 or more, basing our calculations either on the English estimates above referred to, or on the table and the comments following it.

Q. If discrimination in rates were abolished entirely by the flat plan of an equal tariff all over, would not that add to the profits of the railroads?—A. It would add to the gross revenues if the present tariff were enforced throughout.

Q. If you abolish all discriminations you are bringing more revenue into the railroads, and you say by the abolition of that, by coordination, etc., that you would save—that was the expression—\$600,000,000?—A. Yes. It would save that much to the common people. If the favored shippers, who get concessions worth 50,000,000 a year, did not receive those concessions the railroads would be \$50,000,000 better off, and could afford to reduce rates to the general public by that much. Discriminations are made, very many of them, by the payment of rebates and commissions. Now, if you do not make those payments, you save that amount of money to your railroad system, and can lower rates in general by so much. Suppose that the roads received \$1,000,000,000, and that \$50,000,000 were given back to favored shippers. Now, you do away with your discriminations and you can get along with \$50,000,000 less rates, can you not, than you could before? That is the point. Every payment or concession, whether positive or negative, to the Standard Oil, the beef combine, the grain trust, or other favorites of the railways, is just so much out of the pockets of the common people, who have no rebates or concessions and have to pay ordinary rates. It is just the same as if the amount of the concessions were added to the salaries of railroad officials, or as if the oil, beef, grain, coal, and other monopolists were put on the salary lists of the roads, and paid amounts equal to the value of the concessions they get. The common people have to pay for those concessions in railroad rates, and they would have to pay just that much less if the concessions were done away with.

Q. (By Mr. CLARKE.) Even if rates were not to be lowered, would you still see a great advantage in public ownership?—A. Certainly; I think the rates are not the main thing. This matter of partiality, personal discrimination, injustice, that is eliminated by public ownership; and the antagonism of interest between the small class owning the railroad system and the public as a whole, which is eliminated in favor of harmony; the relief of the pressure upon Government, tending to control and corrupt the Government, as our great monopolies do so far as necessary to accomplish their purposes and to protect themselves against bad legislation. All those things and others which are—

Q. (By Mr. FARQUHAR, interrupting.) Do you think that human nature changes in public service from what it was in private service in any way?—A. Yes; gradually; not all at once.

Q. Have you any knowledge of any country where it has?—A. Yes; every country. Man is molded by his environment as well as molding his environment. If we look back to the savage times when man began, we can trace through history the interaction between man and his environment, social institutions being a part of that environment. Now, every change toward harmony by elimination of antagonism and conflict tends to make man less barbarous, less antagonistic, less selfish, more sympathetic, brings him into closer relations with his fellows, molds and changes his human nature toward a higher manhood. That is one of the great benefits that I expect from public ownership,

Q. Do you think that in the railroad service of the United States, were it possible—which everybody seems to think is impossible, of course—for the Government to own them—do you think it is possible to serve the people better, have a more intelligent service by a public service, whether under civil service or not, than you have under the great brotherhoods that control the roads now?—A. Not perhaps a more intelligent service, but an equally intelligent service, aiming at the public good instead of at private profit under the control of the monopolists, not under the brotherhoods, for the brotherhoods do not control the roads, as is clear from the long hours and low wages of most of the men.

Q. Would you abolish the brotherhoods that are on the railroads now and bring in a civil service?—A. No; I would not abolish the brotherhoods.

Q. How would you employ your public servants on the public roads?—A. I would leave the present employees (when the different roads are taken) in the positions they occupy at the time of the transfer, subject to the condition of dismissal for lack of loyalty, under strong civil-service rules, made a part of the law under which the railroads are taken over, all new appointments and employments and dismissals being placed under those rules, and so the change from one system to the other would be made gradually, not by any sudden jolt.

Q. But in the long run that would tend, of course, to eliminate the present form of brotherhoods as they are now?—A. Oh, no; let the unions and brotherhoods stay as long as they want to.

Q. (By Mr. LITCHMAN.) Does the management of the railway post-office service under the Government eliminate the organization of railway postal employees?—A. Not that I know of. Trade unions are frequently opposed and sometimes broken down by private monopolies, but not by public managements. Unions are encouraged in New Zealand under the public service; the workers can not get their full rights under the law unless they do form a union. It is only the unions that can elect their judges to the appeal board.

PUBLIC BENEFITS ASIDE FROM LOW AND IMPARTIAL RATES.

The next point I would like to speak of very briefly is public service, aside from rate making. Take the matter of construction. In New Zealand the construction of railroads is so arranged as to relieve depression instead of creating panic, as our railways have been known to do. In 1873 we had what was practically a railroad panic. And overconstruction of railways in a time of prosperity is thought to be responsible in other instances for intensifying depressions and panics. In New Zealand and Germany the definite effort of the Government is to increase railroad construction in times of depression and to let up on construction in times of boom. In that way they get a double advantage. They equalize the labor market and the control of industry, and they get the railroads constructed at the times of lessened cost instead of at the times of higher cost.

Moreover, the management uses railroad construction and the adaptation of it—increase and diminution of it—to aid the farmers in obtaining the labor they need in harvest time. When winter comes and the unemployed are numerous, the railway managers increase their construction force. When summer comes, and the farmers want harvest hands, the managers slacken the work on the railroads and other public works, so that the men can go to the farmers.

In still another way railroad construction in New Zealand is used to aid the laboring people. The management lets out contracts for construction directly to cooperative groups of workers. A group of laborers contract for a given section of earthwork, another group for laying the ties, another group for laying the rails, another group for grading and repairing the road, another group for building stations and public buildings of various kinds; even iron bridges have been constructed in this way, by groups of cooperative laborers—anywhere from 6 to 50 or 100 men, who elect their own foreman and divide their money equally, the amount paid being determined by the engineer of the railroad system. The result is that the average wages made by the men are nearly double what they were able to make under the old system of private contract, because the men, knowing that the profit is to be theirs, put a great deal more energy and interest into the work, and consequently the state has secured its railways at a lower cost in every instance, so it is stated in their reports, than was the case under the old system of dealing with boss contractors. The elimination of the profits of the contractors and the stimulation of the industry of the men has resulted in these two conspicuous benefits, (1) affording the men double wages nearly, and (2) giving the state its construction at lower cost; beside favoring the development of sympathy, of cooperative effort and of ability to understand each other's efforts and interests. I believe that one of the greatest and most important tests of civilization is the

growth of cooperation. When men were mere savages and barbarians they were incapable of any cooperation. As they were developed they became capable of working in little groups, and larger groups, and larger groups, until finally they are able to work together in the all inclusive group of a public utility, and only as these larger groups of voluntary cooperations federate into a complete cooperation, and finally merge into the great all-inclusive circle of public ownership do we come to the final goal of civilization—the elimination of conflict and the replacement of it by harmony, by cooperative work for the benefit of all, instead of the mastery and conflict of most by the few for the benefit of the few. I believe that is the goal and the test of civilization, and, if so, the public systems in Germany and in New Zealand are emphatically superior to any private system under this test.

Germany controls her railways in such a way as to coordinate them—that is true of other public systems also—coordinate the railways with the telegraph, telephone, and post-office, and every other public service. The railway tariff, for example, is made to enforce the national tariff instead of nullifying it as our railroads are apt to do. For example, a few years ago, it appeared from the testimony in the Texas and Pacific cases that foreigners could ship from Liverpool or London through New Orleans to San Francisco and the Pacific coast, books, matings and carpets, confectionery, boots and shoes, hats and caps, gloves, linens, cashmeres, and so on, at a blanket rate of \$1.07; whereas, from New Orleans domestic products to San Francisco went at rates from \$2.88 to \$3.70. That is only one instance of the practical nullification of the protective tariff by our railroads; whereas, in Germany railroads not only do not nullify the policy of the state in regard to the tariff, but they enforce it, and they can actually establish protection to home industry by making the rates on foreign products higher than on domestic products, and they can admit raw materials for home industries at very low rates, so doubly encouraging home industries.

In one way more, with grand results, Germany has introduced the cooperative and coordinative principle into her railway system. The railways are governed by the minister of public works at the top (with a national advisory council), 20 railway directories, or district superintendencies (with 8 circuit advisory councils), and 6 classes of local officers (operating, machine, traffic, shop, telegraph, and building). One of the principal duties of the local-traffic office is to maintain a "living union" between the railway administration and the public. The chiefs of these offices are required to get into intimate relations with the people of their localities. Each local traffic chief, "by numerous personal interviews and observations, must inform himself concerning the needs of the service in his district, investigate and remedy complaints and evils without delay, and take such measures as will secure the most efficient service."

The local advisory councils are composed of representatives from chambers of commerce, labor organizations, farmers' unions, dairy associations, merchants' clubs, etc.; all sorts of industrial and social combinations are represented in these advisory councils, and the law requires the directories to consult these advisory bodies. The people, organized, according to their interests, into various forms of industrial union (chambers of commerce, labor unions, farmers' associations, etc.), elect the members of the local advisory councils, and these councils in turn elect 30 out of the 40 members of the national advisory board, the other 10 members being appointed, 3 by the minister of agriculture and forests, 3 by the minister of trade and industry, 2 by the minister of finance, and 2 by the minister of public works, state officials being ineligible. These advisory bodies do actually discuss with the greatest force, clearness, and effectiveness all sorts of questions about rates and classification and the conduct of the railroads; they make their recommendations and suggestions, and they are very largely followed. So that in Germany to-day the railroad system is practically in the hands of the people to manage and direct. The roads are actually operated in the interests of the people on one of the most democratic and cooperative plans it would be possible to imagine, it seems to me.

Q. You were speaking about cooperative construction in New Zealand, and I wish to know in that case who owns the facilities and apparatus. Supposing they were constructing a bridge, who would own the derricks and the hoisting engines and all that?—A. The state owns the machinery; but, adding the cost of supplying machinery to wages paid for the work, the total cost to the public is less in every case than under the middleman contract system, and since the abolition of the middleman and the establishment of the cooperative system, 9 years ago, there has been no unemployed-labor agitation in New Zealand.

(Whereupon the commission, at 12.55 p.m., took a recess until 2.30 p.m. The commission reassembled at 2.37 p.m., Mr. Parsons continuing his testimony as follows:)

I want to say that I do not believe personally that we are ready yet for the public ownership of railroads in this country. I should have stated that more definitely at the start. I believe we are never surely ready for the public ownership of anything in a republic until the people as a mass are thoroughly and earnestly awakened to that desire, and so, though I believe we are ready for public ownership of the telegraph, the public having expressed a desire for that for the past 50 years, I do not believe that public sentiment is sufficiently developed as yet to make us ready for public ownership of railroads; but, comparing the two systems throughout, I think there is very strong reason to believe that public ownership is the best, and will be the ultimate outcome when the people come to understand the matter fully. And I believe it is of the utmost importance that the people should be informed on the subject, so that they may make an intelligent decision as to the merits of the two systems.

SAFETY.

We come now to the question of safety. Which system is most likely to care for the public safety? Such special care for public safety as we have obtained on the railroads of this country and on the railroads of Great Britain has been obtained chiefly through severe legislation or direct and strenuous legislation, often resisted by the railroads. For example, the laws about grade crossings, and about keeping stoves in passenger cars, and about various safety coupling arrangements, and so on, have usually been resisted instead of being cordially adopted.

I remember a case in regard to the street railways of Philadelphia, when the presidents and makers of the roads came to consider the matter of putting on safety fenders, and an inventor had a fender that had been tested, and it was found that it would act like the fenders now used in Budapest, that will roll a child from the track without even bruising it seriously; but when it was found that it would cost \$50 a car to put it on the street cars of Philadelphia, the magnates made a little calculation, and found it would be cheaper to keep on paying damages for breaking legs and running over children. Afterwards a law was passed requiring fenders, and the roads delayed a long time until they were forced to get fenders, and then put on the cheapest kind they could get; and the fact is, in Philadelphia now, if a man is struck on the leg by one of those fenders, it would probably be as bad or worse than the blunt edge of the car. The fender has an iron edge anywhere from 6 inches to a foot from the ground, and would more certainly break him in two than if he was struck by the car itself.

When I come to the statistics in regard to accidents in various systems, public and private, I am not able to make out that the influence of ownership is the dominant one. I have here a table which I will incorporate in the testimony, with the permission of the commission:

TABLE IV.—*Railway accidents.*

	Passengers.		Employees.	
	Killed, 1 in—	Injured, 1 in—	Killed, 1 in—	Injured, 1 in—
United States	2,267,000	170,141	447	28
Germany	10,700,000	1,700,000	966	385
Austria-Hungary	8,781,000	652,000	1,560	200
Belgium	10,000,000	614,000	1,360	616
Great Britain	9,000,000	800,000	1,070	43
Switzerland	8,826,000	710,000	1,015	347
France:				
Public roads	12,000,000	4,000,000	1,175	390
Private roads	5,000,000	1,000,000	1,000	320

The Swiss and Austrian figures are for 1897; the rest are for 1898. The Austrian figures include a large block of private railways. I have not as yet secured the separate data. The English data as to employees are taken from *The Engineer*, London, January 28, 1900; the yearly returns of employees injured appear to have been, till recently, very imperfect.

It is made up for the United States, Germany, Austria, Great Britain, and France, and it appears that a passenger is about 5 times as likely to be killed in the United States as in Germany, and about 10 times as likely to be injured,

while a railway employee is more than twice as likely to be killed on our roads and 13 times as likely to be injured; but a comparison of the roads in Great Britain and Germany affords no such striking contrast. The result is not the other way; it is in the same direction, but nowhere near as strong, showing that the matter of ownership is not the dominant factor in the statistics of accidents. In France on the public railroads there is 1 passenger killed to 12,000,000, and on private roads 1 to 5,000,000—the private system being more than twice as dangerous so far as killing passengers is concerned. And 1 passenger is injured in each 4,000,000 on public roads and 1 in each 1,000,000 on private roads—4 times as dangerous on private roads as on public roads in France; and it is also more dangerous for employees on the private roads.

Q. While you are on that point, state how these data are made up.—A. From the reports of the French minister of railways.

Q. In proportion to the population and miles of railroads?—A. No; in proportion to the number of passengers carried. In Germany 1 passenger in 10,700,000 is killed, while in the United States it is 1 passenger in 2,267,000, and by a still later report the ratio is 1 passenger killed in every 2,189,000 passengers carried, 1 injured in each 152,000 passengers; 1 employee killed in 420 and 1 injured in each 27, showing an increased danger in the United States since 1898.

There is one thing further to be said about France, namely: The private roads consist of the great systems, while the public roads in France are comparatively small branch affairs, and that may account for the difference in safety. I am not able to come to any satisfactory conclusion about that.

CAPITALIZATION.

My next point relates to capitalization, and here there is a tremendous contrast. The tendency with the great private monopoly is to build up capitalization year after year, and decade after decade, adding together the cost of the original plant and the cost of all improvements, reconstructions, etc., until, even with honest bookkeeping and without any stock watering, the capitalization, by simple accumulation and accretion, comes to be 2 or 3 times the actual worth of the plant.

Q. (By Mr. A. L. HARRIS.) That is the face value, is it, and not the amount received by the company?—A. No; I am talking about the actual cost put into the road. It accumulates year after year, till it far exceeds the real value or cost of duplication of the plant.

Q. Not the face value of stock and bonds?—A. No. When we come to that, the face value of the stock and bonds, there is a great increase beyond the total capital cost—beyond all that has been put into the roads—a great expansion through the watering of stock and through the inflation of values otherwise than by accumulation of worn-out construction costs.

I do not suppose it is necessary to give illustrations, as it is so well known to be the tendency of our railroads, telegraph, telephone, and street railways, but I might name one of the most conscienceless cases, that of the Boston gas system, where some years ago, I think in 1888, the capitalization was less than \$4 per thousand feet of output. That was about fair. Between \$3 and \$4 capital per thousand is the actual value in large cities, according to the gas experts. Since that time the Boston companies, by a complex system of consolidation and increase of stock upon consolidations, and leases and contracts, and so on, have gradually worked their capitalization up until it is \$43 per thousand feet of output, or about 10 times—more than 10 times—the fair capitalization.

Take the Metropolitan system of street railways in New York. It appears from an estimate made last year, based upon the testimony obtained by one of the legislative committees of New York as to the cost of making railroads in New York City, that the market value of the stocks and bonds of the lines owned by the Metropolitan Company was then 23 times the actual value or cost of reproduction of the said lines, according to the evidence given. That is another very strong case.

The prevalence of water in the railroad system is so well known that it is not necessary to do more than touch upon the matter. Vanderbilt set the pace in consolidating the 11 roads between Albany and Buffalo and increased the capitalization by nearly \$9,000,000 in doing it, then adding 50 per cent to the stock capitalization of the Hudson road, of which he was president; then extending his control over the Central and adopting the same tactics there he added 80 per cent to the New York Central; then he consolidated the two roads, and in doing it inflated the Central 27 per cent more and the Hudson 85 per cent; so that in the 4 years from 1866 to 1870 he brought the capitalization up from \$54,000,000, which was a little more than the total cost on the books of the company—about \$4,000,000

more—to \$108,000,000. The total cost on the books in 1870 was under \$70,000 per mile, while under his capitalization it was \$122,000 per mile.

That example has been followed to a great extent all over the country, so that our railroad capitalization is now about half water, or water and wind. The figures of construction and equipment cost given in Poor's Manual from time to time indicate that the railroads of the United States are capitalized at about double what they could be built and equipped for at the present time.

Q. What about the total capitalization?—A. A little over \$60,000 a mile; and the actual value, according to Poor's figures as to the cost of reproduction, would be under \$30,000 a mile.

Q. In round numbers what is the total capitalization of the railroads?—A. Something over \$11,000,000,000.

Q. (By Mr. LITCHMAN.) That is, outside of the bonded debt?—A. No; including the bonded debt.

Q. Also includes the bonds in the capitalization?—A. Yes.

Q. (By Mr. PHILLIPS.) Is it fair to include both the bonds and the stock as capitalization?—A. Yes, I think so; for this reason: Take the ordinary manufacturer or business man without any monopoly, and it is clear that he can not make his prices any more than is necessary to pay him a reasonable profit in a competitive market on the actual capital value or cost of reproduction of his plant. He can not mortgage his business and issue bonds and pay interest on that out of his prices and still expect to make a profit in the way of dividends for himself. If he tried it, some business man without any bonds or mortgage, who would be satisfied with one profit on the actual investment, would undersell him and drive him out of the market. The merchant, farmer, or manufacturer can not make his customers pay interest on bonds equal to the capital invested and dividends on stock equal to the real capital also. He has to be satisfied with one profit on the actual capital cost of reproduction, and that is right. It places the monopolist at a great advantage in reference to the everyday business man, and especially the small people, if either the bonds or stock or both together are allowed to go beyond the actual value of the plant and become a charge on the community.

Q. (By Mr. CLARKE.) Do you think the present cost of reproduction of a plant is a fair test of the capitalization?—A. I think so, for the reason that I have just stated. It is the test with the manufacturer and the agriculturist. The point I wish to bring out, though, is this: Not to blame the railroads especially, although I do not think they have acted fairly in the matter, many of them, yet they have acted much more fairly than the gas people and street-railway people in many instances; but I wish to bring out the total difference of policy under the public systems where there is no water or inflation, no policy of building up capital from year to year, but exactly the opposite policy of reducing the capitalization from year to year by devoting a certain fund to paying it off so that in the course of 20, or 30, or 50 years the capitalization shall be extinguished, and the railways or other service shall be open to the use of the people at rates just high enough to cover the actual cost of operation and depreciation. That is the policy which is being definitely carried out in Belgium with the railroads, and on the German railways, and the railways of Austria-Hungary; and France, even, has made an agreement with the railways whereby in the middle of this twentieth century they are to revert to the State, as I understand it, free of capital cost. The Swiss Federal Council, in giving their reasons for desiring public railways, made this matter very emphatic; they said, "We are surrounded by countries who are aiming to reduce rates to the lowest practicable figure. If they do accomplish that in the course of the next half century, and we leave our roads to pile up their capital year after year as they are doing, we will be at a great disadvantage. Our rates will be so high that we can not possibly compete, and we will not get any through traffic, but get absolutely nothing except the rates from our own people." That was very influential, I am told, in producing the remarkable vote of two to one in favor of the nationalization of railroads in Switzerland.

STOCK GAMBLING.

Passing from that point, the next one is that railway capitalization, and especially the stock part of it under the private-monopoly system, supplies an opportunity for the speculation and gambling which goes on in New York and other cities, to the great detriment of our industries and to the detriment also of the ideals of our youth. Just so long as our young men feel that there is a chance for them to gain wealth by speculation instead of by honest industry, so long will they turn to speculation instead of relying on useful work—to just that extent we are holding before them a premium to devote themselves to gambling instead of fruitful labor—putting the premium on activities which are not nearly so beneficial to

the public, to say the least, as honest industry is. The public system, on the contrary, by wiping out this railway stock, and gas stock, etc.—the fluctuating securities on which the gamblers of the stock exchanges rely—causes a marked reduction in the speculative and gambling elements in our business life.

COORDINATION.

Then, the point of coordination, which I have briefly referred to before, but wish to emphasize here in a little different way. In Germany, Belgium, New Zealand, and Austria-Hungary, where are the systems I have mainly studied, the railway service is coordinated with the telegraph, telephone, and all other public services in such a way that each one aids the other to the utmost. For example, in the European countries you can telephone your telegram, and in some places you can do it, without charge. They regard the telephone as a feeder to the telegraph, and they use each one of the systems of transportation to help the others.

ANTAGONISM OF INTEREST.

Now, this coordination and unity for public service and the public good, which is so natural to public enterprise, is directly opposed to the antagonism of interest between a small body of owners and the public which characterizes private monopoly. From the antagonism of interest between the owners and the public, I believe, grows nearly all the evils that we have experienced from private monopoly, and also the great difficulty of enforcing the law in the public interest. It is because the owners wish profit, and have the vast power which the great public monopoly gives them to enforce their will, that they are able to make these discriminating rates between big and little shippers and between the city and the country. They can discriminate against a man, a company, a street, a town or city, a State or a nation. They can make the fortune of a city or of a man, or make or mar the fortunes of an industry. They can ruin or build up a city, man, or State, and they are prompted to use that great power against the public interest because of this antagonism of interest between the small group and the whole. That antagonism does not exist to anything like the same extent in any of the countries where the railroads and telegraph, and so on, are owned by the State, and under the best systems it does not exist at all.

THE TEST OF MOVEMENT.

My next point is one that is somewhat novel, but I think I may perhaps make clear what is in my mind by calling your attention to the fact that one of the main differences, and perhaps the whole difference, between a man and a piece of stone is a difference of movement. I suppose there is a certain movement among the particles of the stone or it would be down to the zero of total cold—a little heat movement—but the rock is not able to move itself; it has none of the motions which we call life. And those differences which distinguish a man and a rock exist in a less degree between one man and another, and between one nation and another. Other things being equal, the nation that has the greatest, freest, and most harmonious movement of its molecules among themselves is the most advanced nation, the farthest removed from inanimate existence. This motion of the molecules of the nation—its citizens and their possessions—produces what may be called social thought, wealth, activity of every kind, and social progress. The amount of free, harmonious motion among the molecules of society being one of the basic tests of civilization and evolution, it is fair to ask which of the two systems under consideration conduces most to such molecular motion. When we compare the two systems in respect to this matter of social dynamics we find that the public system greatly excels in its facilitation of the molecular movements that underlie and create social heat, thought, life, and progress. Take a couple of illustrations. In 1869, the year before Great Britain made the telegraph public, there was one telegram to each five persons; in this country at the same time there was one telegram to each three persons. England made her telegraph a part of the public post, and now there are two telegrams per capita in England and about one in this country. In other words, when both systems were private we were nearly twice as far along in the rapid transmission of intelligence as England, but when she changed to the public system and we kept on with the private system she gained on us and passed us, so that her movement of thought along the electric wire is double ours. New Zealand and some of the Australian colonies also have two telegrams per capita where we have but one.

Again, taking railroad movement. In 1888 a comparison was made between Germany and the United States and it was found that the United States had nearly 7 passenger trips per capita to 5.3 in Germany. But in 1890, comparing the records, there are just about 10 passenger trips in the United States and just about 10 in Germany also; almost exactly alike, though the German figure is a fraction above ours. So that again in the railroad movement the change to public ownership has enabled Germany to gain greatly upon us and even surpass us in that movement, in spite of the much greater general activity in the United States; industries which are private in both countries or public in both countries, like the post, showing very much greater vitality and movement here than in Germany. It is easy to see why public ownership increases social movement and vitality. Take the telegraph—our telegraph system confines itself to the better districts, and the companies are not to be blamed for doing it at all: it is in the nature of a system built for profit that it must confine itself to the profitable routes. It does not put lines into the rural districts where lines will not pay; it can not do it. The English private companies did the same thing before 1870, but when the lines were transferred to the State one of the first things the Government did was to extend them very greatly. They more than doubled the facilities, lines, and instruments, and the facilities were increased many fold by making every post-office and post-box a depository where a telegram could be placed. So the difference is inherent in the two systems, without any blame at all being placed on the private system that must naturally and necessarily promote first the private interests.

Another striking illustration which must not be neglected is what took place in Austria-Hungary in 1889, when the zone system was introduced. Rates were reduced from 40 per cent to 80 per cent, and the traffic more than doubled in the first year—an enormous increase in the wealth-creating and thought-producing, sympathy-developing, civilization-making activities of the nation.

As I have already stated, in England, when she took the telegraph and increased the facilities and lowered the rates from one-third to one-half, the result was an increase in traffic which doubled the number of messages in less than 2 years, and doubled the word-miles in 1 year. The term "word-mile" corresponds to the "ton-mile" in freight transportation and the passenger-mile in passenger traffic. One word going 1 mile is a word-mile.

DIFFUSION OF WEALTH.

Now, I want to speak a moment of the question of wealth diffusion—the effects of the two systems in regard to the distribution of wealth. The private system tends to the congestion of wealth, and not to the diffusion of it. Our railroads and telegraphs are recognized without dispute as being large creators of great fortunes, and the railroads, at least, are indisputably largely connected with the growth of other great monopolies which tend to the congestion of wealth. Many of the trusts in their inception owe their growth and power to railroad favoritism. The beef combine, for example, and the oil trust, and so on.

After a trust is once on its legs the removal of railway privileges might not break it down in many instances, but so far as the origin of trusts is concerned a private railway system is of the utmost importance, and with many trusts and combines the railroad system is of great importance to the maintenance of their power.

While I am on that matter of trusts, however, I want to say I am not one of those who believe that public ownership or complete control of the railroads would abolish the trust evil. I do not believe that taking away the protection of the tariff from trusts would do it. Neither am I in favor of destroying the trusts, but only of molding them into good forms and directing their energies in proper channels. I think that the organization of capital is one of the greatest advances of the age, and that trusts, on the whole, represent a movement in the line of progress. Each trust is a brotherhood or cooperation on the inside. It gets rid of the conflict between the different manufacturers or producers who enter it, but intensifies the antagonism that is left between that group and other groups and the public.

Now, if we carry the process of trust making a little further—the same process of organization of industry and cooperation—if we extend the limits of the trust idea in some way so that it shall cooperate not only internally but externally, we have solved the trust problem, and I think that can be done without serious break simply by good laws of taxation and other laws which shall make the advantages of organizing capital on the lines of cooperative industry so great and the disadvantages of organizing on competitive and antagonistic and anti-

public lines so great that capital will voluntarily, of its own motion, tend to organize along cooperative lines instead of antipublic lines. For example, take the ordinary level of taxation on common competitive business as a median level, and for antipublic aggregations of capital that refuse to open their books to public inspection, refuse to cooperate or to allow prices and wages to be fixed by a board of arbitration or public tribunal—for such aggressive combines make the taxes higher and higher in proportion to their size and antagonistic spirit. On the other hand combinations that would open their books to the public and allow the fixing of profits and wages and prices to a greater or less extent, either on a sliding scale or by a board of arbitration, should have rates of taxation below the median level—rates progressively lower in proportion to the size of the combine and the degree of public spirit and cooperative method manifested by it. By such taxation cooperative organization would be encouraged and aggressive organization repressed. The motive of trust formation is profit. So long as profit is linked with aggressive, antipublic organization, capital will flow in that direction. If we can sever profit from that sort of organization and attach it to cooperative, open-hearted, public-spirited organization, capital will unite in cooperative forms. This change in the incidence of profit can be made by well-adjusted progressive taxes—aggressive combinations can be taxed so heavily that it will mean loss instead of profit, leaving cooperative combination the only form of organization from which the promoters and participants can derive a profit.

In some such way as that I think we can solve the trust problem along the line of voluntary association instead of along lines of repression, or of public ownership of manufactures.

Now a word more about the diffusion of wealth. In all these countries, Belgium, Germany, Austria-Hungary, and so on, the railroads and telegraphs and telephones are instruments of wealth diffusion, not millionaire mills nor pauper factories. They do not manufacture great fortunes for individuals and they do not force together large populations in the slums of cities.

The policy of New Zealand is definitely and expressly in favor of wealth diffusion. Everywhere in New Zealand the people and officials express the intent "to have no millionaires or paupers." They administer the railroad system and every other public system, including the land system, with direct reference to that intent—to diffuse wealth—and that is the reason the railroads carry the unemployed below cost and give them work in cooperative groups, and help to keep up wages by cutting out the profits of great contractors, and so on.

They deal with trusts, as Germany does also, to some extent, by threatening that if they do not make fair prices, low rates will be given to small concerns at a longer distance, and so bring competitive products to cut down the prices of the combinations. They make a direct effort to prevent the accumulation of vast power and wealth in the hands of the few.

DEMOCRACY.

Now a word as to the attitude of these two systems, public ownership and private monopoly, in regard to democracy. The whole trend of history in our century is toward democracy in political life, and I suppose none of us Americans would dispute the wisdom of that tendency. We all believe, I presume, in the reasons on which it is founded—to protect the people against injustice, sure to result if great power is in the hands of the few—arbitrary, irresponsible power; and to develop and educate the people through the activities and responsibilities of self-government. These reasons apply just as truly, I think, to industry as they do to politics. Arbitrary industrial power in the hands of a few leads to oppression just as surely as arbitrary political power. Political justice requires that every member of the political group of reasonable age and discretion shall have a voice in the political control of the group, and industrial justice requires that every member of an industrial group of reasonable age and discretion shall have a voice in the industrial control, helping to determine the policy of the group and elect its officers. The educational reason also applies with full force to the democratization of industry, for quite as much development of mind and character is to be attained through sharing the responsibilities of industrial government as by participating in political government. Moreover, real political democracy is hardly possible where you have industrial aristocracy or the concentration of industrial power in the hands of the few. If a few men control the great railway systems, telegraphs, and so on, they will necessarily have an enormous control not only over industry, but indirectly over political and social affairs; so that perfect and real equality before the law and equal sovereignty or democracy in government can hardly be secured unless democracy in industry is joined with democracy in politics.

In fact I believe that the underlying cause of the great unrest of our time is that we have experienced an enormous progress in the accumulation and diffusion of intelligence, and in the diffusion of political power at the same time with an ever intensifying congestion of power and wealth in the industrial field; and the two things can not coexist; they are incompatible. Democracy of intelligence can not continue side by side with aristocracy and concentration of power in industry.

So it appears to me to be of fundamental importance to consider the attitude of the two systems in this relation, and it is of course apparent that the publicly owned monopoly is much more in harmony with the principles of democracy than the private monopoly. The whole people own the public plant. The employees and all the citizens are copartners and coowners. All have a voice in the management and all receive a share in the profits and benefits, whereas under the private system the power and profits belong to a few.

If you should run over the list of the directors of the Western Union, or take the names of the leading men in the railway systems, you would see how deeply true it is that the great fortunes are clustering about these monopolies, because they are produced by and fostered by these monopolies.

The very reason men try to get a big monopoly is that it enables them to obtain more than a fair remuneration for the services they render, and more than they could get in an open competitive market, and just so long as they have private monopolies they will be able to get more than a fair remuneration.

PRIVATE MONOPOLY MEANS SOVEREIGN POWER IN PRIVATE HANDS.

I would like to make this point as clear and definite as I can. Not only does a private monopoly in these great industries antagonize the principles of democracy and tend to establish the principles of aristocracy—concentration of power and wealth in the hands of the few—but it also involves the exercise of what is truly sovereign power by private individuals in private interest.

John Stuart Mill and other economists are agreed that the charges of monopolies engaged in essential services are really in the nature of taxation; and taxation is certainly a sovereign power. Monopoly of a great public utility, like transportation, involves the power of levying taxes on the community. I would go a little farther and say that the great monopolists are able not merely to tax the people, but to tax them without representation and for private purposes; the people are not represented in the body that fixes the monopoly taxes, and the taxes go into private treasuries. Now, taxation without representation was the cause of the Revolution; and the insignificance of the taxation then in question, compared to the taxation which the masses of the people are suffering at the hands of the monopolies now, is very evident. If this taxation, levied by our home monopolies, was levied by an outside power across the water, there would be a revolution in this country without doubt. But we are estopped from any revolution, or any serious objection so long as the laws remain as they are, because we have assented to the growth of this system, and we are almost as much responsible for it as the railroads and telegraphs themselves.

But further, it is not only taxation without representation, but for private purposes, and please note that no legislature in the civilized world has power to do that. That is not merely sovereign power—that is ultra sovereign power—power beyond the reach of any accredited sovereign under free institutions, under constitutional government.

In the second place, the control of the ebb and flow of commerce in foreign goods in competition with domestic products which we call the tariff—the protective tariff—is a sovereign power, and, as I have shown, the railroads are able to nullify or to make duties of that kind inoperative, usurping thereby the sovereign power of regulating international trade and even overruling, in effect, the regulations imposed by Congress to govern such trade.

In the third place, the railroads can make and unmake cities; they can make and unmake private fortunes, and even make or mar the fortunes of a whole State or section of the country. That, again, appears to be a power that should not be lodged anywhere but in a sovereign, and hardly there. I can not conceive how, under free institutions, that power should exist anywhere. The aim should be equalization and not the making or marring of one person, city, or State at the expense of another.

Again, great monopolies are able to exert a very large control over our governments themselves. We are all familiar with the fact that the great railroads, particularly in New York, Pennsylvania, and Illinois, carry the legislatures in their vest pockets; and one of our legal writers, Mr. Lawson, writing on railroad

law some time ago, warned the student of railway decisions not to pay much attention to what the supreme court of Pennsylvania said on railroad matters, because, so far as he could make out, the Pennsylvania Railroad ran the supreme court in Pennsylvania about as successfully as they did their own trains. There is some good ground for such statements as that.

Vanderbilt used practically to own and control the New York legislature until Fisk and Gould came on the carpet, and then it was a question which of the two great railroad interests should get its bills through and carry its points in court and legislature; but until there is a fight between great monopolists the legislature usually yields to the persuasions of any great monopoly.

Even in Massachusetts, where we are supposed to have a pretty good state of affairs, we find it practically impossible to do anything effective in the legislature against the railroads, or the street railways, or the great gas and electric light interests. When we did succeed, after several years' effort, in getting a gas and electric light law permitting the cities to establish municipal plants, the monopolists succeeded in putting in a clause which nearly nullified the benefit of the law by making the conditions so severe that towns and cities have found it very difficult to take advantage of it. The law establishing the State board of gas and electric light commissioners was drawn by the attorney of the gas monopoly—drawn to protect the companies and put the public to sleep, while giving it little real benefit. And when a commission was sent by the legislature all over the country to study public gas plants and electric-light plants, they took the attorney of the gas and electric light companies along, and in one instance, at least, it was shown that the gas attorney wrote the report, and of course the report did not say anything very favorable to public ownership. The superintendents of two or three places wrote letters objecting and saying they had been totally misrepresented; and the superintendent of the gasworks in Richmond wrote that the report contained positive lying and totally misrepresented the facts.

Governor Pingree said, after his experience as mayor of Detroit, that the street railways owned the council body and soul. They would pay \$3,000 for a member and even tried to buy the mayor himself, offered him \$75,000 to sign a bill, and another time the monopolies offered him a trip around the world if he would do something they wanted him to. In city after city and State after State we have the testimony that these great monopolies are exerting their influence to control the government.

In all these ways therefore the private monopolies involve the exercise of sovereign power, and in some cases even ultra sovereign power, and such power ought not to be intrusted to private hands. Only the people have a right to own the great monopolies, for only the people have a right to sovereign power.

JUSTICE, GOOD GOVERNMENT, AND OBEDIENCE TO LAW.

Public ownership tends to justice by eliminating personal discrimination in rates, by making fairer rates to develop the country in every way, and by treating the employees in a more just and humane manner as a rule. The tendency is to increase wages and shorten hours. The aim and purpose is more likely to be in the direction of justice than where personal interests dominate the policy of the system.

As to good government: In the first place, so far as the pressure upon legislative government is concerned, the removal of the great private monopolies would clearly abolish one of the principal causes of our present difficulties with legislative bodies; but when we come to the administrative side of the government we are met by the difficulty of an increase of patronage, which undoubtedly is a very great and serious danger, and which makes me feel that we are not yet ready for public ownership of railroads in this country, because that difficulty could only be overcome, I believe, through a state of public sentiment so earnest and so intelligent as to secure a complete enforcement of thorough civil-service rules.

This difficulty has been overcome in the republic of New Zealand, and to a large extent it has been overcome in the republics of Australia with the railroad, telegraph, and telephone systems. There is still some difficulty with it in Australia, and there is still necessity in New Zealand for careful watch, although they have very thorough civil-service rules, and they are well lived up to.

In Germany there has not been nearly so much trouble on this account, because they adopted a thorough civil-service system at the time they put the railroads into public hands, and the power of the Government has been such that the system has been excellently carried out.

In the English telegraph and post and other public services we have perhaps the very best example, or one of the best, of the thorough enforcement of good civil-service regulations, so that a change of party in Great Britain involves no change except that of forty-odd heads of departments who control the political policy of the Government, and there is no change of employees or subordinate officials whatever.

We have in this country in the post-office some civil-service rules in force to a certain very limited, and, I think, seriously defective, extent; and I am sorry to say there is a tendency just now toward retrogression. Nevertheless, it is simply a difficulty in the administration, which a thorough organization can overcome as has been proved by experience in other lands.

England is quite as democratic, on the whole, as America, in spite of the figurehead of the Crown. New Zealand is certainly fully as democratic as America, and they have solved this problem. We ought to be able to solve it also, and I think we can solve it at any time the people are aroused sufficiently to demand it.

Moreover, the transfer of great interests to public ownership in a community of reasonable civic interest and enlightenment creates one of the strongest influences tending to secure thorough civil-service regulations, because it makes the necessity and importance of such regulations so much greater that, if the people have any intelligence and civic patriotism at all, they will require honest and careful administration, and the wider and more important the public business is the more likely a really intelligent people is to demand good civil service.

It is a question of the degree of civilization of the people. If they are in the state of civilization that New York City is at the present time, large monopolies in the hands of the public are not proper, for the city has not yet shown itself capable of rising to the occasion. I hope and believe they will in the near future.

In England—take Glasgow and Birmingham—the increase of public ownership of great monopolies proved to be one of the most powerful forces moving toward the political purification of those cities, because the people were in a condition where the vast increase of interests awakened their civic patriotism to new effort. They said, "Look here, the business in the hands of public servants is getting so tremendously important it will not do to let this thing be run by a ring. We must see that it is run honestly and fairly, and we must rouse ourselves and go to the polls and vote for honest men." And they have done it, and it has purified those governments. The mayor of Birmingham some years ago wrote an article in one of our leading reviews in which he attributed a large part of the political development and purification of Birmingham to the increase of public ownership in that city.

PUBLIC OWNERSHIP OF THE GOVERNMENT ESSENTIAL TO REAL PUBLIC OWNERSHIP OF OTHER PUBLIC UTILITIES.

Q. (By Mr. A. L. HARRIS.) Should public ownership of public utilities become universal and controlled by the civil service, as you have just described, would not that build up an office class that would cause a great deal of unrest?—A. May I say just a word more about this other matter, and then deal with that. I want to add on the patronage point that, while we are considering this subject of the political aspects of public ownership, it seems to me very essential to note the difference between public ownership and Government ownership. The two are not the same, are not identical. For example, Russia has Government ownership of railroads, but she has no real public ownership, although the railroads are largely administered in the public interest. She has no real public ownership, because the people or the public does not own the Government. If the Government is a private monopoly, everything in the hands of the Government is a private monopoly. Philadelphia, they sometimes say, used to have public ownership and operation of the gas works, but from my studies of Philadelphia I do not think there was really public ownership of gas works there in any true sense, because the people did not own the councils; private monopolies owned the councils and not the people, as shown by the fact that councils refused to submit the question of leasing the works to a referendum. Mass meetings were held, and there were tremendous protests through the press. I think every paper in the city appealed to councils to submit the lease to the people to see whether they would vote for it or not, and the councils would not even do that. They would not allow the lease to go to the people on referendum.

Now, in the light of this distinction between public ownership and Government ownership, the argument I have been making about public ownership—while it applies in a certain degree to Government ownership, in proportion as Government ownership is real public ownership and not private—does not apply to the system

of Government ownership where the Government itself is really a private monopoly in the hands of a political ring or machine, so that the first and absolutely essential point to keep in view in considering public ownership is that the people must have public ownership of the Government, must own their councils and their legislatures, before they can hope to make a success of the public ownership of industrial monopolies. The Government itself is a monopoly and a public utility, and the doctrine of the public ownership of monopolies and public ownership of public utilities includes as its most important element the public ownership of the Government. Now, complete public ownership of the Government involves civil-service reform, and I think it involves also a system of direct nominations and direct legislation, so that the people can at all times control their representatives and their administrative officers; so that if they do what the people do not want, the people can call them down (just as we can stop our agent or architect if he attempts to act in our business in a way we do not approve), or if the representatives refuse to do what the people desire, the people can instruct or compel them to do as they wish, or enact the popular will into law at the polls in spite of councils and legislatures. That is a fundamental element in the philosophy of public ownership, the key to the whole situation.

AN OFFICE CLASS.

Now, your question was in regard to the building up of a great office class. I think that is a serious difficulty. At the same time, if this matter I have just been speaking of is duly regarded, there is nothing alarming about an office class. Those public servants under a fair system of civil service would be as free as the present servants of the great monopolists, and I think freer. They could vote as they chose. In fact, take the carriers in the post-office now. They do not vote all one way by any means. They are Democrats, Republicans, and Populists, Prohibitionists, Social Democrats, Union party men, and nonpartisans, and they are not discharged because of their political affiliations. Public employees are freer now as a rule than the employees of private corporations; and when the people really become aroused to the need for good civil service, public employees will be perfectly free to vote as they please. So long as they do their work well they will be sure of their places no matter what their politics may be, which is more than can be said of the employees of our private monopolies. New Zealand is our best example, perhaps. The English telegraph is very good; but the New Zealand railways and telegraphs and telephones treat their employees in such a way that they feel—the universal testimony is that they feel absolutely free, not merely to vote as they please, but to criticise their own Government. Every railway officer and employee has a vote in electing the appeal board or arbitration court that settles all questions between employees and the Government. It is a bit of real industrial democracy. Any employee who is discharged can appeal to the judicial tribunal to decide upon the justness of the dismissal, or if he is degraded, or his wages are changed, or if he is not treated rightly in any way, he can appeal to the board to determine the justice of the case. It is a court in full power, and the employees have far more liberty, both industrially and politically, than they have under our system of private monopoly. There is little or no tendency, so far as I am able to ascertain, either in the English telegraph or in the German public systems to exert even the slightest control over the politics or religion of employees. In New Zealand there is absolutely none.

Q. (By Mr. LITCHMAN.) Do you take into consideration in that analysis the contrast between the conditions in a new country like New Zealand and the conditions in our own country?—A. Yes; I admit that it would be more difficult in this country to organize and carry on a thoroughly good system, both because of its size and because it has got to running in ruts that are not in the right direction. But the problem can be solved on the same lines here as elsewhere. America is used to larger affairs than other countries, and her strength is greater than theirs, as well as her difficulties. Moreover, the size of our railway systems multiplies and intensifies the evils of private monopoly in transportation, magnifying the need of public ownership in even greater proportion than the difficulty of it. Everything is on a large scale—system, strength, need, difficulty.

Q. Now, doesn't that reach the point where you can consider the question which I asked this morning, that perhaps the greater extent of mileage and consequently vaster extent of the problem itself in America—.—A. (Interrupting). Would make it more difficult?

Q. Would tend to approach a question of impossibility?—A. No, I think not. The difficulties resulting from size do not really affect the question of public ownership as compared with private ownership in the same country, for those

difficulties apply to private roads as well as public. In any given country, whatever its size, if part of the people can own and operate a railway system, surely the whole people should be able to accomplish as much as a part of the people can. It would be a colossal undertaking, if we contemplated the taking of the railroad system, telegraph and telephone, etc., all at one gulp; it would be almost like a man trying to eat a dinner at one mouthful, but under any fairly arranged system of transfer, such as that organized in Prussia, for example, we would take one great line at a time, and organize that thoroughly on the basis of the present employees and officers, superintendents, managers, etc., as agents, to operate for a big body of stockholders, the whole people, instead of operating as at present for a small body of stockholders. That is the only difference so far as the operation is concerned. Now, then, if the big body of stockholders, the people, get sense enough—it is only a question of intelligence—get sense enough to make proper by-laws and regulations so that these agents will run the thing under reasonable conditions, I think they can run the system for the big body of stockholders just as intelligently and just as honestly as for a little body of stockholders—more honestly probable, for they would not be under the same temptation to make private concessions, rebates, etc., as they are now. Then, of course, there must be good civil service rules to prevent dismissals without cause; you would have to have that at the start. Then, after some experience with the one system, we can do as Prussia did, take others gradually, and we can give fair prices for the roads, I think, in the same way that Prussia did. We can say to the railroads, "estimate what you ought to have for your road, and if it is fair we will pay it, but we warn you to be fair, otherwise we will apply to you the principle of competition, which you admire so much, until you are ready to do what is fair." In that way Prussia bought her railroads for very reasonable value, fair to the owners and fair to the people. We could do something like that, although perhaps we could not get entirely satisfactory terms without a preliminary process of legislation to squeeze out some of the water in our railroad capital.

Q. How many railroad hands are there estimated to be in the United States?—A. Oh, I think something like 800,000 or over.

Q. Suppose that 800,000 people were under one party's control or management, which would naturally be the case with the appointments under whatever party was in power, how would you eliminate the sectional question which Mr. Kennedy asked you about this morning—preferences of section rates, or whatever may be given one section of the country against another?—A. I would deal with it in the same way that Germany has dealt with it—advisory councils and a national council representing and equalizing the pressure of interests from all sections. You can't get rid of the sectional question entirely, but you can go a long ways toward it by such a system. In the first place, I do not admit that the 800,000 employees would be under the political control of the party in power. I have clearly stated that civil-service rules controlling appointments, promotions, etc., on the merit system must be a part of any true system of public railways. Every appointment must be by merit or competitive test, and every employee discharged must have an appeal to an impartial tribunal to try his case. No appointments except for merit, and no discharges except for cause, and a public sentiment back of the law that will see it enforced. That is why I emphasize the necessity of strong public sentiment. Coming back to the sectional question, local directories and local advisory boards, representing the various interests of the locality, and sending their representatives to the national council would balance and harmonize sectional interests far better and deal with them far more justly in every way than they are dealt with by private railways. In that way, in Germany, through the discussions of these representative bodies, the counterbalancing influences of these representatives from different parts of the country, the railroad system is kept practically just and reasonable.

Q. Do you think that system of advisory boards would apply to a road 3,000 miles long?—A. Yes; or a hundred thousand.

Q. With the diversity of interests in different places?—A. No trouble about that; the local representative board expresses what its local interests require, and then it sends its representative to the national council, where State and sectional interests would reach a reasonable adjustment, as they do in Congress now, an adjustment in the light of publicity and after full discussion and investigation, instead of adjustment by the arbitrary will of a few railroad men, who decide in reference to their own private profit and not according to the interests of the section involved or of the country as a whole.

Q. Would not this system of civil service, as outlined by you, necessarily involve a system of pensioning?—A. Of old age pensioning?

Q. Yes.—A. Yes. I thoroughly believe in that. Old age insurance is a better name for it.

Q. Are you not doing exactly what Governor Harris asked about—establishing an aristocracy of officeholders?—A. I believe in pensioning or insuring *all* employees in the country, not only on railroads. A man who has worked honestly and industriously during his years of health and power is entitled to a reasonable sustenance in his old age. I see no aristocracy about giving old people the means of comfortable existence any more than it is creating an aristocracy to give little babies a comfortable subsistence.

Q. Is not this whole question of yours a direct creation of a special class of specially favored employees?—A. No, I think not, unless just treatment can be called favor. Public employees are more justly treated as a rule than the employees of private corporations, but they get no more than is fairly due to labor. But even if we waive the objection to the misleading element in the phrase and call them a "favored class," the difference is only temporary. They have come up nearer to the level on which all employees belong, and the rest will follow. Railroad employees will not be any more favored than other employees, provided the progress in other branches of industry keeps pace with the progress in the railroad system. We ought to have public ownership of other monopolies, and cooperative industry in other businesses that are not monopolistic, and if the progress in these other branches keeps pace as it ought to with the development of the railroad system, there would be no privileged class at all. At present I suppose the carriers, the regular employees of the post-office, are in one sense privileged, but that is inseparable from the fact that our civilization does not develop all at once all along the line, and I did not suppose it was an objection to the public post that it treated its employees better than street railway employees are treated, or the workers in our coal mines, or telegraph offices, or sweat shops. I supposed it was one of the strongest arguments in favor of public ownership, that it tends to the elevation of labor, better wages, shorter hours, sick relief, old age pensions, etc. If the creation of this sort of favor is a valid objection to public ownership, the objection applies to the post-office, fire service, police departments of our cities, and State and municipal employment in general.

Q. (By Mr. A. L. HARRIS.) Would there not be danger of this large army of officials banding together and demanding of legislators legislation especially in their favor?—A. Suppose we take 800,000 people. There are over 18,000,000 voters in the country, 16,000,000 or 17,000,000 that exercise their right. Now, can 800,000 people have their way against the majority of the people?—If that 800,000 people wished to accomplish anything that the rest of the people did not want them to accomplish they could not do it. The 800,000 railroad employees, even if a solid unit, could not win against a majority of the people—8,000,000 or 10,000,000 of voters. If they did win, it would be because they had a majority, and if they had a majority with them they ought to win.

Q. (By Mr. LITCHMAN.) Could they not accomplish it if the people were not willing but they were not so well organized?—A. That is simply a question of intelligence. It is not likely the railroad employees would have all the brains. Until the people are intelligent enough to unite to carry out their purposes we do not want—

Q. (Interrupting.) Do we not reach that result in the very examples you have given, where they do not have 800,000 people, yet they do manage?—A. They do it through the immense control of vast property and wealth. They have enormous private profits of their own to spend. How could that be applied to public ownership? You have no such power as that, and under civil-service rules there would be no offices to give. The English telegraph does not enable any officers or band of officers to control anything to speak of.

Q. It seems to me that you do not make clear the application of the theory which you recently had apparently clear as applied to a small undeveloped country, or to a highly developed country that is also small—you do not make that theory clear when applied to a vast extent of territory like our own, with its great diversity of industries and great diversity of thought and application.—A. Yes; but if it is a fact that the public system is a thorough success in New Zealand, under democratic organization, that the people are intelligent and wide-awake enough to look out for it there, then it is simply a question of solving the same sort of a problem under slightly more difficult circumstances on the same principles, on the same lines exactly—a little bigger problem. The same elements, the same principles, publicity, watchfulness, balancing of interests—if the people of each State watch the railroads as New Zealand does, then the business in that locality will go all right, and the representatives of the local organizations will adjust the interstate interests in the National Council.

Q. (By Mr. TOMPKINS.) Did you ever consider the proposition of having the public own the roadbeds and the corporations or individuals do the transportation business in competition, the same as is done by boats on rivers? It is the roadbed that is the monopoly.—A. Yes, I have considered that a little; but it does not appeal to me because it does not eliminate the element of antagonism of interest which I think lies at the bottom of the whole thing, and I do not believe either in the possibility of running the railroads on the principle of competition with good results. Competition means the building up of great cities, and of private individuals, and the system of discrimination would be kept up if private parties owned the business, no matter who owned the roadbed; and I do not believe we could solve the problem in that way in its most vital elements. Moreover, the practical difficulties of the sort of competition you speak of have been found to be insuperable. That was the theory of railway service in the early days, but it was found to be impracticable. Two lines of boats can pass each other on the river, but two companies can not operate trains on the same tracks; so that if two companies are to operate between New York and Washington, each company must have its tracks, and that causes a wasteful duplication, breaks up the business, weakens each company, and neither service is as good as it ought to be, and finally the two companies get tired of fighting and combine, and you lose even competitive rates and have to pay dividends on a double capitalization.

MEANING OF MONOPOLY.

Q. (By Mr. FARQUHAR.) You have used very frequently the word "monopoly," and I think it would be fair to this commission and to your whole address to have an exact definition?—A. I defined it exactly this morning.

Q. Let us have it again.—A. I define monopoly as any advantage which tends to shut out competition, whether it be a franchise, railroad rebate, or other privilege—a vast combination of wealth, the ownership of land, mines, or whatever it may be—any advantage that tends to shut out competition.

Q. Then all your plea is for public ownership of monopoly. Or, otherwise, it is socialized public service.—A. I should not confine my plea for public ownership to monopoly. I think there are cases like public schools and libraries, and fire departments, and so on, where there is no monopoly necessarily, where still the advantages of simplification, and the depth of public interest in the service, and the importance of entire diffusion, bringing the service within reach of the poor as well as the rich, and other considerations are so vital that public ownership is a necessity, without regard to the element of monopoly.

Q. Can you name a railroad in this country that is a monopoly?—A. Yes; every railroad is a monopoly. Every railroad has advantages in regard to its local traffic which tends to shut out competition in regard to that traffic.

Q. How is it with other industries—the carpet trade, the cotton trade, the iron trade? Where is your line of distinction on monopoly coming in there?—A. The same as before. If a concern has a grip on the market that tends to shut out competition, it is to that extent a monopoly.

Q. But you said, competition being eliminated it became a monopoly.—A. No; I said this: any advantage which tends to shut out competition, if it only shuts out a little competition, if it shuts it out partly. There is some competition in every monopoly. A gas plant has to compete with the electric-light plant, or with petroleum. Monopolies, as we ordinarily use the word, are businesses which have great advantages which tend to shut out competition; whereas a man who is manufacturing shoes, for example, in the ordinary way, has no monopoly—anybody with a little capital can go into shoe manufacturing and manufacture on equal terms with such a concern.

Q. But your own advocacy here of municipal ownership, State ownership, national ownership, governmental ownership, creates the greatest monopolies in the country, standing by your own definition.—A. Exactly; but I have no fault to find with public monopoly; the evil lies, not in public monopoly, but in private monopoly, that monopoly which is used for private interest instead of public interest.

Q. (By Mr. LITCHMAN.) The fault is not with monopoly, but private ownership of monopoly?—A. Exactly.

SCOPE OF PUBLIC OWNERSHIP.

Q. Will you suggest what lines of industry you would monopolize under public control, or control in the public interest?—A. I think that is to be decided step by step, going as fast as experience and the sentiment of the people and the evils

of great monopolies justify. Take first those monopolies which the people see ought to be taken, and make experiments step by step.

Q. Have you not in some measure thought that out far enough to give an expression?—A. I believe in the public ownership of the great monopolies, franchises, public utilities, natural monopolies, monopolies of essential services.

Q. Transportation and transmission of intelligence; you include those?—A. Yes; and gas and electric-light works.

Q. How about, for instance, fuel?—A. Well, as far as the commerce in fuel is concerned, I think that the principle of forcing organization of capital into the channels of voluntary cooperation will work, and I am in favor of trying to get capital and labor to organize in voluntary forms of cooperation. I think they have all got to come to cooperation, but I am in favor of trying to get it so far as possible through the channel of federation of voluntary cooperative groups.

Q. How would you apply that in a case like anthracite coal, for instance, where the entire body of coal is already in the control and ownership of capital?—A. The coal industry at its source in the mines is a natural monopoly of the first importance, and I say public ownership of coal mines.

Q. (By Mr. FARQUHAR.) Suppose that you take over the street railroad plants and bring them into municipal ownership, say, costing 3,000,000, how are you going to provide for that amount of money being taken off the tax list?—A. Provide for taxes out of the earnings of the road. I would not take the roads off the tax lists.

Q. Going to make the road earn taxes?—A. Just as it does now. I should not make any change in regard to that.

Q. How will you manage in the case of telephones, where you have probably 5,000 people using telephones in a city where there are 300,000 people, and families and hundreds of people who never use it at all shall have to pay for it under the municipal system?—A. I should not advocate their paying for it any more than they are paying for it now.

Q. Individuals pay for it now?—A. Exactly, and let the individuals pay for it then.

Q. You mean then the city should go into the telephone business?—A. Certainly, but the ones who use the telephone would pay for it, though it would not cost them as much as they pay now.

Q. So then make the political organization the owner of it, and charge rates accordingly; instead of individual or corporation ownership, you want the city to be a corporation?—A. In the case of the telephone I believe that either cooperative ownership or public ownership is perfectly practical, and if the city or town will organize an exchange it can be managed in the same way that public exchanges are managed in many European cities. The city or town may charge an entrance fee to help cover the first cost, and then a reasonable rent per year, which runs from a half to a third of what private companies charge in very many instances, and the system will still pay taxes on its own cost and interest. They can do it without charging any entrance fee, if they want to, by raising the construction money on bonds and paying off the bonds out of earnings. No damage will be done to anyone who does not want telephone service, but experience shows that when the rates are reduced, as they can be under public operation and ownership, to a reasonable figure, that a very great proportion of the people use the telephone, a far greater proportion than under the private system where rates are high. That is one of the greatest advantages of the public system.

Q. Practically, do you think your theories would work well, except with a thing of universal use in a community, like water?—A. Well, yes. There are two replies I should like to make to that. One is that the service, which does not seem universal now, often has that appearance, because it is under private ownership, and the rates are so high that the common people can not afford it. That is the case with the telephone service. The telephone service in European towns and in some of our own, where cooperative systems are operated, is practically a universal service—that is, it is used so largely by the people that it becomes a real public utility. The reason that the telephone is not a public utility in many of our towns is that the rates of the private companies are so high that they are practically prohibited to the masses of the people.

Q. (By Mr. LITCHMAN.) The theory is that there are a great many more letters sent at 2-cent postage than when it was at 25 cents?—A. Yes.

Q. And if there was public ownership in the transmission of intelligence by wire as there is now by post the cheaper service would produce larger use of it?—A. I think so. I think in its nature the communication of intelligence is a public utility, and that it would become practically universal if properly managed.

Q. Is not the success of your theory dependent—I would not say exclusively, but very largely—upon universal intelligence?—A. Certainly; I would state this: I do not believe that democracy in government is practical, except in a high state of civilization. I do not believe that democracy in industry is practical until a slightly higher civilization is reached; but I believe that that higher degree of intelligence has already been reached by our people to a large extent, and that they will attain the full intelligence which will make complete democracy in industry practical just as surely as the high degree of intelligence has been reached which makes political democracy practical.

EFFECT ON CHARACTER, HARMONY, CIVILIZATION.

I guess I will merely state these points in outline. I believe that the public system favors the development of high character and intelligence among the people to a greater extent than the private system, and thereby every step toward public ownership through these effects, and by eliminating conflict and mastery between man and man, developing sympathy, and giving labor fuller opportunities for education and development, tends to secure the very conditions of a further rational and practical advance into the field of public ownership, so the advance of public ownership is the cure of the conditions which make public ownership difficult. It is its own road builder, step by step. It does not come all at once; it is a growth like the life of a youth, each year preparing him for the fuller and more arduous life of the years to come.

Under the public system, therefore, summing up the points I have tried to make, civilization, as a whole, appears to me to be favored as to mobility, as to moral development, as to political purification, as to treatment of employees, as to coordination of industry, as to application of the cooperative principle, as to justice in the administration and making of rates, as to aim and the whole tendency of the system toward a public instead of a private purpose, every test of civilization points to a system of public operation of public utilities as the ideal.

As a consequence of such a system our science of society will become a unified whole instead of a severed system, as it is now. The old political economy is like the old astronomy. The old astronomy thought the world was stationary at the center of the universe, and looked at the stars and sun as things going round the earth; and the old political economy thought that material wealth was the center of all things human. The new astronomy knows that the earth is not the center, and stands off and looks at the world and gets its true relation to the sun and the stars and the moon; and the new economy knows that material wealth is not the real center of human life; it stands off and looks at it and gets its true relations to mind, soul, affections, government, ideals, and human development. The importance of this is apparent when we note that if your government says, "Democracy, power in the people," and your industry says, "Aristocracy, plutocracy, power in the few;" if your jurisprudence says "Justice," and your economy says, "Get rich;" if your ethics and your religion say, "Love, service, devotion," and your economy says, "Self-interest, conquest, mastery," there is civil war in your social science; and we can not have a unified, consistent body of thought and principles until we get rid of these contradictions, and coordinate our political economy, our government, and our jurisprudence with ethics, and make them all one harmonious system under the law of love and service.

(The commission took a recess till 10.45 a. m., January 5, 1901, at which time Mr. Parsons continued his testimony, as follows:)

THE GROWTH OF PUBLIC OWNERSHIP.

The WITNESS. The next point in order in my thought is the growth of public ownership and the development of sentiment in favor of it. I have already spoken to some extent of the development of public ownership of railways and of the fact that the two systems were tried in Belgium and Prussia, and Austria-Hungary, side by side, with results favorable to the public railways. I did not speak of the experience of Australasia. There they started with private systems, as they did also in Prussia, and they had the same experience that private systems were unsatisfactory, and have changed now in all the colonies of Australia and in New Zealand, so that almost the whole system is under public management. The South African Republics have State railroads, the Orange Free State taking the roads over in 1897. Cape Colony owns 2,000 out of 2,350 miles, and Natal owns all. So we find under all sorts of government—monarchical, constitutional, republican, or democratic to the last degree, as in New Zealand—this same tendency of the railroad system to be absorbed by the Government.

When we come to the telegraph and telephone the same thing is apparent. England tried the private telegraph system for over a quarter of a century, and after investigating fully the systems of public telegraph in other countries, decided to make her system public, and has tried that for 30 years with great success and with acknowledged superiority to the former private plan in the same country. With the telephone the French Government tried private concessions first, and finding the private operation unsatisfactory, took the telephones over and made them a public institution. England has followed the same path, making the telephone private first, and now it has taken over the trunk lines and is proceeding to absorb the exchanges. In Australasia—in some of the colonies—the first telephones were private, as in Victoria, and again the private system proved unsatisfactory, and the government decided to make the service public. Those are just a few illustrations from many.

If we look at waterworks and electric-light plants in our own country we find the movement very strong in the direction of public ownership. The number of public electric-light plants in the United States has risen from 1 in 1880 to about 400 now, while public water systems have increased from 1 in 16 in 1800 to 1,690 in 1896, or from about 6 per cent to about 53 per cent of the total. Of the 50 largest cities in the United States, 21 originally built and now own their waterworks, 20 have changed from private to public ownership, only 9 being now dependent on private companies for their supplies, and several of the 9 are considering a change to the public system. Fifty years ago the idea of public ownership of waterworks was vigorously combated and objections urged very similar to those now raised against public ownership of street railways and railroads. But in Massachusetts now 75 per cent of the waterworks are public; in Illinois, 78 per cent; Michigan, 81 per cent; Iowa, 82 per cent; Minnesota, 87 per cent; Nebraska, 88 per cent, etc., and public water supply is quite universally recognized to be the proper thing. Another half century will probably see as great a change in sentiment and practice in the field of transportation.

The street railway movement in Great Britain is one of the most interesting examples. In 1882 there was only 1 municipality—Huddersfield. From 1893 to 1895 4 municipalities took over street railway systems—tramways, as they call them—and from 1896 to 1898 11 municipalities, including Liverpool and 1 line in London, came under public management, and now there are 30 cities in Great Britain owning and operating their tramways. The movement is still very strong, and as fast as the concessions to private companies expire the municipalities are making arrangements to take over the lines, so great has been the success and benefit of public ownership, as proved by actual experience where the two systems have been run side by side in the same country. It is because of the superiority of the public system, proved by such experience, that this movement has grown with such vigor as I have mentioned. There appears to be, in fact, an irresistible sweep of events toward public ownership of municipal monopolies especially. And when we turn to the matter of public sentiment, which I will not dwell upon, but simply call brief attention to, the movement of thought is even more remarkable than the movement of events, promising for the future a continuance in a still more emphatic degree of the change to the public system. I have here a circular, which gives a list of members of the National League for Promoting the Public Ownership of Monopolies,¹ and if you will glance over the

THE N. P. O. LEAGUE, OR NATIONAL LEAGUE FOR PROMOTING THE PUBLIC OWNERSHIP OF MONOPOLIES.

MEMBERSHIP

Dr. Edward Everett Hale, Boston.
 Dr. Charles B. Spahr, New York.
 Dr. John Clark Ridpath *
 Senator Marion Butler, Washington.
 Dr. C. F. Taylor, Philadelphia.
 Hon. S. L. Black, mayor of Columbus, Ohio.
 Dr. W. S. Rainsford, New York.
 Henry D. Lloyd, Chicago.
 William Dean Howells, New York.
 Prof. Frank Parsons, Boston.
 Governor Plingree, Detroit.
 N. O. Nelson, St. Louis.
 Edward Bellamy, a
 Col. Thomas Wentworth Higginson, Cambridge.
 Hon. Henry Truelsen, mayor of Duluth.
 Helen Potter, Boston.
 Ex-Governor Win. Larrabee, Clermont, Iowa.
 Charlotte Perkins Stetson, New York.

William A. Clark, Boston.
 Rev. Herbert N. Casson, Ruskin, Tenn.
 Prof. Vida Scudder, Wellesley.
 President Eltweed Pomeroy, Newark.
 Ex-Governor John P. St. John, Olathe, Kans.
 Hon. Lee Merlweather, St. Louis.
 Prof. Graham Taylor, The Commons, Chicago.
 Mary A. Livermore, Melrose, Mass.
 Jane Addams, Hull House, Chicago.
 Elizabeth Cady Stanton, New York.
 Dr. E. B. Andrews, Chicago.
 Rev. Washington Gladden, Columbus, Ohio.
 Edwin D. Mead, Boston.
 President George A. Gates, Grinnell.
 B. O. Flower, Brookline.
 President Thomas E. Will, Manhattan.
 Hon. S. M. Jones, mayor of Toledo.
 Rev. B. Fay Mills, Boston.

a Deceased since joining the league.

names you will see that many of them carry much weight, such as Dr. Edward Everett Hale; Dr. Charles B. Spahr, New York; Col. Thomas Wentworth Higginson, Cambridge; William Dean Howells, New York; Mary A. Livermore, Melrose, Mass., and so on. Miss Jane Addams has since withdrawn, on account of having so much to do that she did not feel able to give attention to the matter.

Q. (By Mr. PHILLIPS.) What is the address of the league's headquarters?—A. The headquarters is at No. 11 St. James Avenue, Boston; my own address.

The league was organized a few years ago for the purpose of ascertaining, through referendum votes, from time to time, the opinion of leading men on various questions that might arise in respect to public ownership, and of publishing the opinions adopted by a referendum vote. This league has adopted, by referendum vote, a number of statements on the subject, which have been sent out quite widely over the country, and if the commission would like them, I can leave them. I have here a few samples of the work that the league has done.¹

Q. Are they on the specific subject of monopoly, or railroads, or telephone, or telegraph?—A. Some on railroads, some on monopoly. We have no circulars on the telegraph or telephone as yet.

Q. These are bulletins of your league?—A. Yes, some of the bulletins adopted by referendum vote and then issued, and there has been no adverse vote, so far as I recollect, on any of these circulars. One slight qualification from Col. Thomas Wentworth Higginson on one of the bulletins, which qualification was adopted.

I would like to emphasize the important fact of the movement of thought and events toward public ownership in this way. There was a time, not so very remote in history, when the fire service was private. Now it is almost universally public, or very largely so. There was a time when the school system was private. Now it is almost wholly public. There was a time when even the common roads were private, and further back still there was a time when the administration of justice and the matter of defense were private affairs. If a man's rights were infringed, he had to look to himself or the voluntary assistance of his friends for redress. Now all these matters have been made subject to public ownership and operation.

Samuel Gompers, Washington.
Rev. W. D. P. Bliss, Los Angeles.
Hon. George Fred Williams, Boston.
Hon. Herbert Welsh, Philadelphia.
Prof. Helen Campbell, Denver.
President Francis E. Willard, a
Diana Hirschler, Philadelphia.
Governor Rogers, Olympia, Wash.
F. U. Adams, Chicago.
Dr. Anna Shaw, Philadelphia.
Robert A. Woods, Boston.

Prof. J. Allen Smith, Seattle.
Prof. John R. Commons, Syracuse.
Prof. George D. Herron, Grinnell.
Marion M. Miller, New York.
Hon. T. S. McMurray, mayor of Denver.
Hon. John Breidenbuhl, Topeka.
John DeWitt Warner, New York.
Hon. John MacVicar, mayor of Des Moines.
Dr. Geo. C. Lorimer, Boston.
Rev. Russell H. Conwell, Philadelphia.
Rev. Chas. M. Sheldon, Topeka.

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President.
Prof. Frank Parsons, Boston.
Vice-presidents.
Dr. Edward Everett Hale, Boston.
Rev. B. Fay Mills, Boston.
Governor Pingree, Detroit.
William Dean Howells, New York.
Senator Marion Butler, Washington.
Hon. Herbert Welsh, Philadelphia.
Prof. John R. Commons, Syracuse.
Dr. W. I. Rainsford, New York.
Prof. George D. Herron, Grinnell.
Samuel Gompers, Washington.
Rev. Washington Gladden, Columbus.
Prof. J. Allen Smith, Seattle.
Dr. E. B. Andrews, Chicago.
Rev. Russell H. Conwell, Philadelphia.
Executive council:
Dr. Charles B. Spahr, New York.

Executive council—Continued.
Hon. George Fred Williams, Boston.
President Thomas E. Will, Manhattan.
Henry D. Lloyd, Chicago.
Dr. C. F. Taylor, Philadelphia.
B. O. Flower, Boston.
President George A. Gutes, Grinnell.
Distributing secretaries:
N. O. Nelson, St. Louis.
Hon. John Breidenbuhl, Topeka.
Prof. Graham Taylor, Chicago.
Hon. S. M. Jones, mayor of Toledo.
Win A. Clark, Lincoln House, Boston.
Marion M. Miller, New York.
Diana Hirschler, Philadelphia.
Prof. Helen Campbell, Denver.
Rev. W. D. P. Bliss, Los Angeles.
Registrar.
Miss Helen Potter, Boston.

¹ The subjects and names of writers of the bulletins above submitted are as follows:

Good Government v. Private Franchises: by Hon. John MacVicar, mayor of Des Moines and ex-president of the League of American Municipalities.
The Railroads of Switzerland: by Prof. Frank Parsons.
Municipal Ownership: by Hon. S. M. Jones, mayor of Toledo.
Dr. Albert Shaw on the Benefits of Municipal Ownership.
The Wisdom of Glasgow: by Prof. Frank Parsons.

a Deceased since joining the league.

If the principle of public ownership and operation of public utilities is a right principle, then it seems to me we should carry it wherever the reasons apply—wherever the reasons which have caused the growth of public ownership apply to new fields of enterprise. And vice versa, if the principle is not a right one as applied to monopolies and utilities like railroads and telegraphs, telephones, street railways, and so on, then consistency would compel us to go back to primitive times and give the courts and armies and navies over to private syndicates and schools to private combines, and so on. I see no escape from the logic of the past, no escape from the adoption of public ownership in other fields which are similar to those already covered by that system and to which the same reasons apply, the essentials being the vital interest of the public, the importance of diffusion—bringing the service within the reach of all the people, the element of monopoly causing great abuses in private hands when linked with large power—and the necessity for simplification, coordination, unity, and broad cooperation throughout the industrial activities of society—all this being continually held subordinate to the fundamental purpose of the development of mind and character and social institutions to the highest forms conceivable, in which conflict and antagonism shall be so far as possible eliminated, and harmony and mutual service, cooperation for the benefit of all concerned, shall be the dominant ideal and the realized fact.

Before passing to objections, I would like to introduce as part of my testimony an analytic summary of the railroad question.

SUMMARY.

Stating briefly the difficulties with private railways already spoken of and some others not yet mentioned, and placing in a parallel column the advantages of national ownership of railways, we have the following summary:

Difficulties with private railways.

1. Wrong aim: Private profit in place of the public good, dollars and cents instead of social service, dividends for a few instead of benefit for all, mastery and money instead of partnership and manhood.
2. Antagonism of interest between the owners and the public.
3. Lack of due coordination or else a consolidation too vast and powerful to be safe in private hands; a giant monopoly overriding and defying the regulative power of government.
4. An economic waste of hundreds of millions a year.
5. Watered stock and inflated capital, about half the capitalization of our railroads being fictitious, according to Poor and other high authorities.
6. No effort to free transportation from capital charges by the progressive cancellation of bonded or other indebtedness, but, on the contrary, a progressive piling up of capital without even the writing off of depreciation. As to the stock capital, a private road could not be expected to clear that off, since the owners can not be expected to give the road to the public as a present.
7. Higher charges than need be; an effort to obtain all the traffic will bear.

Advantages of public railways.

1. True aim: Service and the public interest first; financial gain subordinate to justice and social welfare.
2. Harmony of interest by making the owners and the public one and the same.
3. Full coordination with entire safety to the public, because the combination belongs to the public, and, with a few simple safeguards, is easily held to the public interest.
4. An economic saving of hundreds of millions a year.
5. No inflation of capital, but, on the contrary, an effort to get rid of the wind and water in the capital of purchased lines.
6. The progressive cancellation of the whole capital, so that transportation may be freed from the burden of interest and dividend charges.
7. Lower charges than private roads can make under the same conditions, and a definite policy of reducing rates as one of the leading objects of the administration.
8. Steady and uniform rates favoring honest provision and cutting the ground from under speculation.

8. Fluctuating and chaotic rates favoring speculation, but throwing honest provision off its hinges.

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9. Unjust discrimination between persons, places, and industries. Free passes, secret rebates, differential preferences, etc.

10. Excessive reduction of rates at competitive points and overcharges on local traffic, to the injury of country districts and the overrapid growth of the cities.

11. No effort to relieve the pressure in the tenement districts of the great cities.

12. Defiance of law when it interferes with powerful railroad interests.

13. Purchase of legislation when practicable and useful to railroad interests.

14. Building and sustaining other monopolies and trusts, by privileges that enable them to control the markets.

15. Creating millionaires and disturbing the fair distribution of wealth.

16. A cause, at times, of industrial disturbance and depression and even panic.

17. Gambling in railway stocks and manipulation of their value by seesawing traffic, withholding dividends, or paying unearned profits, etc.

18. Exorbitant salaries for managers, with long hours, low wages, black listing, and other unfair treatment for ordinary employees, and disturbance of industry by periodic strikes.

19. Insufficient regard to safety of employees, passengers, and the public.

20. Imperfect coordination with the military department in time of war.

21. Injury to political honesty and good government through railway lobbies and the corrupting pressure of enormous private interests.

22. Great opportunity for success by fraud and indirection. (Read *Wealth against the Commonwealth*.)

23. Moral debasement of business men and degradation of the ideals of youth, through the spectacle of enormous wealth and power secured by railway rebates, manipulations of stock, fraudulent issues, and dishonest political action under railway pressure.

24. The payment of public moneys and gift of public lands to build railroads to be owned by private corporations and managed for their profit. The land and money, for instance, bestowed on the Illinois Central was enough to build and equip the whole road and give the company a bonus of \$2,000,000 besides.

9. Fair and impartial treatment of individuals; no secret rebates, passes only to those who render an equivalent in public service; equal rights to places and industries under the broad principles of the zone tariff or other equitable system.

10. Due concessions to through traffic, but earnest attention also to the reduction of local rates to give the small towns and rural districts their fair share of the advantages of cheap transportation.

11. A wise use of the roads to relieve the pressure of population and secure a healthful distribution of the people.

12. Conformity to law; the railroads and the lawmaking power being in the same hands.

13. No motive or power in public roads to purchase legislation.

14. An important means of controlling the organization of capital, by refusing transportation to objectionable combines, instead of giving them secret rebates.

15. A powerful means of securing a better diffusion of wealth.

16. A means of regulating industry, relieving depression, and avoiding panic.

17. Removal of railway-stock gambling and manipulation.

18. Moderate salaries for managers, and altogether better treatment of ordinary employees, higher wages, shorter hours, more good homes, better citizenship, more contented and efficient labor, no strikes.

19. Better provision for the safety of employees, passengers, and the public.

20. An added source of strength in time of war.

21. Removal of one of the greatest sources of political corruption without incurring new danger if reasonable precautions are taken in respect to civil-service rules and nonpartisan management.

22. No opportunities for private fortune by fraud if a proper system of accounting and auditing is established. (Read the *History of State Railroads*.)

23. Removal of one prolific and all-pervading influence tending to moral debasement and low ideals.

24. When public money and land is devoted to building a public road the road belongs to the people who pay for it and the profits go into the public treasury.

25. Public administration of railways means the retention of sovereign power in the hands of the Government, where it belongs; the "public control of public highways;" the public performance of a "public function;" the due enforcement of the tariff; the national regulation of commerce; an added justice, peace, and safety to industry, and an escape from one form of taxation without representation.

25. Private railways mean sovereign power in private hands—not only the sovereign power of modifying or nullifying the tariffs on imports, but the sovereign power to regulate commerce between our cities and States, to determine the distribution of wealth, the success or failure of individuals, the growth of cities, the development of the country, the life or death of industries, the power to tax the people without representation and for private purposes.

OBJECTIONS.

Now for the objections: First, the matter of patronage was spoken of yesterday, but there is one point more I would like to make. The transfer of great industries to public operation does undoubtedly increase the temptations to abuse of patronage. At the same time it creates in a still greater degree, I think, a powerful force opposed to that abuse. Under the private system the financial interests of the wealthy and influential classes are very largely opposed to good government, and it is this opposition of the financial interests of the wealthy classes (the owners of these monopolies) to honest government that is responsible for a large part of the corrupt legislation and bad administration that afflict our politics to-day. As Mayor Swift, of Chicago, said in speaking to an audience of business men. "Who is it that is corrupting the council? It is you business men. It is not the saloons or the slums of the city, the riff-raff or the hoodlums, it is you business men who are responsible for the corruption of councils." Now, the transfer of the great utilities to public ownership changes the financial interest of the wealthy, the great owners of property on this matter, so that it becomes their interest in common with the rest of the people that the Government controlling these great industries should be honestly and fairly administered. They no longer have a financial interest in the abuse of legislation or the abuse of governmental power of any kind. Their interest is strongly opposed to abuse of patronage. Their interest is wholly for good administration, for pure government in every way, or low cost and first-class service, and their interest is usually the controlling factor in the Government. So that the transfer of the great monopolies to public ownership means the transfer of a controlling influence in political affairs from the side of dishonest government to the side of honest government.

EFFICIENCY.

The objection is made that public management is not efficient, and I think the objection is made with great force in many cases. At the same time a review of public ownership in practice, both in the railroad, telegraph, telephone, street railways, etc., in other countries and in the electric-light systems in this country and the waterworks, indicates that the question of efficiency is rather a matter controlled by individual factors and the condition of society than by the form of ownership. Private industries as well as public are less efficient in Germany—that is, it takes more labor to yield a given product: a bricklayer lays fewer bricks in a day than our bricklayers do, and so the same thing occurs there in private industry that occurs in the railroads and the telegraphs where they have to have more employees for a given amount of work.

Again, part of the difference in the product per worker is not really a difference in efficiency, but arises from the fact that public systems give their employees shorter hours. That is true in the contrast between our railroad system and the German. The hours are very much shorter for large classes of employees in the German system than they are here. The same contrast exists between the English telegraph and our telegraph, their hours are very much shorter.

Then there is another difference. They regard safety as of such high importance in Germany that they increase the force of employees upon the roads in order to secure greater safety. These elements must be taken into account when considering the difference in the number of employees, which is greater per ton handled over there and per passenger than it is here. I do not feel able to draw any precise conclusion on the subject, I only indicate the elements.

ECONOMY.

Now, as to economy, which is a very important matter, two points are made. First, it is affirmed that rates are lower under private ownership than under public, our average freight rate being cited as an example; and secondly, it is said that absolute economy, absolute cost, is lower under private ownership.

I have already covered these points with sufficient fullness, perhaps, but I would like to emphasize a few illustrations of the principles that I dealt with yesterday. Take for example the Austria-Hungarian system of railways. The Government there introduced a tariff at one stroke that on long distances was 80 per cent below the former rates and on median distances about 40 per cent below—a reduction that astonished the railroad men of the world—and yet it has been a very great success and has justified itself not only in its social results, vast increase of traffic, and all civilizing influences, but it has also justified itself financially, the expenses not increasing materially—nothing like in proportion to the increase in business—and the net earnings being larger than they were under the high rates.

The English telegraph reduced rates at once one-third to one-half on taking over the lines, and subsequently made a further reduction amounting to one-half, down to the present time. So that about four times as much telegraph service can be bought for a dollar as could be bought when the lines were taken over, while in this country not over twice as much. There is a conflict in the reports of the Western Union Company. In their earlier reports they stated the average cost and average receipts for the earlier years lower than the more recent reports state the cost and receipts for the same years, so it is a little difficult to tell which account is right. But taking their highest figures, there is no such reduction here as there has been in Great Britain.

THE TELEPHONE.

I have already stated the facts regarding the reduction of telephone rates in France when the Government took the lines.

I took pains last night to get a few facts in regard to the Washington telephone system. I called up "Central" and got the exchange rates here and the rates for long-distance work; and the rates here in Washington, they say, are \$96 for residence, unlimited service, \$48 for four party, unlimited, and \$36 for four party, measured. For a business 'phone, \$120, recently reduced from \$135. They declare that they would lose money on a residence rate of \$36. The fact is, however, that the cost of operating a telephone in this country is not very much greater than it is in foreign countries, because, while wages in general are higher here, telephone wages are very little, if any, higher. Telephone girls receive abominably low wages, and the contrast is very slight there, while materials cost more in Europe than here, good Swedish telephones costing \$14 to \$16, while the best American instruments can be bought for \$8 or \$9.

Now, here is Stockholm, with a population of 290,000 (about the same size as Washington), which has metallic circuit, underground wires, unlimited service, \$16 for residence and \$22 for business, interurban communication free within a radius of 43 miles, telephoning telegrams and telephoning messages to be written down and delivered by messenger at low cost. The Bell Company, bought out by the Government, was charging \$44 for far inferior service, without metallic circuit or underground wires.

A United States Government department here in Washington—the Department of the Interior—a few years ago (1894) were paying a total of \$75 per 'phone. They paid the Bell Company \$80 to \$125 per 'phone and employed a lady at \$600 a year to operate the main exchange, making a total cost of \$75 per year for each of the 65 'phones. The Department asked the Bell to reduce rates and the Bell refused. They then put in their own 'phones, and they gave me the figures from the books of the Department, showing that the cost per year was \$6.43 operating cost and \$10.25 total cost, including interest, depreciation, and repairs—about \$10 for what used to cost \$75 under the Bell régime—the cost under private ownership being sevenfold more than under public ownership.

Q. (By Mr. PHILLIPS.) That is here in this city?—A. Yes; that is right here. Among the most interesting facts that I have on the telephone are those relating to Trondhjem, a city of 30,000 inhabitants in Norway. There they have a municipal telephone system which gives rates of \$16 for business and \$8 for residence, in round numbers, and they make a profit, a fair profit, upon the capital invested. The wages, however, are slightly lower than they are in this country, but not very much. In Grand Rapids, Wis., there is a cooperative telephone—

Q. (By Mr. CLARKE, interrupting.) You mean Wisconsin or Michigan?—A. Wisconsin. There is a cooperative telephone there which operates on the same principles as the public system, namely, for the benefit of all who are concerned in the service—and wherever the voluntary cooperative plan is possible, I believe it is preferable even to the public system in the present state of our civilization, so that I regard this example as one of the finest that we have. I have kept track of the enterprise for several years. Here is a letter just received a week or so ago. The present condition of things, in brief, is this: They have about 800 lines; the average cost is \$43 construction; the cost of maintenance and operation is about 75 cents a month for each line. The prima facie charges are \$1 a month for a residence and \$2.25 for a business telephone per month. Each subscriber has a right to take 1 share of stock and is urged to do so, \$50 per share, and nearly all, over four-fifths, do take one share each. One and one-half per cent dividends per month are paid back upon these shares, amounting to 75 cents for each shareholder. So that the actual charge for a residence phone is 25 cents a month and the actual charge for a business phone is \$1.50 a month. The actual cost to the subscriber is \$3 a year for a residence phone and \$18 a year for a business phone. They are continually reducing their rates, and even after paying these dividends they have a surplus fund for improvements. The former Bell Company was charging \$36 a year for a residence phone and \$48 for a business phone, and refused to reduce their rates. They said, just as they say now in Washington, that they could not afford to reduce rates. Yet the people of Grand Rapids are now receiving telephone service at one-third to one-twelfth of the former monopoly rates.

Now, as to distance charges. Philadelphia is 137 miles from Washington. The charge, the day charge, is \$1.25—and I would say that in this country and also in France and several of the other European countries they have half rates at night; I will simply compare the day rates. To Philadelphia, 137 miles, day rate \$1.25, 5 minutes. In England the rate would be 48 cents, in France 30 cents, according to their published tariffs. They have a distance rate in France of 10 cents for 82 miles and in England 6 cents (3 pence) for the first 20 miles—any town within 20 miles—and 12 cents (or 6 pence) for towns within 40 miles, and 12 cents for each 40 miles afterwards. New York is 228 miles from here, and the charge is \$2. In England it would be 72 cents and in France 40. Boston is 417 miles away, so the railroad folks say—I have taken the miles from the railroads and the prices from the telephone—the telephone rate is \$4. In England it would be \$1.30 and in France 70 cents. Chicago, 716 miles; the rate is \$4.25, England \$2.16, France \$1.20. Richmond is 116 miles away; our rate is 75 cents, England 30 cents, France 20 cents. New Orleans is 1,116 miles; our rate is \$6.35, England \$3.16, France \$1.90. We have here three tariffs, all made on the distance plan, the American being a private system and the English and French public systems. The English distance tariff is from one-half to one-third of ours and the French from one-third to one-sixth of ours. I have tested that with many more data than these. I simply give these as illustrations that are applicable right here in Washington. In Boston you must pay 10 cents to send your breath a few blocks over a telephone wire, while the street railway will carry your whole body all over the city for a nickel, and even that is known to be nearly double the reasonable fare. In the State systems of Europe the charge for a local telephone conversation to a nonsubscriber is from 2 to 5 cents, as against a charge of 10 to 15 cents in many of our cities.

The service of the telephone in other countries where the system is public is far superior in its coordination with the post-office and telegraph. You can telephone letters; you can telephone messages to be written down and sent by messenger just as telegraph messages would be; you can telephone telegrams without going out of your house. To a very slight extent, I found in Philadelphia and other cities, you can get service for telephoning telegrams, but it is only by special arrangement, the ordinary telegraph rules in our cities being against the receipt of telegrams by telephone. The telegraph company does not want to make telephoning too interesting, and they prefer to have the message in the sender's writing, so they refrain from making such agreements very accessible. No such coordination of services can be expected between two private corporations like our telegraph and telephone companies, as occurs where both services are public property under a single management.

Q. (By Mr. FARQUHAR.) Can you give a comparison of what the Washington companies here could afford to furnish this telephone service at?—A. The matter has been quite carefully investigated by expert engineers in New York, Chicago, and Boston. I am personally acquainted with one of the men, who is president

of a company that is putting a large amount of capital into a telephone concern in and around Boston—Mr. Holbrook, of the Bibliotheca Sacra, a very fine man and thoroughly acquainted with all the details of this work. They find they can construct the lines for \$40 or \$50 in small places and \$100 to \$150 in large cities, with underground work—an average cost of about \$60 to \$80, or—

Q. (By Mr. PHILLIPS, interrupting.) Eighty dollars per mile?—A. No; for the average cost of line to each subscriber; some will be long and some short. You see that is a little higher than the Grand Rapids; their cost was \$42. They can operate the telephone so as to be able to furnish service even in a large city at about \$30 a year. Offers have been made in Chicago, if they could get a franchise, to supply telephone service for \$30. A similar offer has been made in New York. And in and around Boston Mr. Holbrook's Massachusetts Telephone Company is putting in 'phones and operating them on the basis of \$3 a hundred calls or \$12 to \$36 for an ordinary residence subscriber, up to \$72 for unlimited business service, with underground wires in the heart of a giant city—rates that will work out an average considerably below \$50, since the New England Bell rates, which are about double the Holbrook rates, work out to an average of \$58 per 'phone. Mr. Holbrook's data indicate that Bell monopoly rates are more than double what the system can be operated for either in the towns or in the large cities, even considering the fact that the larger the city, other things being equal, the higher must be the rate for the telephone—exactly the opposite principle that applies to most services. The more dense the business in the case of the electric light the lower should be the charge, other things equal; but the more dense the business in a telephone exchange the higher must be the charge, other things being equal, because more complicated arrangements must be made to connect the different subscribers. That is, if you have 10,000 subscribers, each one may call for communication with any one of nearly 10,000 others; whereas if you have only 1,000 subscribers, each one is limited in his calls to 999; so it is more complex and more costly with a large system. In small places an average charge of \$8 to \$12 or \$15 a year, according to conditions of the locality, is sufficient, and those charges are actually in successful operation in various parts of the country. There is a small telephone system, private system, in Kansas which operates and makes a profit of 10 or 12 per cent on the capital, and their rates only average about \$12 or \$15 per year on their phones. The fair cost of maintenance and operation runs from \$9 to \$12 per 'phone in an exchange of moderate size, and double that in a big city.

Q. (By Mr. FARQUHAR.) Would the matter of the Washington prices here be in some way modified on account of the fact that all of our telephone wires are underground, but if they were put overhead—A. (Interrupting.) In Stockholm also the wires are underground.

Q. So that the extra cost of the installation underground does not make a greater cost there for the use of the 'phone?—A. It adds something to the first cost, but the system needs less repairs, and in the end the result is not very different.

I might mention one or two facts as to the service in the public systems. In Belgium you can send your telegrams free; in France you can also send telegrams free. In England also you can send telegrams free over the telephone, and you can also telephone messages to be sent out for 6 cents in England, and such messages are sent to the subscriber free. In Germany it costs 2 cents plus one-fifth of a cent for each word to telephone a message, telephone a telegram, or telephone a letter. You go to your telephone and send a letter for 2 cents and one-fifth of a cent for each word, and the clerk at the other end writes it down and posts the letter; you have to pay postage in addition.

Q. (By Mr. PHILLIPS.) Now, it may not be quite clear about telephoning a message. What do you mean by telephoning a message?—A. Suppose I want to send a message to someone. I do not have a telegraph office in my house, but I have a telephone. I will go to my phone and telephone whatever message I want to send. Instead of having to go out to a telegraph office and write it, I simply go to a telephone and telephone to the clerk at the other end that message; he takes it down and sends it by messenger to the person to whom it is addressed, or he sends it to a telegraph office and it is sent by telegraph, or he telephones it to the telegraph office directly, or I can be connected directly with the telegraph office and they write it down there and send it at once.

Q. (By Mr. FARQUHAR.) Would it be possible in this city, Professor, to furnish a phone, house or business, say for \$30 or \$35, unlimited?—A. I think so; yes. One of the reasons why the Bell companies think they can not furnish service at such rates is the state of their capitalization. The water in their system is hard

to deal with. Dropsy is an inconvenient affliction for a company as well as for a man. For example, the New England Telephone Company (operating in Boston and other cities and towns of Massachusetts and New England) is capitalized at more than \$300 a line, whereas President Holbrook finds that the system could be duplicated for less than \$100 a line—there is an excess charge of \$10 or \$12 per phone year. Then the "general expenses," salaries of managers and officers, and other office and general expenses amount to a sum almost as great as the whole sum put down to "operating expenses" proper. For each subscriber's station in the New England Company, the average receipts are \$58 per phone year. At least \$10 must be deducted on account of overcapitalization, and \$5 or \$6 more on account of excessive office charges. The "operating expenses" proper are stated at about \$11 per station and maintenance at \$24. The report does not state just what items go to make up this maintenance account, and it is so out of proportion to the cost of maintenance in public systems as to indicate that it is affected by the common corporation custom of charging up to maintenance large amounts that ought to go into the extension and improvement account. A maintenance charge that would duplicate the entire system in about 4 years is certainly very high. The probabilities are that an allowance of \$11 for average operating expenses per phone year, \$4 for general expenses, \$15 for maintenance, including depreciation, and \$5 for interest, making a total of \$35 per year, constitute sufficient charges even in a very large city.

I am aware that in *Manning v. Chesapeake and Potomac Telephone Company* (28 Wash. Law Rep., 97) the supreme court of the District of Columbia has held unconstitutional an act of Congress fixing maximum telephone charges in Washington at \$50 a year with 1 telephone on a wire, \$40 with 2 telephones on a wire, \$30 with 3 telephones on a wire, and \$25 with 4 or more on the same wire (30 Stat. L., 537, 538, chap. 540, June 30, 1898), but a careful reading discloses sufficient evidence on the face of the opinion to invalidate the decision when the case comes before the court of last resort, the supreme court of public opinion. The ground of decision was that the rates fixed by Congress were unreasonably low, the evidence being the testimony and accounts of the Chesapeake and Potomac Telephone Company, doing business in Washington. In 1898 the company had a little over 2,000 telephones in use. It had been receiving \$135 for a business phone, and had averaged \$100 income for every phone in use. It was estimated that the new law would reduce the average receipts to \$47 per phone. The company was paying about \$20 per phone in interest and dividends, and \$8.50 per phone to the Bell Telephone Company and the Western Electric for receivers and transmitters used by subscribers, drops on the switchboard in the central office, and the use of patents the Bell Company may hereafter acquire. It claimed an average annual working expense of \$71.20 per phone. The capitalization was \$470 per phone (\$100 bonds and \$370 stock).

Now let us look at these items in the light of other facts stated in the opinion. The actual value of the plant was found to be \$441,436 as against \$950,000 capitalization, or less than \$220 real capital per phone, instead of the \$470 of existing stock and bonds, making the fair capital charge not over \$10 per phone, instead of \$20. But, further, a very large part of the \$220 was due to the fact that the plant was not used anywhere near up to its capacity, and this in turn was probably due to the high rates maintained by the company. A large part of the capital outlay was for underground construction, putting in vitrified terra cotta ducts under asphalt pavements. The court said that "the cost of additional ducts to provide for future growth of business is very trifling, and it is in evidence that some 3,000 or 4,000 subscribers could be served by cables to be drawn in the vacant ducts now maintained;" that is, the business could be doubled or trebled without more ducts, and even further increase could be provided for at trifling expense. If the rates enacted by Congress had been put in operation, the subscription lists would doubtless have expanded greatly, and it is quite probable that the real capital per phone would have been speedily reduced to the neighborhood of \$100, or \$150 at most, in spite of the fact that Washington is a "city of magnificent distances." I know the judge doubted any substantial increase of subscribers through lower rates, but the facts prove that the doubt was not well based. The following table presents a few of the facts bearing on the relation between rates and the use of the telephone:

	Relative size.	Rates.	Number of persons to 1 telephone.
Washington (1896)	1	\$36 to \$135; \$100 average.	120
Stockholm ¹	1	\$20 average	28
Christiania ¹	$\frac{1}{2}$	\$22 average	30
Trondhjem ¹	$\frac{1}{2}$	\$18 average	38
Berne ¹	$\frac{1}{2}$	\$10 upward	40
Zurich ¹	$\frac{1}{2}$	\$10 upward	50
Berlin ¹	7	\$36	60
Copenhagen	$1\frac{1}{2}$	\$41	70
Amsterdam	2	\$50 to \$100	150
Paris ¹	10	\$75	170
Greater London	22	\$100	700
Greater Boston	4	\$25 to \$150	60
Greater New York	13	\$90 to \$240	120
Chicago	6	\$60 to \$175	180
Philadelphia	5	\$60 to \$250	170

¹ These cities have public systems, the others have private plants. The American figures relate to 1897 and 1898, the year of the Washington discussion. The European figures are a little earlier and therefore probably less favorable to them, as the use of the telephone grows each year. In the column of size, Washington has been taken as the unit and the other cities classed according to their relative size as compared with Washington; Zurich, half the size of Washington; Copenhagen, one and a third times as large as Washington; Philadelphia five times as large, etc.

The evidence is that low charges, whether in cities larger or smaller or the same size as Washington, induce far larger use of the telephone than exists in Washington, such larger use being found as an accompaniment of low rates in cities of vastly less general intelligence and prosperity than Washington, and in cities having private plants as well as those having public systems; whereas in foreign cities, like Amsterdam, Paris, and London, having high charges (though only one as high as Washington) show a lower use of the telephone than Washington, and the same is true of American Bell cities, excepting Boston, which, being the hub not only of the universe but of the telephone business, and a city of great prosperity and unsurpassed intelligence, naturally breaks the record.

In Rochester, N. Y., a city of 163,000 people, or about three-fifths the size of Washington, there is an independent telephone company with rates of \$30 and \$48, on which 8 per cent dividends are made on a large body of stock, all of which is water, as the bonds more than cover the value of the plant. With these rates, which are still too high, there is one subscriber in Rochester to each 40 persons, showing that with anything approaching reasonable rates our people become large users of the telephone.

Upon the facts here stated and the whole body of existing telephone data, there is the strongest reason to believe that lowering the rates to the Congressional level of \$25 to \$50 would very largely increase the number of subscribers, probably doubling the use of the telephone, and perhaps trebling it within 2 or 3 years. The judge said that the court must take "care not to intrench upon the authority of the law-making power, not to disregard the statute under consideration, unless it be *unmistakably* repugnant to the fundamental law." Yet the court refused to consider the case on the basis of the probable increase of business and decided it upon facts relating to the preceding years under high rates. Suppose the law in Hungary establishing the zone system, reducing rates 40 to 80 per cent, had applied to a private system of railways instead of a public system, and the railroads had brought the matter into court, claiming that the law confiscated their property, saying that since they had only been making ordinary interest on their capital at the old rates, they would surely make a loss on the new tariff averaging less than half the old one. The companies would have made out their case on the basis of existing rates and business, and the law would have been declared unconstitutional on the principle of this Washington decision, and yet the law was so far from being *unmistakably* repugnant to the fundamental law against confiscation that the actual result of putting the law in operation was an increase of net earnings instead of a loss, as had been expected. It is not possible to foresee the effect of such a lowering of rates either in the railroad or the telephone field, wherefore the court can not know that such a law as that relating to the Washington telephone is "*unmistakably*" repugnant to the Constitution. The true plan in such a case is to enforce the law for a reasonable time, until it becomes clear that the effect of the law is to deprive the company of a reasonable return—clear as a matter of fact and not as a matter of supposition or inference from

more or less irrelevant data. Then the law may rightly be declared unconstitutional, and the company should have the right to collect from the Government whatever damages have been inflicted upon it by the said enforcement, but if upon fair and honest trial the law justifies itself, it should be continued in force.

In the Wellman case (143 U. S., 839) the Supreme Court of the United States clearly recognized the principle that the increase of business from lowered rates must be taken into account, and made this principle one ground for refusing to hold void a railway law of Michigan fixing maximum passenger rates at 2 cents a mile. In Indiana a statute fixing the rent of a telephone at not over \$3 a month, or \$36 a year, has been held valid, although the company in suit was charging \$11.16 a month, or \$134 a year, and claimed it was only making reasonable profits and could not manage on \$36 a year.

To return to the Washington items. It is probable that the enforcement of the Congressional rates would double or treble the business and bring the real capital per phone down to \$100 or near it, thereby reducing capital charges from \$20 to \$5 or \$6 per phone.

The \$8.50 monopoly tribute to the Bell and Western Electric is almost wholly an unjustifiable charge under an agreement made years ago under pressure of the fact that the Washington company, like those in most other American cities, are really subsidiary Bell interests, or branches of one big monopoly.

The claim of \$71 per phone for working expenses is absurd in my judgment. Compare it with the working expenses of \$6.43 reported in this same city of Washington for the telephones of the widely scattered buildings connected with the Interior Department's exchange above mentioned, and the difference makes the \$71 claim incredible. Remember that this same private telephone interest which now claims it can not reduce rates because its \$100 of average receipts is only just enough to cover cost of working and capital charges made a similar claim when the Department of the Interior asked for reduction 6 years ago, and yet when the Government put in its own phones the service cost only \$10.25 for maintenance, operating cost, depreciation, and interest, in place of \$75 per phone formerly paid. The claim of the company in 1894 that it could not reduce its charges of \$60 to \$125 for these phones has been conclusively proved erroneous, and there can be no doubt in the mind of anyone familiar with telephone data that its present claim is also erroneous. In Grand Rapids, Wis., as I have said, the Bell interest was charging \$36 to \$48, and claimed it could not reduce rates, and yet the people are now actually obtaining equally good service for \$3 a year residence and \$18 for a business place, and a small surplus realized even at these rates. Bell estimates are clearly unreliable. Considering the length of time the Bell companies have been in operation, they seem to know remarkably little about the business when it comes to reducing rates.

With the fine underground system established in Washington repairs and maintenance should cost comparatively little, and the operating expenses are not very heavy. All lines go to the central station, where one operator manages 100 lines, and the public stations in hotels, etc., are managed on the nickel or dime in the slot machine plan instead of having paid attendants as in Boston and many other cities. The \$71 I believe to be more than double the fair figure for working expenses. Companies have many ways of adjusting their accounts so as to show large expenses and small profits. It is a common thing to charge the cost of extensions and repairs to maintenance and operation. Sometimes quite ethereal expenses are put down in the material column. For example, last year in examining the accounts of the Boston gas companies an item of "\$15,000 for gas mains" was found to cover such expenses as \$1,200 to Mr. L, \$1,500 to Mr. M, etc.—L and M being gas lobbyists at the statehouse. This year it is stated on the authority of one of the directors of another gas company that \$1,000,000 is charged on the books of that company to an account that did not receive a dollar of the money, which was abstracted and used for illegitimate purposes. Corporation accounts are very unreliable affairs. And this Chesapeake and Potomac Company has had, without any unlawful abstraction of money, special opportunities of erroneous accounting as to the capitalization and expenses in Washington. These special facilities arise from the fact that Washington is only part of the territory occupied by the company, the stock for its whole territory being \$2,650,000, and for Washington alone \$750,000. A small percentage of error in apportioning expenditures as between Washington and the outside territory of the company might make a considerable difference in the Washington results.

I believe the Manning decision was a judicial blockade of a just law. There was no reliable evidence that the Congressional rates were too low, while, as the court admitted, there was evidence "that in many cities in this country, and also in Europe, telephone service is supplied by the government or by corporations at

rates which appear to be less than those fixed by this act," and there is a vast amount of evidence not referred to in the case which tends to show the unreliability of the company's claims and the fairness of the law. Nevertheless, in view of the well-known power of giant corporations to tangle a court with ex parte statistics, and claim protection against possible loss, it seems to me it would be wise to provide in such acts that the law shall be enforced for a year or two under a guaranty that the Government would make good any deficit resulting from the legislative rates causing the income to fall below working expenses and fair capital charges, providing such deficit occurs in spite of reasonable efforts to make the new rates successful, and is ascertained upon accounts carefully watched day by day by a public officer with full powers of inspection, both of the accounts and the manner of conducting business. In some way the public must take the risk of such changes for the benefit of the public, or else the courts will stand between the corporations and the law. For while the judges say that the law must be unmistakably contrary to the Constitution to be void, they frequently act on the principle that it will be void if the companies can make it appear doubtful whether the new rates will yield a profit. Through some such modification as I have just suggested, or by frequent small reductions, the regulative power may make itself felt; but the only clear, clean, certain, and complete solution is public ownership.

After making this statement regarding the Manning case, I submitted to President Holbrook, of the Massachusetts Telephone Company, the question of the credibility of the \$71 charge for working expenses under Washington conditions. His reply was that the said claim was not only absurd but pathetic, and not only pathetic but humorous: pathetic that a claim nearly three times the reasonable figure should be made, and humorous that men in authority could be made to believe such a claim. With underground wires in a plant like that of Washington, the fair charge for maintenance and operation would be about \$25, according to President Holbrook. In Montreal, a city about the same size as Washington, with wires largely underground, a good profit is made on a \$50 telephone rate established by the Dominion Government. In Rochester, a city of 162,000 people, the independent telephone company has 3,600 subscribers, and the Bell has dropped to 400. The cost of the independent company's lines has been a good deal less than \$100 a line. The plant is bonded for \$400,000, and the stock is \$400,000, a capitalization nearly three times the real value of the plant, yet the company pays 8 per cent dividends with rates of \$36 and \$48 per telephone year. Referring to the New England Telephone Company, President Holbrook says: "The cost of operating they claim is \$11 a phone; the cost of maintenance, \$24 a phone. Their general expense, including taxes, is about \$11 a phone. Now these figures are excessive. There is an overcharge on maintenance of \$13.50 per phone, which is due to the necessity of their building old-fashioned and worn out plants entirely over. They are obliged to pay \$4 a year royalty on each phone, \$2 extra on taxes per phone, owing to the fact that they are stocked and bonded at \$300 a phone; whereas \$100 would rebuild, and in an entirely modern way, their entire system. A capital charge of \$12 in excess is therefore put against each phone. In other words (taking all the facts into account), the New England company is handicapped to the extent of about \$31.50 a phone." As the New England company averages \$58 per phone, this opinion of President Holbrook would indicate \$26.50 as the normal average charge for that company's exchanges, which more than confirms my own estimates stated above.

FURTHER OBJECTIONS.

When the English Government began to consider the absorption of the telegraph, the telegraph companies used every effort to prevent and impede the reform. The objections they raised were:

1. It was not the Government's business to telegraph.
2. There would be a loss if it did.
3. The telegraph would be better conducted under private enterprise.
4. The Government rates would be higher.
5. And the use of the telegraph would decrease.
6. The Government service would be nonprogressive—no stimulus to invention, etc.
7. The secrecy of messages would be violated.
8. The telegraph would be used as a party machine.
9. The Government could not be sued.
10. To establish a public telegraph would be an arbitrary and unjust interference with private interests. The companies had risked their capital in the new enterprise, and just as they were about to get their reward the Government was

going to take the business away from them—private enterprise experimented and the people wanted to steal the fruit.

These objections are very familiar. Our monopolists know them by heart, and use them over and over, taking no notice of the answers to them, no matter how many times they are refuted. It is easy to answer them a priori and the overwhelming demonstration of their falsity by the actual experience of England ought to have buried them forever beyond the possibility of disinterment:

1. It is the Government's business to transmit intelligence, and that business includes the use of the telegraph and all other appropriate means of transmission.

2. If rates remained the same, an increase of profit instead of a loss was to be expected by reason of the economies that would result from a united telegraph in combination with the postal service. The people could keep rates up and realize a large profit, or put rates down, thereby increasing the usefulness of the telegraph, and taking their profit in the form of more and better service for the same money. They did the latter, and, as a matter of fact, they have saved at the lowest estimate \$150,000,000 in 30 years. The telegraphing they have done would have cost them at least \$150,000,000 more than it has cost, including expenses of operation, extensions, repairs, interest on the capital, water purchase, and all.

3. It stands to reason that a manager appointed and paid by himself, and whose avowed interest and effort are to line his own pocket with the utmost possible "giltiness" consistent with his personal safety—it stands to reason that such a manager will not conduct your telegraph or any other business of yours as well as you can do it yourself or have it done by your own agent. As a matter of fact the public telegraph service turned out to be vastly superior to the private telegraph service according to the universal verdict of the English people. Complaints of inaccuracy ceased, and instead of the old delays we find a service as prompt as that of Belgium and Switzerland. "The service is performed with the most perfect punctuality." (U. S. Consular Report on the English Telegraph, Consular Repts., vol. 47, p. 565, 1895.)

4. It was reasonable to expect that the Government rates would be lower, because the Government would work at cost, and would, moreover, secure an absolute economy relatively to private corporations in the conduct of the telegraph. In fact, the rates dropped at once one-third to one-half, and afterwards the ordinary inland rate was again reduced almost one-half.

5. The use of the telegraph doubled the first year.

6. The Government service has adopted new inventions and shown a progressive spirit in respect to employees, as well as the service of the public.

7. There has been no complaint of violation of secrecy.

8. Nor the least suspicion of partisan use.

9. The Government can be sued and is sued. Claims against the Government are tried judicially the same as other claims.

10. Interference with private interests to accomplish a public good is not arbitrary and unjust. It is the very essence of justice and good government. The private interests of gamblers, saloon keepers, opium sellers, shipowners, house builders, powder makers, bone grinders, grain-elevator men, etc.—private interests both good and bad—are interfered with for the sake of the public welfare. Telegraph interests form no exception. The companies had already received large returns on their investment, and would receive full compensation for their capital when the public took their plant—more than full compensation, as it turned out.

There is really no force at all in the current objections to public ownership aside from the patronage question, which is covered by the merit system of civil service and the transfer of the interest of the wealthy classes to the side of good government and honest administration, which accompanies the establishment of public operation.

THE ITALIAN COMMISSION.

The report of the Italian commission of 1880 is often referred to as proving the case for private railways, being ranked as the strongest document in existence against the doctrine of public ownership. Even Professor Hadley, now President of Yale, lays much stress on this report as a proof of the inferiority of public railways. The fact is, however, that the report has little real bearing on the relative value of public and private systems, and while the commission decides in favor of leasing the Italian roads to private companies, its conclusions are practically worthless so far as we are concerned, (1) because the reasons given by the commission for its decision are partly false, invalid on their face, and partly inapplicable to this country; (2) because the commission lacked almost the whole of the important facts and experiences that have since demonstrated the superiority

of public railways, and (8) because the commission was appointed on purpose to make the decision it did make, the commissioners being selected with reference to the conclusion desired by the appointing power.

The commission based its conclusion mainly upon three propositions: (1) That the credit and finances of the Italian Government were too weak to make it wise to undertake the operation of the railroads, needing, as they did, large sums for improvements and extensions, and strong financial backing to steady their operations under the fluctuations of traffic; this was the principal reason on which the commission acted, and it is a reason that is clearly inapplicable to this country; (2) the unsatisfactory results of a brief experience with direct operation in northern Italy (1878-1881), the said results being due partly to the fact that the lines came to the Government from the private companies in a dilapidated condition, and partly to the fact that the road, having been part of an Austrian system, was officered throughout by Austrians, who were, of course, displaced en masse when the road was taken by the Italian Government, as it could not trust the loyalty of such employees, the result being that all the most valuable officers and employees were swept away and their places filled by occupants in large part green and unfit; (3) the idea that "State operation is more expensive than private," a statement the commission thought it had succeeded in proving by showing that the percentage of operating expenses to receipts was lower with private companies than with State systems in a few cases which were given as the evidence, and the only evidence, of the conclusion as to cheapness. Yet it is perfectly clear that the percentage of operating expenses to income may be low, not because of economy in operation, but because the rates are high, and vice versa the percentage of operating expenses to income may be high, not because of lack of economy, but because the rates and fares are low; if the rates were so low that they just paid the cost of operation the operating expenses would be 100 per cent of the income, although the roads might be managed more economically than another system where the rates were high enough to make the income double the operating cost and the coefficient of operation 50 per cent instead of 100 per cent. No conclusions as to economy can be drawn from the percentage of operating cost to income without a careful comparison of rates, volume of business, grades, cost of fuel, labor, etc., elements which may make the percentage of operation vary from 40 to 100 per cent on different lines in the same railroad system under the very same management, and as the Italian commission paid no attention at all to those elements in their study of economy, but based their whole argument upon a comparison of percentages of operating expense to income without allowance for differences of rates and conditions behind those percentages, their conclusion on this matter is entirely worthless.

It must be remembered, further, that the Italian commission did not possess the light we have to-day. Prussia had not made her remarkable success with State roads when the commission gathered its testimony; the law had been passed, but the roads had not been taken over. Austria had not established her great public system either, having only one-eleventh of the railways when the commission gathered its facts. The zone tariff, with its wonderful developments and simplifications, did not come till 1889. Switzerland had not then voted 2 to 1 for public ownership, after studying the question deeply for many years. The achievements of New Zealand and the Australian republics were not in evidence.

Finally, it is charged on high authority that the commission was packed with railway men and agents of those who desired to lease and operate the roads, instead of having the Government take charge of them. (See Quarterly Journal of Economics, July, 1887, article by Simon Sterne.) The railway promoters wanted the lease, and the Government desired it also, in order to get funds for other purposes, so the Government and the railway men united to secure a commission that would render a report justifying the lease. "Soon after the report was made, Simon Sterne, a prominent member of the New York bar, being in Italy as the confidential agent of President Cleveland, received trustworthy inside information that the commission was appointed with the understanding that it should make the sort of report it did in order to enable the Government to lease the roads and obtain thereby much-needed funds for the reorganization of the Army and Navy." (Prof. E. W. Bemis at Massachusetts Legislative Hearing, March 20, 1900.)

REGULATION.

On the subject of regulation, which is the last objection I will speak of, I would like to remark that the plea that regulation is sufficient to solve the problem does not seem to me to be true, for this reason: Regulation can not overcome the antagonism of interest between owners and the public, nor the congestion of wealth

and power, nor the aristocratic tendency. We have antagonism, wealth congestion, and aristocracy instead of harmony, diffusion, and democracy, which are secured by a normal public institution in far greater degree, at least, than they can be secured under private ownership. It is a fundamental maxim of business in modern times that property is to be administered in the interest of its owner; and our business ethics compel the managers of private systems to manage them in private interests; and the same business ethics would impel the managers of the public system with the same earnestness and honesty to administer the system in the public interest.

THE TELEGRAPH.

Passing to the telegraph, I would first like to say that under the Constitution of the United States it seems really to be the duty of the Federal Government to establish a postal telegraph system. The Constitution not merely gives the Government a right to administer the means of communicating intelligence, but the provision is mandatory, and is so understood by jurists. Congress is bidden to supply the people with means of communication. Now, it is a fundamental principle of the law of agency that an agent or trustee is bound to use the best means reasonably attainable for the purpose of his agency.

Q. (By Mr. A. L. HARRIS.) What section of the Constitution do you refer to?—A. The section which deals with post-offices and post-roads. I will give an authority for this in a moment. When the stage coach was replaced by steam railways and the ordinary sailing ship by the steamboat, it became the duty of Congress to adopt those improved means for the transmission of the people's mail, and they did use those means. When the electric telegraph was invented and came into use, and when the telephone was invented and came into use, it was equally the duty of this trustee to adopt the new and improved methods for the transmission of intelligence. That duty has been recognized and strongly emphasized in one of the reports to Congress made some years ago, and as the matter is very important, I will give you the reference: House Report 187, Twenty-eighth Congress, second session, pages 1 to 3.

Q. Is it a majority or a minority report? It was a committee report, as I understand.—A. Yes: it is a majority report.

Mr. PHILLIPS. Please read the paragraph.

The WITNESS. (Reading:) "The Government is authorized and required by the Constitution to carry intelligence. The functions thus devolved on the Government of performing for the people the office of universal letter carrier and news carrier is a matter of the very highest consequence in every light in which it can be viewed. The bare fact that our ancestors refused to leave it dependent on individual enterprise or State control, and rested it expressly in Congress, abundantly attested their anxious sense of its importance and their conviction of the impracticability of realizing the requisite public advantage from it otherwise than by giving it Federal lodgment and administration. But though not anticipated or foreseen, these new and improved modes were as clearly within the purview of the Constitution as were the older and less perfect ones with which our ancestors were familiar; and there being no doubt entertained, either on this point or as to the obligation of the Government to lay hold of the best and most rapid methods of transmission which the improvement of the age puts in its reach, steam power commended itself at once to adoption and has long been extensively employed both on land and water for the carriage of the mail.

"It is not without full reflection that the committee insist on the principle that it was the duty as well as the right of the Government thus to avail itself, even at heavy additional expense, of the powerful agency of steam for the purpose of accelerating the mails."

I think I might omit a little here and still give the whole sense:

(Reading:) "This great and fundamental principle upon which the Department acts (of not being outstripped in the transmission of correspondence and intelligence) led necessarily to using the steam engine in the service of the post-office, and it must and will lead with equal certainty to the adoption of any other newly discovered agency or contrivance possessing decided advantages of celerity over previously used methods. The same principle which justified and demanded the transference of the mail on many chief routes, from the horse-drawn coach on common highways to steam-impelled vehicles on land and water, is equally potent to warrant the calling of the electro-magnetic telegraph—that last and most wondrous birth of this wonder-teeming age—in aid of the post-office in discharge of its great function of rapidly transmitting correspondence and intelligence."

Q. (By Mr. CLARKE.) What is the date of that?—A. That is the Twenty-eighth Congress, second session, March 8, 1845, report of the Committee of Ways and Means.

Mr. PHILLIPS. You will proceed in your own way, Professor.

The WITNESS. The application of the law of agency and the trustee principle they do not mention specifically; but that is an obvious legal method of stating or emphasizing the point made by the committee.

Now, I would like to discuss for about 10 minutes or so the experience of England with her telegraph. As I have already said she tried the private system. Complaints were made of delay, inaccuracy, high charges, and insufficient facilities. Chambers of commerce took the matter up; some of them petitioned the postmaster-general and the Government. An agent, Mr. Scudamore, was appointed by the postmaster-general to go to other countries and study the public systems and compare them with the private systems of England. He did so, and made full reports with the result of showing conclusively, as appeared from the subsequent vote of Parliament, that the public systems of Belgium, Switzerland, and other countries far excelled the private telegraphs of England both in cheapness and quality of service and in facilities. The Government thereupon bought out the English telegraph companies, making the mistake, as I believe, of buying them all out at once—instead of one at a time as the Prussians did with the railways—and paying about four times the real value of the lines. The Government immediately reduced rates very much—from a third to one-half it is estimated, as I have said—and extended the lines into the country districts where the companies had refused to go because there was no profit. They increased the facilities in every way by opening telegraph offices in the post-offices and even making the post-office boxes places where telegraph messages could be deposited.

They secured a great economy by the saving of rents and wages and light and fuel through the coordination of the telegraph with the postal service, the same officers and employees very largely being able to attend to both services, especially in country districts.

Q. (By Mr. PHILLIPS.) Will you give the date when this occurred?—A. They took the telegraphs over at the beginning of 1870. The effect on labor was very beneficial, the Government telegraph pursuing a systematic policy of increasing wages from time to time, so that the percentage of wages to receipts rose from 39 per cent in 1870 to 72 per cent in 1895.

They have also shortened hours so that since 1881 the hours have been reduced from 56 per week on an average to 48 and 42—48 for day work and 42 for night work. All Sunday work is paid for as overtime.

The diffusion of wealth has been helped through the removal of the opportunity for making vast profits out of the telegraph for any individual or group of individuals. The public operation and ownership of the telegraph has brought about a harmony of interest which has been secured by getting rid of the antagonism between the small group of owners and the public.

The benefit to the press has been great through the enormous reduction of rates, which the postmaster-general claims has given England the lowest press rates in the world. The facilities for press work were also greatly increased by public ownership. I notice, however, that some of the newspapers are not wholly satisfied in England with the conditions there in spite of the great reduction and the increased facilities. Public ownership is not perfect, but it is better than private monopoly—it is the least imperfect of the two systems—and sentiment in England is practically a unit to the effect that the postal telegraph is a vast improvement on the private system.

The development of business has been something remarkable. I have already referred to it in brief. The number of messages doubled in two years. The actual amount of business done doubled almost in the first year, and the subsequent increase has been very large, so that the rate of increase in England under the public system has been 6 times as rapid as the development of the telegraph business in America under the private system.

Further, there has been a great strengthening of social ties by the civilizing influences of easy communication among the people. That contrast is brought out very strongly by comparing the testimony of the president of the Western Union some years ago in a Congressional investigation, where he said that 46 per cent of the total business in this country is speculative—stockjobbing, wheat deals, pool-room matters, etc.; that 34 per cent is legitimate trade, 12 per cent is press, and 8 per cent social. Whereas they find that in Belgium and Switzerland and other public systems the percentage of social messages runs up in some cases as high as 63 per cent of the total.

President Green, of the Western Union, in an article of his some years ago in the *North American Review*, said that only about a million people in this country use the telegraph—chiefly the stock gamblers and speculators, and pool room men, and so on, and he asked if that was the class that the Government ought to seek to benefit. In some of their testimony it was stated that they believed the masses of the people would not use the telegraph to any great extent even if they had the privilege of low rates. They apparently regard the farmer as a sort of hermit, or relic of primeval times, who does not care very much about matters of commerce or social intercourse, and has no need or desire to use the best means of communication. But the facts in other countries appear to indicate that, if the rates are low and facilities ample, the masses of the people do use the telegraph to a very great extent. The electric current belongs to the people. It is one of the great inventions of modern times and it ought to be brought within the reach of the people.

Summing up we find that for 27 years Great Britain permitted the telegraph to remain in private hands; that the companies combined to keep the rates up and to destroy any real attempt at competition; that the tariff was exorbitant, the service very poor, the lines confined to the more populous districts, the treatment of employees such as is usually accorded them by private corporations; that a few thoughtful men called attention to the existing abuses and advocated national ownership as the remedy; that the chambers of commerce and the press took up the matter, and with the help of a leading statesman carried the measure against the powerful opposition of the companies and the inertia of those afflicted with the heart failure of extreme conservatism and public distrust; that the immediate results were—

1. A reduction in rates of one-third to one-half.
2. A vast increase of business, the work done by the telegraph nearly doubling in the first year after the transfer.
3. A great extension of lines into the less populous districts, so as to give the whole people the benefit of telegraphic communication.
4. Large additional facilities by opening more offices, locating offices more conveniently, and making every post-office and post-box a place where a telegram may be deposited to be taken to the nearest telegraph office for transmission.
5. A considerable economy by uniting the telegraph service with the mail service under a single control, avoiding useless duplications, using the same offices, the same collecting and delivery agencies, and often the same operatives for both services.
6. A marked improvement in the service, throwing complaint out of the steady occupation she had had so long, the aim of the post-office being service, not dividends.
7. A decided gain to employees in pay, hours, tenure of office, etc.
8. Unprecedented advantages to the press for cheap and rapid transmission of news, at the same time freeing it from the pressure of a power that claimed the right to dictate the views and opinions it should express.
9. The development of business and strengthening of social ties, ties of kinship and friendship, through the growth of business and social correspondence.
10. The removal of a great antagonism and the cessation of the vexatious and costly conflict it had caused between the companies and the people.

Looking at the subsequent history of the English postal telegraph we find—

1. A further reduction of nearly one-half in the average cost of a message.
2. More than a tenfold increase of business in 25 years, while population increased but one-fourth, over 1,000 per cent telegraph growth to 25 per cent population increase.
3. A sixfold extension of lines and fiftyfold increase of facilities.
4. A steady policy of expanding and improving the service, adopting new inventions, putting under ground hundreds of miles of wire that formerly ran over houses and streets, etc.
5. A systematic effort to elevate labor, resulting in a progressive amelioration of the condition of employees in respect to wages, hours, tenure, promotion, privileges, and perquisites.
6. A good profit to the Government (excluding interest on the water-logged capital cost) in spite of low rates, large extensions into thinly populated areas, advancing wages, heavy losses through carrying press dispatches below cost, competition of telephone companies in the best-paying part of the traffic, etc.
7. Satisfaction with the telegraph service even on the part of conservatives who objected to the change before it was made.

Comparing the English situation with our own, we find:

IN ENGLAND.	IN THE UNITED STATES.
Low rates.	High rates (twice as high).
Good service.	Poor service.
Extension of telegraph facilities to the masses.	Facilities only for the classes.
Rapid growth; 40 times as rapid as the growth of population and 4 times as fast as the growth of the letter mail.	Slow growth; less than one-sixth of the growth of the English system.
Progressive improvement of labor.	Progressive maltreatment of labor.
Harmonious, uninterrupted operation.	Big strikes.
Large popular use of the telegraph.	The telegraph an adjunct of speculation.
A management aiming solely at serving the people.	A management aiming solely at serving themselves.
Moderate salaries for leading officials.	Exorbitant salaries for leading officials.
No big fortunes from telegraph manipulation.	The telegraph a millionaire machine.
Universal satisfaction with the telegraph situation.	Universal discontent.
Public monopoly.	Private monopoly.

We do not need to imitate England's mistakes--

- In paying too much for old lines;
- In allowing the telephone to remain so largely in private hands;
- In serving the press below cost;
- In giving the railways a vast service every year for nothing;
- In leaving the telegraph debt to hang like a millstone around the neck of the department, instead of paying it off from the postal profits or other public funds;

In charging new construction against current income.

But we may well imitate her energetic adoption of a needful reform, her economies, her progressive administration, her care for the welfare of labor, her public spirit in this matter of the telegraph.

Now, in regard to our own telegraph system. I will take up first the matter of watered stock or inflated capital, and the question of rates.

First, in regard to the stock. The National Board of Trade some years ago made a summary, which I can supply in detail if you like. The result was this: That \$60,000,000 of stock represented less than \$10,000,000 of actual value which had been issued in the building up of the Western Union; and something like \$35,000,000 of stock, largely stock dividends, which we can not analyze and can not tell just how much is solid and what is not.

The highest estimate I have seen in any of the legislative investigations as to the actual amount of money paid in by the stockholders into the companies that formed the Western Union is \$16,000,000. The plant has been built up out of earnings very largely, and money secured on bonds, and by the issue of stock to some extent, I presume.

The railroad commissioners of North Carolina 3 years ago (1897) made an extensive examination and came to the conclusion that about \$5,000,000 was the actual value of the Western Union plant above the bonds. The stock at that time was about \$97,000,000, which would leave \$92,000,000 of water--about 18 of water to 1 of solid.

I sent circulars to all the States and got a good many replies, which gave the assessed value per mile of line and per mile of wire, and so on; and I also gathered together the statements put out in the Western Union reports, and in the various hearings by their officials. Combining all the evidence it appeared that the plant could be duplicated for 20 to 25 millions, or at the very outside \$80,000,000. That was 4 years ago when I made that investigation. The data on which my estimate was based and the statements of the National Board of Trade may be found in the Arena for March, 1896, and in chapter 111 of the Telegraph Monopoly, Equity Series (1520 Chestnut street, Philadelphia).

Since my estimate was made a careful investigation has been made in Ohio which fully confirms my conclusions. Under the Nichols law in Ohio telegraph companies are taxed on a value ascertained by taking the same proportion of the total market value of the capital stock that the lines in the State bear to the total lines of the company. The assessors took the market value of Western Union

stock, subtracted the real estate and the stocks and bonds of other companies held by them, and dividing the remainder by the total number of miles of line belonging to the company, found the assessable capitalization per mile of line to be \$364. This gave \$3,016,614 for the 8,272 miles of line in Ohio. As assessments in Ohio are at two-thirds value, the Western Union was assessed at \$2,000,000. The company rebelled and took the matter into court, claiming that the law was unconstitutional and declaring that all its property in Ohio was not worth more than \$647,000; that the average cost of the poles was \$1.50, plus \$1 more to put them up ready for wire; that the wire cost \$17.50 per mile and stringing \$4, and that the total cost was \$103 per mile of line—poles, wire, stations, equipment, and everything. This would give (taking the company's figures of 190,000 or 200,000 miles of line, in round numbers) a total of \$20,000,000 as the actual value of the whole system, if Ohio was a representative State, as to quality of the telegraph plant, and that supposition can not be very far out of the way. So the evidence points very strongly at least to the broad conclusion that there is a good deal of inflated value in Western Union capitalization; just how much I would not like to say that I was sure, but a good deal.

Now in regard to the rates: In this country the average receipts are about 31 cents for a 10-word message, not including the address. In several countries of Europe the rates are very much less than that. For example, in England we have a 12-cent rate for 12 words, and in France a 10-cent rate for 20 words. In Great Britain, however, and in France also, they include in that rate the address as part of the words counted; but the actual result on the average brings the telegraph rate in England below 15 cents, showing that the people are able to use the telegraph, even counting the address, to great advantage by cutting down the words so as to bring the communication within a very moderate limit. In Belgium the ordinary minimum charge is 10 cents (for 20 words) and in Germany 12 cents, in Switzerland 12, Austria 11, and the United States 25 cents (for 10 words and the address).

	Ordinary rate per word.	Ordinary minimum charge per message	Average receipt per mes- sage.
	Cents.	Cents.	Cents.
Great Britain	1	12	15½
France	1	10	15½
Germany	1½	12	.....
Belgium	½	10	8½
Switzerland	½	12	.....
Austria	1	11	.....
United States	2 to 7	25	31

This table was prepared in 1896 and revised about a year ago. The ordinary rate per added word in Great Britain was 1 cent, in France 1 cent, Germany 1½ cents, Belgium two-fifths of a cent, Switzerland one-half of a cent, Austria 1 cent, while in the United States the ordinary rate per added word is from 2 to 7 cents, according to the information given to me in the Western Union offices.

Now, whether the rates are too high in this country or not is a question that may be difficult, as we found the question of railroad rates was difficult yesterday. The Western Union officials in their testimony say, in the first place, that the distances are so much greater—double distances, they say, in this country—an average of double the European distance. That, however, hardly seems to explain the difference between 31 cents and 15 cents; because, if we take the total cost given in the Western Union reports for maintenance and reconstruction and divide that cost by the total number of messages, we find that the cost due to distance is not over 3 cents a message, so that half that cost, or the cost due to excess of distance as between this country and European countries, would be only about 1½ cents, which of course would not account for the difference in rates.

The Western Union officers introduced in their testimony tables purporting to show rates and distances in this country and Europe—

Q. (By Mr. PHILLIPS, interrupting.) Where would this testimony be given—at various places or in the city of Washington?—A. In Washington, I think. It was a Congressional committee. The Western Union, in its endeavor to overcome the force of the tremendous fact that telegraph charges here are more than double the public telegraph rates of Europe, made tables of rates and charges to prove their assertion that the difference was a matter of distance.

Unfortunately for the Western Union, the Washburn committee consulted geographies and telegraph maps and found that the length of telegraph routes between the cities of Europe was strangely minified in the Western Union statement, while the distances between American cities were mysteriously larger than those set down in maps and geographies. Here are some examples:

From London to—	Telegraph distances.	
	Western Union statement.	Truth.
	Miles.	Miles.
Dover.....	56	82
Plymouth.....	190	246
Paris.....	200	313
Reims.....	250	400
Hamburg.....	380	556
Munich.....	540	860
Berlin.....	560	722
Prague.....	600	958
Madrid.....	750	1,225
Rome.....	850	1,349
Naples.....	950	1,510
St. Petersburg.....	1,100	1,806

Not one single distance is correctly stated. It is necessary in nearly every case to add at least one-third and often more than one-half of the stated distance to obtain the real distance. The sum of the stated distances was 15,734 miles, and the sum of the real distances was 23,578 miles, or almost one-half more than the Western Union's statement. To show the falsity of statements about American routes it was not even necessary to disturb the dust on the geography—the statement was its own refutation; for example, the distance from Memphis to New York was placed at 2,000 miles, while in other tables of the same Western Union testimony the distance was said to be 1,000 miles. So the distance from New York to Chicago was placed at 750 miles, and to Galena at 1,400 miles, though Galena is only 185 miles from Chicago. Substituting the true distances in the comparison of telegraph charges in Europe and America, the committee obtained very different results from those of the Western Union statement. The rates and distances from Paris to thirty-odd cities all over Europe were placed in one table; a similar table was made with Berlin as a center. For the United States a table was made of the rates and distances from Washington to thirty-odd of our chief cities having distances almost identical with those in the tables of Paris and Berlin. The conclusion of the committee from these tables, together with the corrected tables of the Western Union statement (rates and distances from New York to 61 American cities, and from London to 29 cities in all parts of Europe, the cities in each table being chosen by the Western Union), was that the *rate per mile in Europe was less than half the rate per mile in America*. And the rates compared were for internal traffic in the United States, and for international traffic in Europe. The cost of international communication is more than the cost of internal communication for an equal distance, because the receipts have to be divided among two or more nations, each of which desires nearly or quite as much return as for an internal message, and the division itself entails additional expenses of bookkeeping, etc. *When internal rates in Europe are compared with internal rates in America, mile for mile, the contrast becomes more glaring than ever; the committee found that the rate per mile in England was less than one-third the rate per mile in the United States, and in France less than one-fourth of our rate, mile for mile.*

Q. (By Mr. A. L. HARRIS.) When was that report made?—A. That report was in 1870. Afterwards Postmaster-General Creswell made an examination, and he came to a similar conclusion, that the rates per mile in this country were from 1½ to 4 times higher than they were under the European public systems.

Q. (By Mr. PHILLIPS.) That was just the year that they took over the telegraph in England, was it not? That report was made the year they became public property in England—1870?—A. Yes; that is correct.

Q. Therefore it would compare them under private ownership, at least so far as England is concerned, with private ownership here?—A. No; at the beginning of 1870 the lines in England were taken over by the public and the rates were put down at once. It was the public system in England that our lines were compared

with. In Senate Report 577, part 2, p. 25, Senator Hill, of the Committee on Post-Office and Post Roads—

Q. (By Mr. FARQUHAR.) What year was that?—A. I have not the year. He said to President Green, of the Western Union: "How can you say that your system is cheaper when France sends 20 words 2,000 miles for 20 cents, and in several countries of Europe messages are sent for one-half a cent a word?" President Green replied: "When you understand that we pay more than twice as much to our operators as they do, and that material, except as to wood and coal, is higher, there is every reason why it should be higher here." You see he shifted his ground in two respects. He had formerly claimed that rates were lower here than in Europe, and also that the excess of rates here was due to distance; now he claimed it was due to wages.

Soon after, President Orton, of the Western Union, told the Washburn committee practically the same thing, that salaries of operators in Europe were less than half as much as the similar employees receive here. Immediately afterwards he gave a table which showed that the French telegraph employees below the grade of superintendent got an average salary of \$430, and in the same speech he said that \$2,000,000 was expended for labor by all the telegraph companies in the United States; and the committee found that the number of operators was 6,000, so that if the whole \$2,000,000 went to operators they would only receive an average of \$333 instead of \$360 as would be necessary to make good President Orton's assertion.

The Tenth Census, volume 4, gives the average salary of telegraph employees in Great Britain as \$300, and it has since risen above \$400. In Germany the average was \$300, and it is now stated as \$446 in a recent English work. The average for European countries was \$320. That was in 1880. In 1883 the president of the Western Union told the Blair committee that "the aggregate salaries from president down are between 4 and 5 millions a year." This was in the Senate investigation on labor and capital, volume 1, page 901. He also stated that the number employed and paid by the Western Union Company was about 25,000, which would make the average salary \$200 to the telegraph employee in this country. European telegraph wages are 60 per cent higher on these facts than telegraph wages here, while our wages in general, taking other industries into account, are 50 per cent higher than in Europe.

The Western Union officials also say in their testimony that the work done per employee is greater here; that the efficiency of labor here is greater; they say that it is double. The Tenth Census gives data which show that there were 1,370 messages per employee here and 1,180 in Europe. That does not show "double" work here by any means, but comes nearer to the Western Union statement than might be expected by one familiar with their methods. The larger number of messages here per employee is partly due to the longer hours, and to the selection only of the more populous districts through which to run Western wires, so that the assertion as to efficiency is not wholly to the credit of our system. Probably, however, our efficiency is somewhat greater even in the telegraph system in spite of the lower average pay.

But I would like to call attention to the fact that if, as on the Western Union testimony would be the case, the efficiency of their labor is twice as great as that of Europe and if, as investigations bring out clearly, the wages are found to be lower here on an average than in Europe, they ought to be able, so far as wages are concerned, to furnish telegraph services at lower rates here than in Europe, more than balancing the difference in distance, which, as I said, was only a cent and a half, so that upon Western Union data they ought to make the rates here even lower than they are under the European system.

In reply the Western Union is likely to say, and has said—there is a deficit under the public systems of Europe. It is true that a deficit has appeared in Great Britain, but it has not appeared so far as I am able to ascertain in the other systems. The returns of the telegraph and telephone systems are merged, so it is not possible to tell certainly whether the telegraph alone makes a profit, but the two systems together do make a profit in Belgium, France, and Germany—a very material profit.

The value of these Western Union statements may be estimated perhaps by recalling the fact that one of their presidents said that governments never made any profit on anything, whereas we know that Prussia is making \$75,000,000 a year on her railway system, net profits turned into the treasury; the British post-office is turning in some \$16,000,000, and many other countries are making large profits on their public industries.

I would like to give here a conversation which occurred between the president of the Western Union, Dr. Green, and the Blair committee, and which will be

found in the Blair Report of 1885, Senate Committee on Education and Labor, volume 1, page 875:

"Q. What is it that causes the great disparity between your rates and the rates charged between England and the Continental countries?"

"GREEN. I think a good deal of it grows out of the conducting of a commercial business by the government and the conducting of the same business by individual enterprise.

"Q. Do you know of any other cause to which the difference can be attributed?"

"GREEN. No, sir; salaries are much lower there than here. They pay much less for the service than we do.

"Q. Is the telegraph a source of revenue beyond expenses to the governments abroad?"

"GREEN. I do not know of any government that has ever made any profit out of the telegraph." [Very extensive knowledge.] "The British post-office system claim to be making about expenses, but they get large appropriations every year. They claim, however, that those appropriations are for the extension of the plant, the construction of new lines.

"Q. They must do much less business there than is done in this country in proportion?"

"GREEN. No, sir; they do a larger business in proportion to the amount of wires they have than we do in proportion to our wires.

"Q. Then, if they are doing a larger business with cheaper labor, and are receiving much higher prices than you receive, why should they not make money?"

"GREEN. Well, I do not know why; but somehow governments never make any money out of anything.

"Q. You state the fact as you understand it, but you do not feel called upon to account for it.

"GREEN. I do not feel called upon to account for it."

I do not think in all the history of cross-examination a witness was ever tangled up any more beautifully and brought to a clearer *reductio ad absurdum* than in that examination.

Now, as to the deficit in England. In the first place England paid 4 times the fair value of the lines—an example which we ought not to follow; in the second place she pays high wages; and in the third place she has been burdened by great competition of the telephone; in the next place the Government is not aiming at profit at all, but at the development of the country, as I said yesterday—the development of other industries, business in general, social intercourse, etc., and they get, even on the financial basis, very large returns—far greater than any experienced deficit—from the superior development of the industries of the country through low rates. They have 2 telegrams per capita to 1 in this country.

Q. (By Mr. PHILLIPS.) Please state whether they created a sinking fund and have liquidated the purchase money yet, or is it still bonded?—A. It is still a funded debt, still bonded. I think they made a mistake in that, in not using the great profits of the postal system, of which the telegraph is a part, to pay off the telegraph debt, and so release it from that burden. It is just as absurd, it seems to me, to keep that debt and turn in a large postal profit, as it would be to keep a debt on mail boxes or pneumatic tubes. It is a part of the postal service and ought to be paid for with postal profits.

There is another point. Telegraph experts in England told the inventor, P. B. Delaney, according to his testimony, that if the expenses were properly divided between the postal system and the telegraph—the mail system proper, I mean, and the telegraph—there would be no deficit, in spite of the tremendous interest on the overgrown debt. They say that the postal authorities are anxious to make a strong showing for the mail department as compared with former records and that they are not quite fair in the division of expenses. How slight a change would account for all the difference can be seen when it is stated that a 2 per cent variation in the division of expenses between the mail department and the telegraph would more than cover the deficit. The very low rates to the press, carrying large masses of press matter at 9 cents per 100 words, is another element that must be considered, and the free service to the railroads, so that in reality I do not think much weight can be placed on the English deficit.

John Wanamaker in 1890 made some investigations, which he told me personally resulted in his judgment that a uniform 10-cent rate—

Q. (Interrupting.) When he was Postmaster-General?—A. Yes. He told me a little while afterwards that his investigations had led him to believe that a uniform 10-cent rate in this country with the postal system would be remunerative and cover all cost.

We may see from the example of a little line between Milwaukee and Chicago, put in some years ago, how excessive our rates are in some instances. That company made at first a 10-cent rate, and paid back from 30 per cent to 40 per cent of the receipts to the patrons of the road after paying a large interest (7 per cent) on the capital. Subsequently they reduced their rate to 5 cents, or half-cent a word, and still paid back from 25 per cent to 40 per cent of the total receipts to the patrons of the company, although they had doubled their stock, making it half water. There is a vast mass of facts which go to indicate that our rates are high; that is one of the most interesting perhaps.

The treatment of labor by our telegraph system is, I think, one of the most objectionable features of the management. According to the testimony of telegraph employees in various investigations and Congressional hearings, a systematic policy of reducing wages has been pursued by the telegraph monopoly. They have put boys to work in the offices to learn the business, and then if the operator resigned or moved away or did not prove satisfactory, or if for any other reason his office became vacant, they would offer the place to this young student or apprentice at \$5 or \$10 less than the salary formerly paid: and in that way and in other ways they have reduced the wage so that, according to the testimony, it was reduced 40 per cent from 1870 to 1883.

The great strike of 1883 throughout our telegraph system was largely due to the low wages and long hours. They asked for an increase of pay of 15 per cent and for 8-hour work, and no salary lower than \$50. These requests, moderate as they were, were refused, and the great strike was fought out at a cost altogether of over \$1,000,000, and after the strike, according to Western Union testimony, the result was that the company was able to get about one-third more work out of the men for the same pay. The hours of operators are in many cases very long, the work is very trying, and they are apt to be affected by consumption and other diseases—unable to continue many years under the strain.

Q. You have no knowledge of how many are male employees or female?—A. No; I have not the difference.

They also blacklist their employees, I understand from the workers, so that the man who meets with their disapproval is practically unable to get employment in the country. They try to shut out the unions of the men, and they even deny them the privilege of petition. The men say that the leaders in presenting a joint request for amelioration of conditions, if found out, are almost sure to be discharged from employment.

The profits of the system may be realized from a couple of statements. Postmaster-General Wanamaker in 1890 found that early investments in Western Union stock had received an average of 300 per cent cash dividends per year from 1858 up to that time (1890), and 150 per cent a year in stock dividends besides. In 1858 the capital stock was \$385,700. From 1858 to 1866 the stock dividends were \$17,811,140 and the cash dividends \$4,156,240, a total of \$21,967,380. The annual earnings were \$2,745,920. The cash dividends in that period were 100 per cent a year and the total dividends 700 per cent a year. These figures constitute another proof of high rates. Excessive profits prove that charges are exorbitant.

Our telegraph facilities are not what they ought to be, because private monopoly naturally and necessarily limits itself to regions that will pay, whereas public ownership tries to give the whole people the benefit of the service.

Poor service is very strongly brought out sometimes by such experiences as these: Several cases are in evidence where persons before going on a railway trip have telegraphed to the friend they were going to visit that they were coming—telegraphed sometimes 2 or 3 hours before they started—and yet they have been able to travel hundreds of miles and get to their place of destination before the telegram. I recently had that sort of experience myself. I telegraphed from New York City to Philadelphia, and half an hour later I took a train and went to Philadelphia; half an hour after I got to the house my friend received the telegram saying I was coming. That is simply one of many illustrations that our service is not what it ought to be.

Professor Ely and former president Walker of the Institute of Technology, and many other men who have traveled extensively in Europe, have told me that the service in Germany and Great Britain was in their judgment greatly superior to our service except where speculative telegrams are concerned. Instead of being an advantage, that is in my judgment a fault of our system, that it discriminates in favor of speculative telegrams, even setting aside, according to the testimony, not only social messages, but Government business, and violating the law in so doing, in order that speculative messages should go first.

Postmaster-General Wanamaker accuses the Western Union of having bought up and shelved, or otherwise suppressed, 16 inventions, instead of giving the

country the benefit of every improvement, as a public system would be likely to do. The tendency of the private monopoly is to adopt only those inventions which improve the service and also increase present profits. If an invention, no matter how great the improvement may be, will make their present investment practically valueless so that they will have to rebuild the system, they are apt to try to repress that invention and keep their capital intact until they can wear it out and get all the service out of it.

The company goes into politics to a certain extent. It has distributed favors among various legislators and among Congressmen, and Western Union testimony is explicit as to the benefits they have received. Long ago the president of the Western Union said:

"The franks issued to Government officials constitute nearly a third of the total complimentary business. The wires of the Western Union Company extend into 37 States and 9 Territories within the limits of the United States, and into 4 of the British Provinces. In all of them our property is more or less subject to the action of the National, State, and municipal authorities, and the judicious use of complimentary franks among them has been the means of saving to the company many times the money value of the free service performed." (Western Union report of 1873. See also Wanamaker's argument, p. 164; Postmaster-General Creswell's report, 1875, p. 49.)

The passage is constantly cited by writers and speakers dealing with the telegraph, because of its astounding nature and implications. I have it on the authority of one of the most distinguished members of the United States Senate that "books of telegraph franks are tendered to every Senator and Member of Congress, and most of them accept the favor." The company confesses it has received large benefits from this distribution of favors, and some of us have thought perhaps the reason Congress has not been more alive to this question and has not passed laws asked for by petitions, signed in some instances by as many as 800,000 voters and backed up by some of the strongest men in the country—that the reason may be that they do not want to get rid of a system under which they can do their telephoning free and come to a system where they would have to pay for their own private telegrams at any rate, and to a system under which they would get no profits on telegraph stock. Perhaps I am unjust to Congress; I hope I am, but it is a little difficult to see just what influence could withstand the enormous pressure of thought and business interests brought to bear by John Wanamaker, for example. He told me he was the most disappointed man in the country; he expected fully to pass his bill, but found he could not.

METHOD.

Now, this question of method: A public plant may be secured in many cases, or in all cases, probably, without a dollar of taxation. This can be done in two or three ways. The Government may, in giving a franchise, put into it a clause that at the end of the term—20 or 30 or 50 years—it shall become public property free of debt. That has been done in France and in Italy and to some extent in Germany and England, I believe. Another way is for the Government to issue bonds and pay off these bonds out of the earnings of the system, as is being done by the railroads in Belgium, Germany, and Austria-Hungary. Another plan, which is especially applicable to municipal monopolies, is for a group of citizens to advance the capital and make the plant a public one, but worked under a lease so that the operation is governed by the private parties and the city together—a copartnership—until the capital is paid for out of the earnings, at which time the system becomes completely public. This plan has been adopted in Springfield, Ill.—substantially this method—with the electric plant with very good results.

A more serious question relates to the method of procedure in taking over a private plant or a part of it, and also the question as to construction or purchase.

In reference to the telegraph, I believe that a good method would be to begin by offering to purchase a few of the chief lines if the companies are willing to sell at a reasonable valuation; if not, the Government, under its constitutional power to build post-roads, should construct lines joining some of the main centers and gradually extend the lines, making reasonable rates, but not the lowest rates, not to cut the bottom out from under the company completely, simply to bring a little pressure to bear, and then do as the Prussian Government did with the railroads; say to the company: "We will buy your lines one after the other if you will put a reasonable price upon them; if not, we will apply competition and continue to construct, till you are ready to sell at reasonable figures what we may wish to buy."

In reference to the railroad system the same method might be adopted, but it

is more difficult on account of the great cost of new lines and the established character of the present system. Therefore I believe the practical plan there, when public sentiment is ready for public roads, will be to buy out one or two great systems—one great system, perhaps, from east to west—and then make reasonable rates and simple tariffs and gradually absorb the other systems on the same plan that Prussia did and as New Zealand is now doing.

As steps preliminary to construction or purchase, investigation and publicity are of the utmost importance and every effort should be made to bring the innermost facts in regard to these great monopolies to the knowledge of the people. If a law could be passed which would open the accounts of all corporations to public inspection, I think it would be of very great benefit; and if a competent expert could be sent out, some officer of the postal system, as was sent in Great Britain, or some man of acknowledged ability and impartiality could be sent to study other systems and our system and make a scientific colorless report—no propaganda matter in it whatever—in regard to the conditions of labor and service, and so on, in the railroad, telegraph, and telephone systems of various countries, I believe it would be of great benefit, as it was in England. What we want is light; and with light I believe the public spirit of the people and the intelligence of our legislators can be relied on in the end to produce true results.

Q. (By Mr. CLARKE.) Before you recapitulate I would like to ask one or two questions. In Europe do the public-owned utilities set aside a percentage of gross earnings for depreciation to provide for renewal of plant?—A. It is just the same as with our private companies here—some do and some do not. In the Belgian and German systems they are very careful indeed to cover depreciation. In many of our own—take the Massachusetts companies, that I am most familiar with—very many of them do not allow anything for depreciation at all, and it is the same way with some public plants. My experience is that the public plant is a little more apt to make provision for depreciation than the private monopoly.

Q. You believe it should be done?—A. Certainly.

Q. Now, in regard to the basis of capitalization on which you take over the properties of corporations, do you recognize that the securities of corporations are in the nature of a contract between the company and the holder of the security?—A. Yes; I am in favor of being very liberal on account of what I understand to be the doctrine of estoppel. The companies have in many cases violated not only law but common honesty in inflating their capital; in other instances the inflation is not morally reprehensible. In the first class of cases there is strong argument in favor of those who think that that sort of inflation should be cut out in spite of the fact that the stock and bonds may have come into comparatively innocent hands. They say there is no such thing as an innocent purchaser nowadays, because everybody knows that these fraudulent stock issues have been made. I think, however, as the change is to be made for the public benefit, the burden of the change should fall on the whole people who are to reap the benefit, and not on any class, especially as that class, however much to blame they may be, have been encouraged in their action by the silence and acquiescence of the public. In a democracy it appears to me that if the people stand by and see a railroad issue stocks, and take no measures to prevent it, they ought to stand the consequences of that stock getting into the hands of men who buy it for good money in the open market.

Q. Then it is your belief that any law enacted by Congress or a State legislature for making these corporate properties public utilities, should take into consideration the constitutional provision against impairing the obligations of contracts?—A. Certainly; but that is not the point I am dealing with. I do not think our governments are bound legally to pay for inflated values. I place my argument upon the moral obligation of the people; as they have allowed this thing to go on they ought to share the consequences, and not shuffle them off now that they have got their eyes open a little more, and make these consequences fall on one class; but so far as the legal rights are concerned, I think the Government has a perfect right to build a line, and, in fact, it has been held by the Supreme Court of the United States that the Government has a right to build a bridge or railroad right alongside another, and take away its value completely, if they choose to, unless an exclusive franchise has been granted. We have a right in that way, or by legislative regulation of rates, to squeeze the water and wind out of these overgrown capitalizations, but I am not in favor of doing that to any severe extent. I think we ought to stand the consequences of a system that we have ourselves permitted.

Q. (By Mr. A. L. HARRIS.) If a railroad company has \$100,000,000 of common stock and that stock is only worth 20 per cent, you would merely undertake to pay the value of the stock and not the inflated value?—A. The market value. That is the rule of law, that we should pay the market value.

Q. That, then, would reduce the value of the railroads that the Government would have to pay much below the 11 or 12 billions of face capitalization?—A. Yes. To make my idea a little clearer, let me go back to Vanderbilt's time. When he increased the Hudson stock, I believe a true public spirit would have prompted men to protest immediately in the courts and before the legislature and try to stop that thing before the stock got into the hands of innocent purchasers. If the people had done that and followed up that policy consistently, I believe they would have a good right to claim that they should buy the roads at their actual value, but as they did not do that and as practically the whole country by inaction has acquiesced in that system, it seems to me it is not fair to turn around and say: "We have stood by and let you issue a lot of extra stock, and men have bought and paid for it, in many cases without means of knowing whether it represented value or not, but we've come to the conclusion, now that we want to buy the roads, that this won't do, and we've determined to knock the bottom out of the whole thing and pay only actual value for the roads."

I disagree in that, however, with most of my friends. Even Professor Bemis thinks I am too conservative on that point. He believes the water ought to be squeezed out. He advocated that the Boston and Albany should be purchased by the State at \$27,000,000, as they had the right to do under the charter, although they had allowed a process of accretion to bring the capitalization to about \$65,000,000. I do not think that would be fair. I think it would be wrong; we have a legal right to do it, but not a moral right.

Mr. PHILLIPS. Have you anything further to state, Professor, by way of conclusion?

The WITNESS. Only that I think the line of least resistance in industrial progress in this country at the present time is to work for public ownership and the cooperative organization of municipal monopolies, such as electric light and street railways. The movement for municipal street cars is very strong in Detroit and in Chicago, and in some other cities there is a vigorous sentiment in favor of public telephone exchanges and such things as that. I do not think it is advisable that national railways should be attempted until the growth of sentiment in this country is very much stronger in favor of it, which constitutes a powerful reason for putting forth every effort to enlighten the people upon the enormous benefits of a well-managed system of public railways in order that we may develop as soon as possible the conditions that will make it wise to establish public ownership and operation of our railroads. On the other hand, I do not see any reason why the manifest duty of Congress, under the Constitution, to provide the best means for transmission of intelligence should not at once result in taking the first steps toward the establishment of a system of postal telegraph and telephone communication.

(Testimony closed.)

WASHINGTON, D. C., March 5, 1901.

TESTIMONY OF MR. ALBERT B. CHANDLER,

Of the Postal Telegraph Company, No. 253 Broadway, New York.

The commission met at 11.22 a. m., Mr. Farquhar presiding. At that time Mr. Albert B. Chandler, of the Postal Telegraph Company, appeared as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. FARQUHAR.) You will please give your name and address and official position to the stenographer.—A. Albert B. Chandler, No. 253 Broadway, New York. I have been president of the Postal Telegraph Company for 15 years, and am now chairman of the board of directors.

Q. (By Mr. CLARKE.) Will you please give us a concise history of the organization and development of the Postal Telegraph-Cable Company?—A. The Postal Telegraph-Cable Company is a reorganization of the original Postal Telegraph Company, and has been 15 years under its present organization and management.

Q. You may give, if you please, a statement as to whether or not any other companies entered into it.—A. In its development it has acquired quite a number of smaller telegraph companies that had been built up between the years 1880 and 1890, but the property is chiefly of its own construction.

Q. Were those other companies local, or did they aim to do and undertake to do a general telegraph business?—A. Several of them were of sufficient extent to say that they were doing a general telegraph business, but they were all local—that is, none of them were extensive, none of them covered any considerable portion of the country.

Q. When were the Postal Telegraph Company and the Commercial Cable Company united?—A. They have from the first been in very close alliance, under contracts of connection. They have been substantially one property since January, 1897.

Q. We shall be pleased to have you give the capitalization of the company in bonds or stock, if both classes of securities have been issued, and also its mileage, number of offices, number of employees, etc.—A. The capital stock of the Postal Company was, at the time of the acquisition of the property by the Commercial Cable Company, exchanged for bonds of the Cable Company. The Postal Company has never issued any bonds; that is, the present Postal Company. What we term the land-line portion of the property is now represented by the bonds issued by the Cable Company in exchange for \$20,000,000 of stock that had been issued previously and for property since acquired. The total amount is \$20,000,000.

Q. That is, of bonds?—A. Yes, sir.

Q. (By Mr. FARQUHAR.) Is the whole capital stock in bonds?—A. Yes. On the land-line properties there are no shares of stock outstanding, excepting that the land-line system consists of nearly 40 different corporations, and in many of these corporations the entire capital stock is not owned by the Postal Telegraph-Cable Company, nor by the Commercial Cable Company.

Q. In what shape is the capitalization of the Cable Company?—A. That is in stock.

Q. Do you include that stock in your \$20,000,000?—A. No. I would like to be excused from answering for the Cable Company in respect to any of its affairs, for the reason that the organization is absolutely separate from the land lines. It is a trans-Atlantic property, and although its business is closely related to the land-line business, any inquiry made respecting it should be made of an officer representing that company.

Q. What interest do the bonds carry?—A. Four per cent.

Q. Can you state anything with respect to your dividends?—A. The Postal Company earned and paid 4 per cent dividends previous to the sale of its property for a comparatively short time, and it has earned the interest that has been paid by the cable company on the bonds since.

Q. Have you any sinking fund in connection with it?—A. No.

Q. Have you a cumulative feature in your interest bearing?—A. We have not.

Q. Any debenture bonds?—A. No; the bonds are mortgage bonds.

Q. Do these bonds cover simply the whole property, or do they also cover franchises or patents?—A. They cover whatever the company has acquired, and the company's acquisitions have been not only in physical properties, but in franchises, patents, and a variety of requisites for carrying on the telegraph business that have cost money.

Q. Your bonds cover what you might call good will or the working franchises of your company?—A. Yes; they cover everything that belongs to the company.

Q. (By Mr. FARQUHAR.) Is this alliance with the Cable Company in the form of contracts or in material and ownership of lines, or is it simply in control of it?—A. It is simply in control of it.

Q. Have you used the surplus earnings of your company in extending your lines?—A. Yes. Our surplus earnings have been used in part to build up the system. The company did not begin the payment of dividends until April, 1896. It is impracticable now for us to ascertain accurately the amount of surplus earnings that have gone into the property.

Mr. FARQUHAR. It would be interesting to know how much surplus earnings have entered into the extensions. It would save people afterwards thinking there was a covering in the matter that had not been brought out by the commission itself, and from your annual reports it would be easy to summarize how much surplus went into extension.

Q. (By Mr. CLARKE.) In brief, was the company paying dividends when you became connected with it?—A. Very far from it. It was operated at very heavy loss.

Q. What is the present extent of the property and amount of business being done?—At the close of last year our mileage, poles and cables, not including the Atlantic cables, was 26,043 miles, and the wire mileage, 169,236; the number of offices, 2,781. The number of messages transmitted last year was 16,523,444. This refers only to the property of the Postal Telegraph-Cable Company, and does not refer to its Canadian connections or any other of its connections, nor to the cable service.

Q. (By Mr. CLARKE.) Can you give the average rates per message?—A. The day rates for messages of 10 words, exclusive of date, address, and signature, range from 20 cents, applying locally in a few cities, to \$1, applying between the

extremes of the Atlantic and Pacific coasts. The average amount received per message by the Postal Company during the year 1900 was 34.2 cents.

Q. (By Representative OTJEN.) Can you give States or localities in which your lines operate?—A. We cover the country pretty fully from Maine to Oregon and California.

Q. It would be substantially correct if you said you covered the whole United States?—A. Almost all of the commercial centers of the United States are reached by our system now. There is no very considerable city that is not in communication with us, and our business may properly be said to be interstate business. I do not mean that there is not a great deal of local business within the States; what I mean is, all offices accept business for any State.

Q. (By Mr. CLARKE.) Is your business competitive in all these places with the Western Union?—A. No. We have a good many offices at places where the Western Union has none; that company has a great many more offices at places where we have none. In the whole system, including Canadian lines and all others with which we "check direct," as telegraphers say (we check direct with offices that are not our own under contract relations, and they check direct with us), there is no transfer point at which business and tolls are divided, and messages go through as on one line, yet there is a division of tolls out of our whole system reckoned in that way which adds largely to our number of offices. There are a little over a thousand offices that are not reached by Western Union lines.

Q. In places where both companies have offices is your business competitive?—A. It is essentially so.

Q. Have you any understanding or agreement with your competitors in regard to a division of business or in regard to the method of conducting business?—A. We have no agreement or understanding with the Western Union Company with reference to any division of business. They have no interest in our company, its property, or its business, and we have no interest in theirs; but we have an understanding with them respecting rates and respecting certain methods of competition, the giving of rebates, and things of that kind, that are equivalent to paying for the obtaining of business. We aim to put an end to that form of wasteful competition.

Q. What had been the practice concerning rebates and other forms of cutting prior to this agreement?—A. Such methods had prevailed to a very large extent previous to 1888, to a very injurious extent to all concerned. At the time such understanding was had a large number of rates were reduced, long-distance rates particularly, and the very low rates—10, 15, and 20-cent rates—that had been established by the various smaller competing companies were done away with, it having been well ascertained that the more business done on that basis the worse for the doer of it.

Q. Who had been the principal beneficiaries of the cutting, or the rebate, or whatever form the competition took?—A. The commercial public, chiefly. Of course the general public benefited to a certain extent, but large commercial houses were the chief beneficiaries of that system of conducting business.

Q. Were they generally commercial houses or brokerage houses?—A. Both, and under the system of rebates the meanest would get the largest favor. That may not be a very graceful way of putting it, but it is a fact.

Q. That is to say, the man who was most enterprising in pushing for the reduction?—A. The one who insisted on having the largest rebate that could be allowed, or else he was "going to give his business to the other company."

Q. Since this understanding all that has been done away with?—A. Practically all. It is not the intention of either company to allow anything of that kind to happen.

Q. Thereby a small customer is as cheaply served as a large customer?—A. Just the same, and that is a point which perhaps people not acquainted with the telegraph business might understand by an explanation better than they can if they never have given it any thought. It is not exactly like carrying letters or carrying freight, by which you can carry a car approximately at the same price as you can carry half a car, but in the transmission of telegrams the facilities are used exactly alike, for every message of equal length takes exactly as much time of the operating service and as much use of the line as every other message of equal length. There is a limit to the capacity of wires, and carrying messages, therefore, is not the same as carrying on a business on the plan of wholesale and retail, which has been often urged.

Q. In this connection, concerning unfair advantages, I would like to inquire to what extent the free-frank privilege prevails in your company.—A. To a much lesser degree than has been true of other companies, and still it prevails to a considerable extent in our company—unfortunately, to a growing extent. The number of people who like to avail themselves of that privilege grows with every

year. Originally franks were only given in our service under contract relations involving reciprocal service. They are now given in case of quite a good many public men who think they are entitled to the free privilege. I do not know why, but they seem to think so.

Q. Do you give franks voluntarily or only when they are asked for?—A. I do not think I can answer that question by saying that either is true in every instance. In the main, our franking privilege is extended upon application.

Q. (By Mr. A. L. HARRIS.) When you say you give franks to public men, do you mean members of State legislatures?—A. They are about as eager as anybody else in their pursuit of franks.

Q. (By Mr. FARQUHAR.) Is the franking privilege usually extended to members of Congress?—A. For quite a good many years the Postal Company never issued a frank to a member of Congress because he was a member of Congress. There were some members who were connected with railroad service or with some other business with which we had reciprocal relations which entitled them to free service. At present, perhaps under the necessity of meeting our great competitor, as much as for any other reason, and on account of applications, for another reason, there are quite a large number of members of Congress who hold franks of the Postal Company.

Q. Does the privilege extend down to members of municipalities, aldermen, mayors, and judges of the courts?—A. To a considerable extent; not everywhere; not to all, but to a considerable extent.

Q. (By Mr. CLARKE.) Do you have to get franchises or privileges from cities or towns for the erection of poles, etc.?—A. Yes. It is now, I think I may say universal, that in going through any city or town we have to acquire a franchise. Of course we always had to obtain a right of way; but now it is the practice to require a formal franchise in every incorporated city or village, for they undertake the regulation of telegraph affairs to a greater or less extent. We claim that under the post-road act of Congress of 1860, and the amendments thereto, a municipality can not prevent our erecting poles and wires in the cities, but can only regulate the construction. Practically, however, the difficulty of obtaining an ordinance from the municipality for the construction of our lines is as great as though we obtained an entire franchise from the municipality.

Q. Do you have to pay for these contracts, franchises, or privileges?—A. The manner of acquiring them varies about as much as the number of places we go through. Hardly two are alike, and in one way or another they have to be paid for. Our preference is to pay a reasonable concession to the city government; that is the preferable way of dealing with it, and let that end it.

Q. But does that end it?—A. Unfortunately, it does not always end it.

Q. Do members of the city government have to be seen personally?—A. I have never seen any of them personally, sir, and I do not know; not in the way you use the word "seen."

Q. I used the word in a perfectly innocent sense—whether they had to be conversed with in order to get their consent to hold a meeting, to pass a vote, or anything of that sort.—A. It is very common to make our wants known and to explain our purpose and the extent of our use of the public highways or other privileges, and make it understood that we are trying to do good and not harm, and are willing to pay what is reasonable, right, and proper to the municipality for it. We endeavor always to remove all reasonable objections to our extension, to place our poles where the city engineer or city officers desire them to be placed, and generally put ourselves in accord with the city authorities. We can't always do the business with such harmony and under such conditions as we would like to.

Q. (By Representative ORJEN.) Do you meet with any opposition coming from the competing companies? I mean in obtaining franchises through municipalities.—A. Sometimes we have done so. I can hardly say that at the present time there is any opposition of that kind, unless there should be some question particularly interfering with their own route. There has been some conflict in regard to interference with each other's lines, but we take good care to avoid all conflict of that kind, and it rarely happens any more.

Q. (By Mr. CLARKE.) Do you keep any account in your company of the business value of the franks that you give?—A. Yes.

Q. Are they given in such a way that you know exactly how much you are out of pocket by means of that or how much they favor the man who receives them?—A. Yes. The account is not as accurately kept as that of paid messages, but it is intended to be a substantially accurate account. Our franks that we call complimentary are issued in the form of books of stamps, something after the style of the postage stamp, each stamp covering a message of 20 words or less, and an additional stamp for additional words. We have certain franks that are issued

in the form of cards for some special reason, chiefly to railroad officers, and of these an account is also kept. I am happy to say that a large proportion of people using our franks treat them very reasonably and fairly. Sometimes people like to telegraph on trifling affairs and send very long messages when perhaps letters ought to be sent.

Q. (By Representative OTJEN.) You spoke of giving franks to public men, public officials; do you also give franks to people doing private business not in a public line?—A. To a very limited extent; that is done as a matter of reciprocity; sometimes in payment of rent, sometimes in payment for pole privileges, rights of way, and other things of that sort. Sometimes we pay for what we acquire by the issue of franks instead of by paying money.

Q. (By Mr. KENNEDY.) Do you give them to editors of daily newspapers or their representatives?—A. Newspaper correspondents and newspaper proprietors to a very considerable extent have the franking privilege.

Q. (By Mr. CLARKE.) They also have a special press rate for news messages?—A. Yes, their rate is different from the commercial rate, but the rates are alike for like service. There are several classes of newspaper service, and the rates are uniform for each class of service.

Q. On what principle are those franks extended to newspaper men?—A. They are constantly with us. It is a matter of accommodation; it is a privilege that has grown up by long years of practice, and in the main I think is discreetly used.

Q. Do you give franks to other large customers?—A. No, not for the purpose of securing their business. That is another evil like rebating; that would be simply another form of rebating; we do not undertake to do that.

Q. Is it on the principle that the representatives of the press are in a sense public men that franks are given them?—A. Hardly that. A good many of them are old telegraphers; a good many of them have been personal friends of the officers, and they come in contact with us in a different way from what the general public do. The practice has grown up from a very early day. I do not know that I can give you any better reason.

Q. (By Representative OTJEN.) Do I understand you that these franks are confined to messages concerning private or social affairs, or do you give franks to papers whereby they may transmit news connected with the paper?—A. There are business franks issued for business purposes and as a way of paying for rights and privileges and benefits. The complimentary franks are for personal and social messages.

Q. But do I understand you that you give franks to newspaper men which enable them to transmit news to the papers?—A. No; we do not.

Q. News messages are paid for?—A. They are paid for at newspaper rates, special rates, or whatever the rate is, according to the class of service that is performed.

Q. (By Mr. KENNEDY.) I would like to ask how that rate to newspapers compares with the rate that is given to the commercial public and the public generally?—A. It is a much lower rate.

Q. How much lower?—A. That differs according to the circumstances of the case and the distance and number of papers served. For instance, in many cases a great many papers are served by one sending and distributed to 20 or 30 different places, and of course a service of that kind is not comparable with service of one delivery at each place. It is not comparable with ordinary commercial service.

Q. Is it not less than one-half the rate given to the business public?—A. There are several classes of newspaper rates. The lowest applies to dispatches filed by a press association, to be delivered at 5 or more places at one sending. On such the rate to each paper may in some cases be as low as one-fifth of a cent a word. Rates on newspaper specials vary from a quarter of a cent a word on matter transmitted at night, between comparatively near points, and one-half a cent per word for the same service transmitted during the day, to 1½ cents per word for night and 3½ cents per word for day service between distant points.

Q. (By Mr. CLARKE.) In your opinion as a financial manager of a telegraph line, could the franking system be dispensed with without any injury to the company as well as to the public?—A. In our company the franking business is not so serious an item as to be a great factor either way. As a matter of individual judgment, if the whole franking privileges of telegraphs and railroads could be done away with, and everybody be induced to pay his own way, I should be glad to see it done; but under the conditions existing it does not seem likely to be accomplished.

Q. (By Mr. FARQUHAR.) By abolishing franks on telegraphs and on railroads, would the general public gain anything by cheaper rates?—A. So far as our company is concerned, the franking is not a sufficient factor in the occupancy of our wires to have any perceptible effect that way. I think I can say that with certainty.

Q. So it just stands in the relation of a privilege to certain favored parties?—A. Yes.

Q. And financially you would not say it would be any benefit to the general public to have it abolished?—A. I do not see that it would make it possible for the public rates to be reduced.

Q. (By Mr. CLARKE.) Since you had this understanding with the Western Union Company in regard to conducting business has there been any increase in the rates to the public?—A. There has been no increase in rates to the public, except, as I stated in the first instance, that there were certain low rates done away with, but there was a much larger number of rates that were reduced at the time that understanding was had, particularly the rates between distant points. It had been ascertained that to undertake to conduct a telegraph business at 10, 15, and 20 cent rates was an absolute loss, and those rates were done away with.

Q. Is it your opinion, therefore, that the understanding has resulted in a benefit to the public as well as to the companies?—A. It has resulted in a very decided benefit to the public in this way. That every man engaged in a business and doing a certain part of his business by telegraph knows that he has just the same rates that his competitor has in his line of business, and that no one has an advantage over another one, and there has been very much less complaint of rates on the part of the commercial public since it was known and understood that uniform rates were established than was true when every man thought he could get an advantage over his fellow if he would only insist upon it.

Q. Then, it is your opinion, founded upon your experience, that the public would be benefited if all discriminations in the transmission of intelligence or the transportation of goods could be dispensed with?—A. That is a very broad subject. I should be glad to see the whole franking privilege done away with; but while it prevails in one direction it is almost impossible that it should not be extended in other directions, and I think it is perhaps a utopian idea to suggest that the whole franking privilege could be done away with.

Q. Have there been any serious complaints on the part of customers who formerly had cut rates since you entered into this understanding to maintain rates?—A. Not since they have come to know that it is an absolute fact and that there is no means of getting around it. Everybody is well contented. At the outset they were rather loath to believe that it was true—that this advantage was not still obtained by competitors.

Q. They all seemed willing to pay if others were to pay?—A. Yes; recognizing that the rates for telegraph service are now very low—much lower than they were before. The tendency all the time is toward lower rates, extending the system of low rates to remoter points.

Q. Do you have any arrangement with the Western Union Company for transmitting your messages over their lines to places where your lines do not run?—A. No.

Q. You do not accept messages except where you have facilities for carrying the intelligence?—A. We do not undertake to accept business for any places not reached by us. If a customer comes to us and offers a message for a Western Union point, we do in some cases accept the service as his messenger to take it to the Western Union office, and pay for it just as he would. We are in that case simply the messenger of the customer to take the message to the Western Union office. That is not a business which we undertake to do except for the convenience of our customers.

Q. In cities do you telegraph his message to their office, or do you send it by messenger?—A. Send it by messenger. We have no means of connecting by wire with Western Union offices.

Q. (By Mr. LITCHMAN.) Is there a community of interest between your company and the Western Union?—A. No, except as I have explained to you. The only community of interest is that both recognize that rebates, excessively low rates, and things of that kind can not be afforded, and both companies have abandoned them.

Q. I have seen it stated in the public press that there was an understanding between managers of the two companies which resulted in the operation of them practically as one company.—A. I have found it best not to believe everything that is in the newspapers. The statement you mention is not true.

Q. (By Mr. CLARKE.) In what relations do you stand to railroad companies along whose lines your lines run?—A. We have contract relations with but very few railroad companies. We own lines on a few railroads, and we have contract relations in a limited sense on a few others, and we perform reciprocal service for a few railroads that we have no contract relations with, as a matter of mutual convenience and out of courtesy; but our relations with railroads are limited.

Q. Are any railroad station agents agents for your company?—A. In the cases of a few railroads. The railroad contracts apply to the Western Union Company chiefly under old-time conditions, when the railways and telegraphs were being built up in the early days.

Q. Have you any contracts with railroads which give them business preference over that of the public?—A. There are usually on railway routes certain wires assigned to railway purposes, of which the railway companies have exclusive use, and they give preference to messages referring to the movement of trains. The intention is that commercial business should occupy its own wires and the railroad service occupy its own wires.

Q. When there is an arrangement of that kind, are there other wires over which public business can be sent?—A. On railroad routes?

Q. Yes.—A. I do not know of any railroad route—I do not think of any now—I do not think there is any that has not commercial wires as well as railroad wires along the route.

Q. Have you ever received complaints from the public that their messages were neglected, or have you ever given as a reason for any delay in the transmission of a message that the railroad business had to take precedence?—A. I do not remember any such instance.

Q. Have you in your telegraph experience, before you became connected with this company, any knowledge that such a condition existed or had existed?—A. Undoubtedly in some cases during an interruption of lines or wires, railroad business has been carried by commercial wires to some extent. I do not remember ever to have had a complaint on the part of the public that business was delayed or injured by reason of that fact. In practice I know it has happened to a limited extent; in case of storms, for instance, when part of the wires were down and business was compelled to be done on a single wire or two wires, and the movement of trains requiring the use of wires, the commercial business has had to wait. That is a rare occurrence.

Q. One witness before us testified that he sent a dispatch from New York to Philadelphia and that he arrived at Philadelphia that day, and when he arrived he found his dispatch had not been delivered, and that it came in long after he had arrived. How can you account for such delay between two such cities, where the telegraph facilities ought to be very ample?—A. That might be accounted for in a great number of ways. The message might have lain in the Philadelphia office through some oversight for a long enough time for a train to go from New York to Philadelphia before anybody discovered it. Such accidents do happen sometimes. There might have been such an interruption of lines over the particular route where the message was assigned that it was delayed. There are a good many ways of accounting for the delay. In every case of complaint of that kind we have to investigate and find out exactly what did happen to the message.

Q. (By Mr. FARQUHAR.) Have you any rule of precedence in respect to dispatches that Government business shall go first, for instance, and railroad business next, brokerage business next, and the public next?—A. No; there is no such regulation. Just as you stated, Government business under the law is entitled to go first. There is no other regulation or order of business except such as might be instituted by a chief operator for an emergency on account of the condition of wires. There is no general rule on that subject.

Q. Are the stock and brokerage dispatches liable to get the right of way over ordinary business?—A. A very large proportion of stock exchange and brokerage business is done over wires that are assigned to that purpose; that is, they are leased. But there is no arrangement or engagement on the part of our company that such messages shall have precedence over those of any other persons.

Q. Can brokerage companies lease a wire as cheaply as a newspaper?—A. That depends on conditions—on the extent of the service to be done and the connections to be made. What we aim at is to provide a uniform rate between stated points under equal conditions. The rates are uniform to that extent; but that there is no difference in rates under any circumstances I would not say. When there is any difference, there is a business reason for it.

Q. When brokers advertise their own wire, is there more than one broker on the line?—A. Sometimes; sometimes several brokers lease a wire, and they each have their own operator and connection and they take care of the operating service

altogether. The telegraph company simply furnishes the wire and battery and keeps them in order, and the brokers carry on the business themselves.

Q. Both for the sending and receiving end they have their own employees?—A. Yes.

Q. (By Mr. CLARKE.) How many people has your company in its employ?—A. Nearly 9,000.

Q. Are they all of one sex or are both sexes employed?—A. We have a great many females employed as operators and clerks; not a large proportion of the whole, but still a good many.

Q. What are the rates of wages paid?—A. The wages vary according to the work to be done, the nature of the work, and the service rendered in a variety of ways. The salaries of operators range from \$25 to \$85 per month, the average being about \$60. The salaries of clerks average somewhat less.

Q. Are you able to state in this connection whether or not wages are substantially at the same rates they were a few years ago, or have they been increased or decreased?—A. I think there has been little change in the rate of pay to telegraph operators either way, on an average, for the last 15 years.

Q. Are you able to state in this connection how the wages compare with wages for skilled labor in other employments in the same places?—A. There are so many different kinds of skilled labor that really bear no relation to the telegraph service that I could hardly answer that question intelligently.

Q. Is your labor organized?—A. There has been quite a number of organizations. I do not know whether there is an existing organization that is operative now. A number of organizations have been instituted and exercised for a time considerable influence but if there is any in existence now I do not know of it.

Q. Is there any understanding between your company and the Western Union that each will not hire away the other's help or take help from the other?—A. No.

Q. Is it a matter of common practice that telegraphers go from one company to the other?—A. Sometimes. I think that is regulated altogether by supply and demand.

Q. Have you had any labor difficulties recently?—A. Not recently. We have not had in our own company any difficulty of that kind.

Q. Are your engagements made with your operators singly or through committees?—A. Singly.

Q. Do you inquire whether or not they belong to a union before you engage them?—A. No.

Q. Do you know how the rates of wages paid by your company compare with those of the Western Union?—A. I think they are very nearly uniform for the same service. I do not know of any difference. There are several classes of operators.

Q. Can you tell us about the hours of labor of your employees?—A. Yes; there are established hours for day and night service. In the principal cities 9 hours is accounted a day, and at night 7 hours. This varies somewhat in different localities, and in the smaller offices and branch offices the hours of duty are arranged with reference to the necessities of the case.

Q. Has your company kept abreast with the march of invention and brought into use the new and useful devices in telegraphy?—A. It has endeavored to do so to the fullest extent.

Q. It has been frequently asserted by the advocates of Government ownership that it is not in the interest of private companies to take in new devices that would mean the displacement of the old, in which they have large investments, and that therefore the service is not conducted in the most economical way or to the best advantage of the public. What have you to say to that?—A. That is not true so far as our company is concerned and so far as my experience goes. There has never been a time when we would not very gladly have availed ourselves of anything that was a real improvement upon our manner of transmission or reception of messages, or otherwise in the conduct of the business. A great many so-called improvements have been presented which have had apparent advantages, but which, when brought into actual practice and into competition with appliances already existing, have been found wanting.

Q. Have you studied the operation of the telegraph system of Europe under government control?—A. Only in a general way; not to such an extent as to make it competent for me to testify in respect to it.

Q. Do you see any objection to the acquisition by the United States Government of all the telegraph lines in this country, provided they are taken at a fair valuation? I mean, do you see any objection inherent to the business itself whereby the public would not be as well served as by the several companies?—A. I know of no reason why the Government might not conduct the business as

well as it can be done by corporations. Whether the Government would conduct it as well is another question. Judging from the excellence of the mail service and from the fact that the Government could conduct the business more cheaply, perhaps, in some respects than corporations can, in the Post-Office Department, and in the absence of incentive to earn dividends, possibly it might be that the Government could carry on the telegraph business effectively to the satisfaction of the public.

Q. Have you any knowledge that would justify you in expressing an opinion as to whether the European governmental ownership and control is successful from the point of view of public accommodation?—A. I can only state that on information and belief, because I have not come directly in contact with it. I know some of the officers of the telegraph in Great Britain, and I have had the testimony of business men who have traveled much abroad, and I believe that the business carried on by the Government there is generally quite acceptable to the public. It is not profitable to the Government, so far as I know.

Q. Is it conducted for profit, or is the governing principle to render the public the most service?—A. I think the latter is true.

Q. If this Government were to take over the telegraph systems, are you prepared to indicate what would be a proper basis of appraisal of the property?—A. That is too serious a question to answer "off hand."

Q. It has often been said that the Western Union Company has been grossly overcapitalized. I will not ask you your opinion about that, but I will ask you if there is telegraph property which has cost money in the form of contracts, franchises, privileges, etc., which can not be classified as tangible property, either real or personal?—A. Property of that kind enters very largely into the telegraph, and has not only cost money, but is indispensable to the conduct of the business.

Q. Is it your opinion, then, that if the Government should ever take over the properties, it ought, in justice and equity, to appraise such properties at a fair value?—A. I do not see how it could fail to do so if it proposes to do equity. The intangible properties as well as the telegraph lines have cost money not only, but they have cost large sums of money, and they have accomplished a vast amount of good; they have made practicable the conduct of business that without them would not have been practicable.

Q. Would the cost of reproducing lines and instruments and offices by any means measure the entire cost of the telegraph systems of the country?—A. No; it would come very far short of it.

Q. If the Government were to acquire the properties, in your judgment as a practical telegraph man, should it be done by degrees or all at once?—A. It seems to me the wise course would be to exercise very great care and take all the time necessary for it, to have a very complete organization, and then have the change take place simultaneously. It seems to me that would involve the least interference with business and would be the best manner of proceeding, by all means.

Q. Do you think it would be practicable to introduce the telegraph into many country post-offices and have both the mail service and the telegraph service performed by the same force?—A. I know of no person who it might not be done.

Q. If that could be done, would it result in a considerable saving in the expense of operating the telegraph?—A. Undoubtedly so.

Q. (By Representative BELL.) About what proportion of the business does your company do in the United States?—A. The number of messages transmitted by our company last year was about one-fifth of the whole—a little more than one-fourth as many as the Western Union.

Q. And the majority of your stations have competition?—A. Yes.

Q. With the Western Union?—A. Yes.

Q. Now, where is the necessity of having two companies doing business at the same point?—A. We shall have to define the word "necessity," I think.

Q. Well, is it good economy?—A. Of course the business could be done more cheaply under one management; but the difficulty about that has been hitherto, when the whole telegraph business has for a time been done under one management, that new competition has sprung up of a wasteful sort, and legislation has been instituted against telegraph interests. Public clamor has been raised against monopolies, and it has not so far been practicable to maintain a single service for any considerable time.

Q. Does it not strike you as very expensive economy that we must burden a community with two lines in order to get a reasonable rate, or with two railroads, or a duplication of anything else in the same line? Is not that a waste, in your judgment?—A. It would seem unnecessary, and if we could reach a utopian condition of things it would be unnecessary. Business is no doubt better done under competition.

Q. Would not a strict Government regulation be more reasonable than to burden a community with a new line to reach the same purpose?—A. If the Government owned the entire property and carried on the whole business itself, for the benefit of the whole people, it might be done.

Q. Could the business not be regulated by statute without taking the whole system?—A. If it should be regulated by statute, would it not be necessary to provide, in order to accomplish the economy, that there should be, for instance, only one office in a particular town?

Q. I do not know that that is necessarily true; but it has always occurred to me that the idea that you must bring in a parallel railroad or a parallel telegraph line in order to reduce the rates is a contradiction in itself, because the people must pay the expenses of both.—A. Hitherto the people have not been willing to rest—the commercial public have not been willing to rest—under a single management of the telegraph.

Q. Has not that been because legislatures and Congress have neglected to thoroughly regulate?—A. I can not say. The thorough regulation of the business under competitive conditions by Congress would be an exceedingly difficult matter, I think, without doing serious injustice.

Q. You think the better way would be Government ownership?—A. Government ownership would simplify the case very much.

Q. In European countries my remembrance is that their rate is about a cent a word.—A. That depends; it is not universally so. In European countries the distances are very short in comparison with ours, and, besides, in European countries every word is charged for. Here the rate is upon the message itself. The date, address, and signature are not paid for.

Q. Have you ever made a comparison to ascertain the proportion that part of the telegram we do not charge for would be to the whole?—A. The computation has been made some years ago in answer to a committee of Congress, and the figures obtained at that time are in existence. We have not the telegraph tariff rates of European governments, and I can only say that I have repeatedly been informed, both by telegraph officers abroad and persons using the telegraph there, that, taking into account the fact that all words are charged for by foreign governments, and that the distances within the limits of European countries are much less than in the United States, rates there are nowhere lower than here, and in case of messages going from one country to another they are much higher.

Q. I notice the reports state now that in the little country of New Zealand, that is now attracting so much attention, in each railroad station building they have a railroad station, a telephone station, a telegraph station, and a savings bank in the same building, under the same management. Do you think such an arrangement would be feasible in a country like this, where things are on so much larger a scale?—A. That is a great question; I would hardly feel myself competent to testify on that point. That is a degree of concentration that would depend so much upon local conditions that I think a man would have to be an expert in all those kinds of business, as well as a statesman and political economist, to decide it.

Q. There would be no question but that you might distribute the offices in the same building?—A. Of course, for the public convenience, you can have those kinds of public service done in one central point. I think that could be so; but whether they could be done under one management just as well is a question I am not able to answer. I think that would have to be tried to be proved.

Q. You spoke of your dividends being four per cent; is that upon the actual investment?—A. There are no dividends. The 4 per cent is the interest upon the bonds that were issued.

Q. And do you figure the amount of your earnings that you put into extending lines, or is your 4 per cent beyond that?—A. The 4 per cent is paid upon the \$20,000,000 of bonds. Any earnings beyond that amount are invested in extensions and new construction.

Q. How does the earning capacity of your land lines or of land lines generally compare with the earning capacity of your cable lines or of cable lines generally, taking into account the expenditure?—A. The Commercial Cable lines up to this time have the advantage over the land lines.

Q. Now, relative to your franks, is it not your judgment that for the good of the morals of both sides they should be prohibited? That is, are you or are you not driven to giving franks by men applying for them? Do you not think the prohibition, outside of the equality in the service, would help the public morals?—A. That is a moral question that might have many sides to it.

Q. The frank is an incentive to the public man, is it not, to stretch his conscience a little in furnishing you facilities when you want to get into a municipality—to shirk his duty to you and to the public? And haven't you got to meet

the demand? It seems to me that it gets up a kind of rivalry.—A. I suppose public men should be so strong that they are not to be influenced by such means.

Q. (By Mr. LITCHMAN.) Do you think these privileges would be given if it was not expected that a quid pro quo would be rendered in return?—A. I think the principal feature of the franking privilege is reciprocity.

Q. (By Representative BELL.) If it did not pay it would hardly be exercised, would it? It must be a benefit to the company?—A. It is one of the things that began with the business and has continued the same as with the railway service.

Q. And the evil grows?—A. And it is a practice that grows.

Q. The same way as the railway pass; the company itself seems to be unable to handle it. I suppose that your company or a railroad company would appreciate anyway that you could get out of it?—A. I have already expressed my individual judgment that it would be much better if there were no free privileges. I would much rather pay my own way than to have a pass, provided the rule could be made universal.

Representative BELL. I think the generality feel the same way.

Q. (By Mr. KENNEDY.) You said the tendency was to cheaper rates all the time. Can you say what the average reduction per word or per message of a given number of words has been in 10 or 15 years?—A. In 1880 the rate between the Atlantic and Pacific coast was \$1.50. It is now \$1. Rates between many points of the Northern and Eastern States, to and from many others in the Southern and Western States, in 1880 were 75 cents and \$1. They have since been reduced to 50 cents and 60 cents, respectively. Many 50 and 60 cent rates of 15 and 20 years ago have been reduced to 40 and 50 cents, and many rates of 40, 35, and 30 cents have been reduced to 30 and 25 cents, while the limits within which the lower rates apply have from time to time been extended. The tendency toward a reduction of rates of late years has been brought about largely from the disposition to reduce the number of different rates and to extend, for instance, the limits within which a rate shall be 25 cents, the limits within which it shall be 35 cents, and 40 cents, and 50 cents, until now the highest rate existing in this country is \$1, and comparatively little business is done at that rate; it is between extremes of the country. But there are much fewer rates than there were; they are getting toward uniformity.

Q. (By Mr. LITCHMAN.) Is the rate fixed on what is known abroad as the zone system?—A. Yes; it is somewhat similar. It is fixed through squares, as they are termed. The whole country is districted into squares, and the rate is made from one square to another square, and the manner of arriving at it and giving instructions is in that way. It is a method of simplifying the way of doing it. It is no small task to make a tariff from 20,000 offices to 20,000 offices, and there are more than 20,000 offices in telegraphic communication.

Q. (By Representative BELL.) You spoke of your general agreement with the Western Union to avoid the cutting of rates. You do not mean by that that you put an unreasonable rate on and thus destroy what the world harps on so much as free and unobstructed competition?—A. We have sought to make the rates not only reasonable, but just as low as the business could be well done for. We have tried not to interfere with the efficiency of service.

Q. But at the same time you cut off competition?—A. Cut off competition—you mean by the understanding?

Q. By this understanding.—A. No; the competition is quite as sharp as ever.

Q. That is, you do not compete on the power to reduce rates?—A. We do not compete by buying business.

Q. It would not be buying business if your competitor would reduce the rates below you?—A. Yes; he buys the business by offering the difference between our rate and his.

Q. Yes; but that is competition itself.—A. I see.

Q. And therefore you destroy this free competition?—A. That is simply destruction.

Q. I admit it, I admit it, and I do not believe in it myself.—A. That is destruction. Let me show you how it operates. Of course, you do not need to be shown, but I want to explain it. One or the other has got to go under. Now, between the Western Union and the Postal, which are the principal telegraph factors in this country to-day, if the Western Union reduced the rate from here to New York, which is now 25 cents, to 20 cents, the Postal Company would have to do that at least, and, if it were a question of getting the business—"buying the goods," as I claim—we would probably have to make ours 18 cents, and they would make theirs 18 or 17, and we would make ours 15 or 12 or 10.

Q. Which would result in the survival of the strongest.—A. Certainly; it is inevitable.

Q. Is not that true in all business?—A. The law of gravitation is not any more certain.

Q. And that the higher commercial instinct now is dispensing with unobstructed competition in every line of business?—A. It is the only way to properly protect invested capital.

Q. Does not that also destroy the theory that you make lower rates by bringing in competing lines largely?—A. No; I do not think so. If we bring in competing lines, it enables us to do business on better terms. It has done so in the past, when there were quite a number of lines brought in by one or the other of the larger companies. By removing that competition which has been wasteful in its nature, we have been able to do the whole business cheaper than the whole business was done before.

Q. And yet you had the fixed expenses of two companies?—A. When there are two.

Q. The people bear the whole burden?—A. Yes.

Q. It seems to me that that is a contradiction within itself—that two companies can do the business cheaper than one with all those fixed charges.—A. I have not said that two companies could do it cheaper than one.

Q. I know; but the theory of the world is that you must have two companies, two railroads, two telegraphs. I say that there must be a legislative regulation of the one so that it will not charge so much.—A. The telegraph is entirely different from the railroad in this: The telegraph line represents comparatively a small investment in any particular locality, but it covers an enormous territory, extending throughout the whole country, and its service must be instant in order to be satisfactory. A great many people suppose that all that is necessary to do to get a telegram from here to San Francisco is simply to deposit it in the office here and then as quick as that [snapping fingers] it is in San Francisco. It is impossible to do that. It is a very different service. It requires a series of connections, and separate repetitions for telegraph transmission between remote points. Telegraphic transmission is every letter by itself, every punctuation mark by itself.

Q. Yes; I only refer to that because it presents the principle so strongly and gives it in all its grossness.—A. But you see there is a very distinct difference.

Q. (By Mr. KENNEDY.) You stated your number of miles to be how many?—A. Twenty-six thousand and forty-two miles of route. If we have 20 wires, and the distance is 40 miles, the wire mileage in that case is 40 times 20. Our total wire mileage, as I stated, is 169,236.

Q. Have you figures showing the first cost of putting up the telegraph per mile, and then the subsequent cost of stringing wires?—A. No; you might as well ask what it costs to build a house as what it costs to build a telegraph line. I have known very good single-wire telegraph lines to be built for \$150 per mile, and I have known single miles of telegraph to cost \$10,000 under ground. In some sections of the country the expenditures for poles and wires and transportation and all that sort of thing are comparatively light, and a line can be built across the country at comparatively small cost. In other sections it costs very heavily to build the same character of line by reason of transportation, scarcity of timber, etc.

Q. Did the telegraph companies oppose the enactment of the law for putting the wires under ground in large cities and resist it?—A. I think there has been some change of sentiment on the part of the telegraph companies in respect to that, and that in the main the telegraph companies are rather desirous of putting their wires under ground under recent conditions in very thickly settled portions and the business portions of cities and towns. It is done to a very large extent now, and it has many advantages to the telegraph companies as well as to the public. Of course it is a very expensive thing to do, and when it was undertaken to be done at the outset, and forced through regardless of consequences and regardless of method, and before methods had been worked out for the successful doing of it, there was a great deal of opposition on the part of the telegraph companies; but as methods have been devised for doing it successfully, and as municipalities have been more reasonable in their exactions, it has come to be done more generally.

Q. (By Mr. A. L. HARRIS.) Is there any uniform rule for valuing telegraph property in different States for taxation?—A. No; I wish there were.

Q. Generally, how do the different States get at the taxation now?—A. It is done in almost as many different ways as there are States.

Q. Have you anything to recommend in the way of general legislation for the valuation and taxation of telegraph property?—A. It seems to me that the best way of arriving at the taxation of telegraph property would be to make a single assessment on the whole telegraph property within a State, and then have the company

pay the tax to the State on the whole property and the State distribute it where it belongs. If that plan could be generally adopted, it would be a great blessing to the telegraph companies and would be just as well for the public; but in many cases there is a tax on the capital stock, there is a tax upon the franchise in the city or town, there is a highway tax, there is a tax upon gross earnings, a tax upon net earnings, and all sorts of taxes; a tax on each pole, a tax of so much per mile of wire. All sorts of schemes of taxation are resorted to in different sections, and it makes that branch of our business one of the most difficult to conduct.

Q. You have to pay taxes then in almost every county and town in which your lines run?—A. We pay taxes everywhere, so far as I know; but, so far as I know, the telegraph companies do not object to paying taxes if they are to be taxed within reason, like other people; but they are generally not taxed within reason; they are very outrageously taxed in many places. By reason of the inclination of the States, cities, counties, towns, school districts, and even country municipalities to tax telegraph companies in every way possible, the taxes levied have become one of the most serious menaces to the success of a telegraph company. There is a particular hardship in the levying of license fees by municipalities on telegraph companies, inasmuch as these license fees are either a lump sum, in which case they bear unequally and unjustly upon a small telegraph company as compared with a large one, or these license fees are in the way of a fixed charge per annum for each pole and each mile of wire constructed on the streets and highways, and in that case the tax is unequal and unjust and discriminating as against a telegraph company that has to construct its lines on the highways, as the Postal Cable Company does, as compared with a company that is able to construct its lines on railroad rights of way, as the Western Union Telegraph Company does for the most part.

Q. Will you give the gross amount which you pay in taxes?—A. It is impracticable to give this amount with any accuracy, inasmuch as there are nearly forty separate corporations in which the postal-telegraph system is interested, directly or indirectly, and some of these companies in some of the States pay taxes as taxes, while others pay what is equivalent to taxes in the way of license fees, and I find also that there is considerable litigation pending in regard to the validity of some of these taxes and license fees, and that it is impossible to give with any accuracy the amount of taxes paid by the postal-telegraph system.

Q. Could you give your mileage in the different States and the amount of taxes you pay in each?—A. My answer to this has to be the same as my answer to the last previous question.

Q. The object I had was this, to see where one State was getting the advantage of another State and putting a burden on the others.—A. The chief object of each State seems to be to get the advantage of the telegraph company, and not to get the advantage of another State.

Q. (By Mr. FARQUHAR.) You stated, when asked about European rates, that they were about the same for equal distances. That is, where the Government owns the telegraphs, the European rates were about the same for equal distances as they are in this country.—A. No; I said it was my impression that the rates were lower for equal distances in this country than they are there, taking into account that they charge for every word, while we charge only for the body words in a message.

Q. Have you any means in your head office in New York to furnish this commission with the rates of these European lines that are owned by the Government?—A. I shall not be able to furnish this information.

Q. (By Mr. LORIMER.) Can you tell how the salaries of the telegraphic employees in Europe compare with those of the American employees?—A. We have no information at hand about salaries paid to telegraphers in Europe, except in Great Britain. The conditions of service in America and Great Britain are so different that it is difficult to make a comparison. The mere inspection of the figures is apt to be misleading. In America a young man of good conduct and of skill commands a first-class operator's salary very early in his career. In Great Britain the youth having acquired a fair amount of skill is appointed at a salary of about \$4 per week, and so long as his conduct is satisfactory and he develops ordinary skill as a telegrapher he receives regular annual increments, until he arrives at a maximum figure for a first-class operator of about \$65 per month. In considering salaries paid to the British operator, it must be remembered that at the age of 60 he is retired on a pension.

Q. (By Mr. FARQUHAR.) What proportion do the salaries of the operatives of your lines bear to your total bill of expenses in operation?—A. The salaries paid for all classes of service form a very large percentage—the one great item of expense indeed. It is approximately 70 per cent of the whole.

Q. (By Mr. LITCHMAN.) Do you keep any record of the personnel of the people employed as between men and women?—A. Yes; it is not far from 80 per cent in principal cities, and 25 per cent in the whole country, of female service.

Q. Are the same wages paid for the same service whether it is a man or a woman that does it?—A. We intend that a woman who is able to do just as good work in every way, and is just as useful to the company, shall be paid as well as a man; but it does not often happen. There are limitations to female labor. We can not send a woman on an emergency to perform service all night in the country in case of a railroad wreck or in case of other exigencies, and there are comparatively few women who are as skillful as men as operators, nor are they all as regular in their attendance. The aim is to pay them what they are worth. I do not think there is any discrimination in regard to sex—none is intended.

Q. In your general commercial business, where men and women are employed, how does the rate of wages compare?—A. In our commercial business?

Q. You gave an illustration a moment ago about the railroad business. Now, I am speaking to you about your general commercial business.—A. When a woman is able to work as heavy a wire, as we call it, as a man, I think there is no discrimination.

Q. I have noticed in most hotels that the operators are women. Has that always been the case?—A. I think that has been generally true for the last 15 years particularly. The practice has been growing; it has been increasingly true in offices of that kind. Hotel offices are branch offices having comparatively light business, most of them, and working short wires in connection with the main office in the city or town. It is a very different thing to work a wire of that kind from what it is to work a wire from Washington to Chicago, which is crowded all the time.

Q. You have women employed in the main offices, have you not?—A. Yes; generally working city wires and short wires and performing service that is less exacting and less skillful than that performed by the men.

Q. As a general matter, is it not true that the wages paid to the women are less than those paid to the men?—A. Yes.

Q. The excuse you give for that is that the labor is not as severe?—A. Where the woman is called upon to do the same work the compensation is equal, but it seldom happens that she is able to do it.

Testimony closed.

Whereupon at 1.15 p. m. the commission took a recess until 2 o'clock.

WASHINGTON, D. C., March 14, 1901

TESTIMONY OF MR. THOMAS F. CLARK,

Vice-President Western Union Telegraph Company.

The commission met at 10.55 a. m., Mr. Clarke presiding. At that time Mr. Thomas F. Clark, vice-president Western Union Telegraph Company, appeared as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. CLARKE.) Please give your name and post-office address.—A. Thomas F. Clark, 195 Broadway, New York.

Q. What is your official relation?—A. Vice-president of the Western Union Telegraph Company.

Q. The commission will be pleased to have you proceed in your own way to testify upon the general subject of the telegraph and its relations to the public; and questions will be asked after you shall have finished, unless it should occur to some commissioner to be important that one should be asked as you proceed.—A. I think I would rather have it that way, because the subject will come out a little more in proper sequence than if questions are asked right along.

Now, as I have read the evidence that has been given to the commission in favor of Government ownership of the telegraphs, that evidence has been chiefly based upon the conditions of the telegraph in Great Britain and Ireland and in Switzerland and Belgium. I think, therefore, that before we go into any details it would be better for me to point out the disparity of those comparisons, in order that the peculiar conditions of the telegraphic situation in the United States should appear divested of any mistaken relation to other systems that are of a different extent and which are operated under entirely different social, political,

and physical conditions. I have therefore brought with me two maps. This is a map of Europe [witness indicating map]. The two are practically on the same scale. There is Switzerland [indicating]. The area of Switzerland is 15,981 square miles, or about one two-hundredths of the area of the United States. Belgium has an area of 11,373 square miles, which is one two-hundred-and-sixtieth the size of the United States. Great Britain and Ireland have 120,678 square miles, one twenty-fifth of the size of the United States; the area of the United States, exclusive of Alaska, being 3,092,679 square miles by the census.¹

In Great Britain the population is about 333 inhabitants to the square mile. In Belgium it is 588. In Switzerland it is 183. In the United States it is about 24. Perhaps I would better give the mileage of telegraph in operation, since I have given the extent of these countries now. There is in Great Britain 308,436 miles of wire, or 43,507 miles of line. In Belgium there is 3,964 miles of line and 20,752 miles of wire; in Switzerland, 4,439 miles of line and 13,100 miles of wire. In the United States the Western Union Telegraph Company has 192,705 miles of line and 933,153 miles of wire. Of course, in addition to the Western Union Company, there are the Postal Telegraph Company and some subsidiary companies connected with it, of which that company gives me the mileage, which is 20,882 miles of line and 184,333 miles of wire, which makes altogether in the United States 222,587 miles of line against 425,600 miles of line in all Europe, according to the latest statistics of the international bureau at Berne, and 1,118,086 miles of wire in the United States as against 1,585,267 miles of wire in Europe. Now, comparing the mileages of wire to population, we have 1 mile of wire to 130 people in Great Britain and Ireland; 1 mile to 321 people in Belgium; 1 mile to 222 people in Switzerland, and about 1 mile of wire to about each 76 people in the United States.

You will please bear in mind that the system of the United States covers the whole country, reaches every important center from New York, on the Atlantic, to San Francisco, on the Pacific, and that in order to reach these places it is necessary for the wires to cover large unproductive territories, where the cost of construction has been exceedingly high and where the cost of maintenance is relatively higher than it is in more thickly settled places. This is shown by the fact that of the Western Union Company's wires two-thirds, or about 600,000 miles of them, are in operation east of the Mississippi River, and one-third of the whole mileage is spread over the large unproductive territory west of the Mississippi in order to reach the small towns and camps and places along the various lines of railroads to the Pacific coast. As a foil to these conditions I quote a statement made recently of the population surrounding Manchester, in England. In a radius of 10 miles there are 3,000,000 people, and within a radius of 50 miles there are 8,000,000 people. That is Manchester; what the population surrounding London and other large centers of England in similar radii will be I do not know, but there is almost a case of confluence of populations, making almost one densely settled territory, while we have hundreds and sometimes thousands of miles of line where there is scarcely any business at all.

I have had prepared a statement giving the extent of the telegraph service in the United States, which shows the number of places with a population of 1,000 and over in each State, and the number of telegraph offices and delivery and collection connections through telephones in each State. I will read some of it. In the State of Alabama, to begin at the beginning of it, there are 44 places with a population of between 1,000 and 2,500 each. These figures are taken from the last census—not the present census, because that is not completed and we could not get access to it. There are 10 places with a population from 2,500 to 5,000 each; there are 8 places with a population of over 5,000. That is, there are 62 places with a population of more than 1,000 people each. Yet in that State there are 405 Western Union Telegraph offices, and there are 116 telephone connections with remote and small localities for the collection and delivery of occasional messages, making in all a service covering 546 places in the State of Alabama, although there are only 62 places there with a population of more than 1,000.

I will also give a few examples from the State of Massachusetts, that you may see the drift of the figures. In that State there are 165 places with a population between 1,000 and 2,500, 73 of between 2,500 and 5,000, 79 of 5,000 and over, or 317 with a population of more than 1,000. There are 405 Western Union telegraph offices and 355 telephone connections for the collection and delivery of messages, making 860 places served in the State.

¹ See Exhibit A for statistics concerning telegraph lines in foreign countries.

In Pennsylvania there are 249 places with a population of 1,000 to 2,500, 92 of from 2,500 to 5,000, 84 of 5,000 or over, or 425 in all, with 1,566 Western Union offices and 707 telephone connections, or 2,585 places served by telegraph. Now, we will go to the far West.

Q. (By Mr. LITCHMAN.) Right there, Mr. Clark. That enumeration of course includes the stations in large cities, like Philadelphia?—A. Only 1 office for each city is included. There are no branch offices included in this statement at all. In New York we have, say, 250 branch offices, but they are not included; it is simply the one place.

The State of Washington has 22 places with a population of from 1,000 to 2,500, 7 of 2,500 to 5,000, 7 of over 5,000; 36 in all. We have 230 Western Union offices and 96 connections by telephone, making 344 in all in the State.

Now, taking those States as to population, Alabama has 35 people to the square mile, Massachusetts has 349 people to the square mile, Pennsylvania has 137 people to the square mile, and Washington has 7 people to the square mile. Here is a State, Montana, with 1 person to the square mile. There are 23 places with a population of from 1,000 to 2,500, 4 places with 2,500 to 5,000, 4 places with over 5,000, 31 in all, yet we have 160 Western Union offices, 103 connections by telephone, or 292 places in all in the State receiving telegraphic service.¹

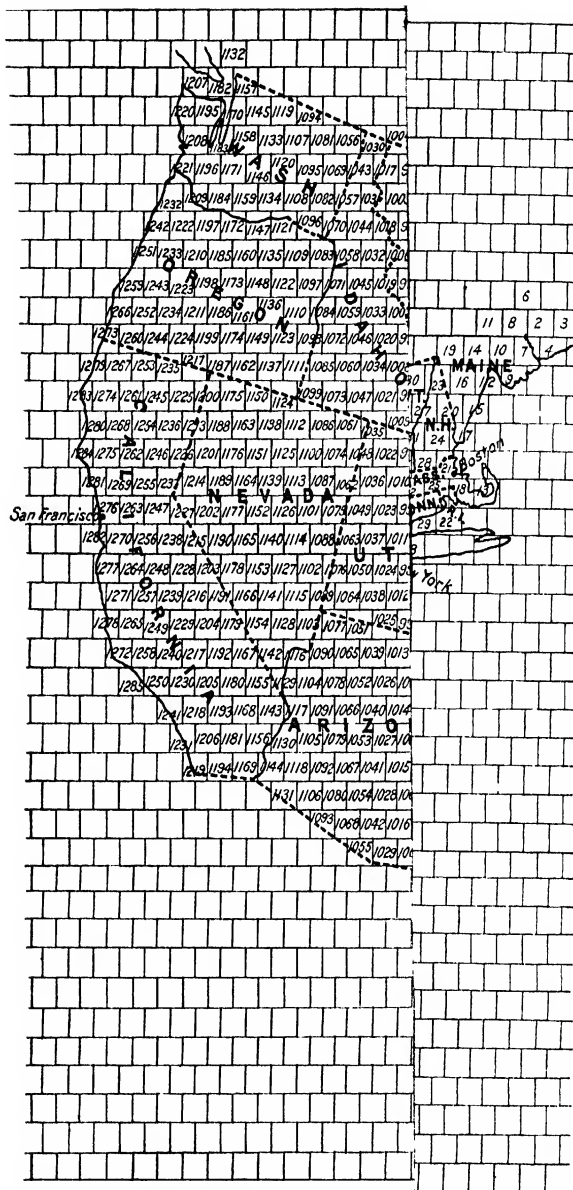
As a further basis of comparison on these points I may say that there are about 59,000 places reached by the telegraph companies and their connections in the United States. There are 76,000 post-offices in the United States. Great Britain has, as far as I can ascertain, about 40,000 post-offices, with 10,816 telegraph offices. Roughly speaking, the telegraph reaches practically 50 per cent of all the places where there are post-offices in the United States to-day, while in Great Britain it still, although the population is so dense and the distances so short, reaches only about 25 per cent of the post-offices.

As I have shown the comparison of the areas of the countries and the extent of the telegraph systems, it may be well to take up the comparison of rates now. I presume that you are advised that the rates charged by each separate Government system in Europe have no relation to the business sent from one country to the other, or what we technically call "through" business. It is quoted to you continually, in the arguments in favor of Government ownership as against private ownership, that the rates in Great Britain and the rates in France and the rates in fact in any European country are very much lower than they are in the United States. That is true to a certain extent for the local business in those countries, but for the through business on distances that compare at all with the distances over which we send business in the United States, the rates in Europe are very much higher. For instance, in all countries of Europe they charge for all words transmitted, for the address, the text, and the signature of the message. In the United States we send the address free and the signature free, and base our tariffs on a count of 10 words for the text of the message. The rate in Great Britain is 12 cents for the whole count of the message, anywhere in the United Kingdom.

Q. (By Mr. CLARKE.) Is that irrespective of the length of the message?—A. No; for 12 words.

Q. Twelve cents for 12 words?—A. Yes; 12 cents for 12 words, and 1 cent for each additional word. In France the charge is 10 cents for 10 words or less; in Norway and Sweden, 10 words or less, about 13 cents, I think it is half a krone; in Germany, 10 words, 12 cents; Belgium, 15 words or less, 10 cents. Now, we find by careful examination, a fair examination of business, that we transmit about 11 words in every message free—that is, of the address and signature—so that on that basis we send for our 25-cent tariff on the 10-word basis—31 words, whereas the interior rate in European countries is made on a basis of from 10 to 15 words, counting everything. To reach a fair conclusion on comparable conditions, I will take the British Government statistics, because they are quite complete and because the British operation of the telegraph generally furnishes the burden of argument with the advocates of Government ownership. From New York to any place in New England our rate is 25 cents for 10 words, 10 text words; that is, 25 cents for 21 words, because, as I have stated, the average on a fair count of a large amount of business shows that we transmit 11 words free, figures counting as words. The longest circuit that can possibly be worked in Great Britain is about 600 miles, but messages sent that distance would represent a very small part of their business. Their principal business is done, of course, between and within the large centers, which are much nearer together than that.

¹ See Exhibit B for the full tabulated statement.



I think that their own statistics show that about 65 per cent of all their messages are sent into and out of London, while the distance of our transmissions varies from a few miles up to 8,000 or over.

Q. (By Mr. LITCHMAN.) In that connection, have you anything in your statistics to show how large a proportion of your work is brokerage and how large is commercial work?—A. No; you can't get at that. It would necessitate an analysis of all the business and of all the messages, and even if we could make that analysis we should hardly be able to determine what was brokers' business and what was ordinary commercial messages, unless we happened to know who the senders were and what their business is.

Q. Does the process of having cipher names and addresses prevail in foreign countries the same as in ocean telegraphy?—A. I will come to that in a minute. I am now talking of the local tariff within each country compared with our rates, how it sums up in comparison with our 25-cent rate within a great many of the States, each State for itself; and from New York to New England, or from New York to New Jersey, or New York to Pennsylvania—25 cents for 21 words. There is not much difference between that rate and the rate in Great Britain, while the circuits used are undoubtedly a great deal longer, because the centers of population are farther apart in the United States than they are in Great Britain.

As to the through business on the Continent of Europe, you can register, if you have any amount of business, a code address as you do in cable messages; but you have to pay \$5 a year for that registration. Therefore, that is a system that is used only by people who have enough business to warrant it. For the telegraph business of the general public—although I have no statistics to refer to—it must, I think, be self-evident that the registration is not used very much, and that the ordinary business passing between any two centers in Europe would be practically on the same basis of count as the business in the United States. Therefore, it is safe to assume that the general business, say, between London and Paris, between London and Marseilles, between London and St. Petersburg, between London and Rome, would be about on the same count as it would be with us. In fact, I think the tendency would be there to make it more, because the names of streets are much more involved than in our numerical system of designating streets in the United States. I ought, perhaps, to repeat here that the rate for all international business in Europe is made on a word count, and not on a count of 10 words or less, or 12 words or less, whatever the number may be, but precisely in the same way as cable business is transacted; that is, each word is paid for. The rate between London and Paris is 5 cents a word for 290 miles, which on a fair basis of 21 words to the message would be \$1.05, whereas you could send the same message from New York to any part of New England or Pennsylvania or New Jersey for 25 cents. From London to Marseilles, 827 miles, the rate is 5 cents a word; that would be the same as Paris—\$1.05—while our rate from New York to Chicago, about the same distance, is 40 cents. From London to St. Petersburg the distance is 1,774 miles, and the price is 11½ cents a word, or \$2.41 for 21 words, while our rate from New York to Galveston, 1,789 miles, is 75 cents. From London to Berlin is 746 miles, and the telegraph toll 6 cents a word, or \$1.25 for 21 words, while our rate from New York to Cincinnati, the same distance, is 40 cents. From London to Rome is 1,192 miles, and the rate is 6¼ cents per word, or \$1.37 for 21 words, as compared with our charge of 60 cents from New York to New Orleans, 1,344 miles. I could go on and make a large number of comparisons of that kind, but they would give practically the same result, and I do not think it is necessary. I may say, however, that as I notice one of your witnesses disputed the distances on which some comparisons were made once before, that these distances are taken from the Bradshaw Railroad Guide, and therefore I think, if not exact, are practically correct. So much for the comparison of that rate.

Perhaps while we are on the question of rates, I might give you an idea of the character of rates we have. There are the commercial rates, of which the 25-cent rate that I have referred to, of course, forms a part. Those rates are made up in different ways. For instance, in some States they are 25 cents for the whole State. From New York to New England points they are 25 cents. There are also rates from State to State, and there are rates between large centers. The rates for local purposes all through the country are made up by a system of squares, shown on this map [exhibiting the following map]:

The Witness: The whole country is laid out in a system of squares, 50 miles to the square, and numbered, and then the rate is made 25 cents from any square to any 2 circles of contiguous squares.

Q. (By Mr. FARQUHAR.) These red lines designate the—A. (Interrupting.) The State boundaries. Each side of each square is 50 miles. Within a radius of squares the rate is 25 cents.

Q. Who invented that system?—A. I think Mr. Holmes had as much to do with it as anybody. As the business has grown and localities have become more thickly settled, direct rates have been extended, and the square system has been overshadowed by the extension of the flat rate, as in the case of New England, where business and population justify it. The highest rate we charge is \$1; that is from the Atlantic coast to the Pacific coast.

Q. For 10 words?—A. Ten words. All our business is on the 10-word count, with address and signature free. Then we have a system of night rates east of the Rocky Mountains; that is for messages to be transmitted during the night and delivered the next morning at about half the day rate. But we have no rate less than 20 cents.

The press rates are made on a basis entirely their own, and because of the volume of business done and because the larger part of it is transmitted at night. The business of the press associations is largely done over leased wires. The Associated Press has a system of leased wires practically connecting all large centers of the country, which the association uses as it chooses and over which it sends all its business. We have nothing to do with that system except to take our rental for the wires, the same as we do from any private individual. The press rates on matter that we handle ourselves are made on a basis of circuits, by which a large number of papers can be served at the same time, so that economy to each paper can be promoted as much as possible, with due regard to the return to the telegraph company. The special rates to newspapers for a single transmission to one paper are based on what we call "the additional-word rate" of the day message; that is one-third of the additional word rate in the daytime and one-sixth at night, so that where our rate is 35 and 2, the press rate in the daytime would be two-thirds of a cent, and at night it would be one-third of a cent a word for direct transmission and delivery to a single paper.

Then we have rates for commercial reports which are distributed to exchanges and to various subscribers throughout the country. They are made on a basis somewhat similar to the press rates for individual subscribers, in that they name a rate for certain reports that may be desired, especially where they can be transmitted over circuits, so as to give the farmers and the dealers of produce in grain all obtainable information of the markets, in order to regulate the sale of their crops and the getting of them to market. Certain people may wish to have the opening and the noon and the closing reports of certain produce from certain exchanges, and those reports are made up and sent and delivered at those hours over certain circuits as they are called for through the rural districts.

Q. How do these rates compare with the general rates at which you send messages to those points?—A. I can't give you the exact comparison. They are lower because they are made up in one transmission.

Q. Does the Produce Exchange make the arrangements itself?—A. No; we make them. We have an arrangement with the Produce Exchange. That is, we take the quotations from the Produce Exchange and distribute them. They are handed by a regular bureau for commercial news, and, of course, the information is sent between exchanges on arrangements made with each exchange.

Then we have the question of Government rates.

Q. Before you pass from the question of rates to exchanges I wish to call your attention to the fact that a question has come before this commission in respect to brokerage and bucket-shop dispatches and others of that character, it being charged that they had precedence, very often, in the case of an intensive market in stocks. Is there any discrimination made for the purpose of handling money and stocks?—A. No, sir; those statements have been made without any evidence or proof that has ever come to the knowledge of any officials of the company. There is no discrimination permitted in any way or under any circumstances, and if there is any case of that kind that can be charged against the company, we are only too anxious to know it, that the service may be kept on a proper basis. The larger brokers have leased wires. That is none of our concern; but the business that comes to us for transmission is transmitted without discrimination, without partiality, and directly in the order in which it is received, and is delivered in the same way.

I was coming to the question of Government rates. We have a contract, which is made from year to year with the Government for the business of the Weather Bureau. That contract provides that for messages containing not more than 20 words, all words counted except the date, the charge shall be 20 cents, and for

each additional word 1 cent, for a distance not exceeding 1,000 miles. For distances of over 1,000 miles, one-fourth the price of messages for 1,000 miles is to be added for every 500 miles or fractional part thereof. That is the rate for the general messages. For the circuit reports, where we make up circuits and are able to send to a number of places with one transmission, we take their reports and send them for 2½ cents a word over each circuit not exceeding 1,000 miles, with one-half cent per word additional for circuits over 1,000 miles in length, provided that no circuit shall exceed 1,500 miles in length, one-eighth cent per word to be added for each additional drop-copy station.

For all cotton, sugar and rice, and corn and wheat region messages on each day that they are telegraphed, the charge is 20 cents for the first message received at each circuit center and 10 cents for each additional message, no matter where. For the general business of the Government we accept the rate made by the Postmaster-General every year under the provisions of the act of July, 1866—that is, we have done so, except when Mr. Wanamaker made it practically nothing. It has been generally accepted by the telegraph companies. That act provides that the Postmaster-General shall have the privilege of fixing the rates in return for the privileges granted to the telegraph companies under it, such as rights of way through public domain, etc. We send messages, which are practically the same as miscellaneous messages for the Weather Bureau: For night messages not exceeding 20 words, exclusive of place from and date, the charge is 15 cents for any distance within 2,000 miles and for greater distances 25 cents; in each case 1 cent for each additional word. These rates are not made up on any particular commercial basis, nor with the hope or expectation that they will yield the company anything like an adequate financial return for services rendered. In fact, they don't. The company really contributes through these contracts a large sum every year to the Government for its service. I think it might be well, with your permission, to have these two contracts included in my evidence, and so I will leave them with you. [See Exhibits C and D.]

I think now we might pass on to the question of capitalization, which I see is included in your plan. The charge is continually made that telegraph rates are not reduced because the properties are overcapitalized. So far as the Western Union Telegraph Company is concerned, considering the question on the purely business basis of the experience of a large and important industry, which has had to go through all sorts of commercial crises, all phases of discouragement, almost failure, and has resulted in successful service to the country, the rates will compare more than favorably with the rates charged by any system of telegraphs that can be put upon the same basis without the props of government aid and of government support to provide means, without regard to returns annually, to supply very large deficiencies. There is no ground whatever for the charges made by the people who have this idea of overcharges, and I think that they make the charges in ignorance.

The financial conditions of the telegraph systems in European countries are very much obscured by all the returns made, with the exception of those of Great Britain. Her Government has the frankness to acknowledge the absolute financial failure of her telegraph system, and to tell the taxpayers that they are expected to provide a large sum every year to make up for the losses of the system which is used by that portion of the public that sends and receives telegrams. I might perhaps say in the beginning that the total officially reported deficiency of the telegraph system in Great Britain since it was assumed by the Government in 1870 is £7,756,654 10s. 4d., or an equivalent of nearly \$40,000,000.

I should like, with your permission, to have this page of the return relating to postal telegraphs, issued by order of the House of Commons, printed in my evidence as it stands.

RETURN RELATING TO POST-OFFICE TELEGRAPHS.

Statement prepared in accordance with the following paragraph of sect. 4 of 39 Vict. c. 5, viz: "There shall be added to such account a statement of the amount expended during said year on account of the annual charge for the securities created for the purpose of the telegraph acts, 1868 to 1870, and any acts amending the same, and of the surplus, if any, which, after deducting from the said balance the amount of such annual charge, remains as a sinking fund for the redemption of the said securities; and a statement of the mode of application of such surplus."

	£	s.	d.		£	s.	d.
Capital stock (consols) created in respect of money raised for the purchases of telegraphs, &c., viz:							
Under 32 and 33 Vict. c. 73.....	7,588,757	0	0				
Under 34 and 35 Vict. c. 75.....	1,079,043	0	0				
Under 36 and 37 Vict. c. 83.....	1,347,152	2	11				
Under 39 Vict. c. 5.....	525,186	0	5				
Under 40 and 41 Vict. c. 30.....	407,733	2	9				
	10,948,173	6	1				
Less—Stock purchased and cancelled							
(1) On account of surplus balances							
Period to 31st December, 1870....	54,771	17	8				
Year to 31st December, 1871.....	12,830	3	3				
	67,602	0	11				
	10,880,571	5	2				
(2) With the unexpended balance of the post-office telegraphs capital account in August, 1891.....	11,907	10	9				
	10,898,663	14	5	{Interest at 2½ per cent per year to 5 Jan., 1898}	289,888	5	0
Amount expended on account of the charge for the year ended 31st March, 1899.....					298,888	5	0
Excess of expenditure over receipts, as shown by the foregoing account.....					221,869	0	0
Deficiency of telegraph revenue in the year ended 31st March, 1899, to meet expenditure and the interest on telegraph stock created.....					520,757	5	0

The total of the deficiency to the 31st March, 1899, was £7,756,654 10s. 4d., as shown below, viz:

	£	s.	d.
Deficiency for the year to 31st December—			
1872, vide Parliamentary Paper No. 65 of 1877.....	118,966	15	1
1873, ditto ditto.....	177,988	11	4
1874, ditto ditto.....	207,898	0	5
Deficiency for the fifteen months to 31st March, 1876, vide Parliamentary Paper No. 67 of 1877.....	191,633	14	7
Deficiency for the year ended 31st March—			
1877, vide Parliamentary Paper No. 30 of 1878.....	187,259	0	11
1878, ditto ditto No. 35 of 1879.....	189,066	8	2
1879, ditto ditto No. 61 of 1880.....	114,119	12	5
1880, ditto ditto No. 23 of 1881.....	29,909	2	7
1881, ditto ditto No. 47 of 1882.....	984	7	3
1882, ditto ditto No. 42 of 1883.....	112,524	16	1
1883, ditto ditto No. 51 of 1884.....	142,225	10	8
1884, ditto ditto No. 73 of 1885.....	346,114	4	3
1885, ditto ditto No. 60 of 1886.....	362,767	3	9
1886, ditto ditto No. 29 of 1887.....	371,554	6	0
1887, ditto ditto No. 31 of 1888.....	471,889	16	11
1888, ditto ditto No. 388 of 1888.....	332,501	2	2
1889, ditto ditto No. 46 of 1889.....	265,183	5	8
1890, ditto ditto No. 21 of 1890-91.....	220,902	19	4
1891, ditto ditto No. 19 of 1892.....	231,032	14	7
1892, ditto ditto No. 37 of 1893.....	389,166	16	2
1893, ditto ditto No. 451 of 1893.....	465,570	13	0
1894, ditto ditto No. 96 of 1894.....	477,827	4	7
1895, ditto ditto No. 16 of 1896.....	440,625	17	7
1896, ditto ditto No. 49 of 1897.....	339,435	16	8
1897, ditto ditto No. 63 of 1898.....	448,344	13	2
1898, ditto ditto No. 40 of 1899.....	606,006	12	0
1899, as above.....	520,757	5	0

7,756,654 10 4

The losses on the telegraph in Great Britain are provided for by the annual grant made by Parliament to the department. That grant covers all the cost of extensions as well as of operations, and therefore no capital charge is made especially for the telegraph department, and the whole amount, including the interest on the original stock that was issued, goes in as a part of the expenses of the post-office granted by the Government; and no interest charge, since the exhaustion of the original grant of about £10,000,000, has been charged up to the telegraph department, as I understand it, but this is carried either as a charge against the post-office in a general way, or as interest, or as part of the interest on the national debt.

The statistics of the system in Great Britain are as follows: Poles, 43,507 miles; wire, 308,436 miles; capital account, grant of original act of purchase, 1869, including £2,126,000 expended for extensions to September 30, 1873, £10,868,663, or \$52,820,702; expenditures for extensions included in general expenses September 1, 1873, to March 31, 1900, £2,836,000, or \$13,782,960. The total capital account for the lines is \$66,603,662. These figures give an average capital account of \$1,530.80 per mile of poles and \$215.90 per mile of wire. I may say that the above figures for the expenditures for extensions I have learned from official sources, and they are therefore not to be questioned.

As a comparison with this showing we will take, if you please, the Western Union Telegraph Company as it stands to-day. The system of the Western Union Telegraph Company represents: Stock, \$97,370,000; 5 per cent collateral trust bonds, due January 1, 1938, against which bonds and stocks bearing the company's guarantee of interest or dividends at 6 per cent per annum have been deposited with the trustee, \$8,502,000; 4½ per cent funding and real-estate mortgage bonds, due May 1, 1950, \$10,000,000; 7 per cent building bonds, due May 1, 1902, \$1,150,000; stock of leased lines bearing guarantees of the company held by individuals, on which the company pays dividends or guarantees dividends, \$14,334,665; in all, \$131,364,665. The mileage of the system, which I have already given you, includes the 2 Atlantic cables, which should be deducted as not being a part of the system within the United States. Therefore, on the basis of 186,623 miles of poles, the capitalization is \$703.80 per mile. Deducting the Atlantic cables from the wire mileage altogether, leaves 927,071 miles of wire at a capitalization of \$141.70 per mile. In other words, the capitalization per mile of poles in Great Britain is more than twice as much as that of the Western Union Company, and the capitalization of wire is exactly one-half as much more.

There is another view to take of this question to put it on a fair basis, and that is that the company has in its treasury about \$11,000,000 of assets of outside companies that are not telegraph companies and whose systems are not in any way comprised in its mileage. If, therefore, we should deduct those assets from the above amount of stocks, bonds, and outstanding guarantees, the total capitalization is \$120,364,665, or \$645 per mile of poles and \$129.80 per mile of wire.

I have some comparative figures on this question of capitalization with the mileages given to me by the Postal Telegraph and Cable Company to which I have already referred. That company has \$18,000,000 of 4 per cent bonds, and that does not capitalize all that the lines have cost, which is about \$20,500,000. On the mileage given by them in the United States it makes that company's capitalization on \$20,500,000 \$782 per mile of poles and \$121 per mile of wire. You must bear in mind that that company is the result of sundry reorganizations of other companies and has been built up on practically a cash basis.

The capitalization of the Western Union Company has resulted from the amalgamation of a large number of telegraph companies from the beginning. In the early days the country was exploited by small companies in all directions, and they made their own tariffs. If you wished to send a message from one remote place to another remote place you had to do precisely what you have to do in Europe to-day, that is, send it over a number of government lines in order to reach a given point, and pay what to-day we call the transit rate through each country for that particular class of business. The result was, of course, that there was no unification of service. There was no compact way of reaching any point, and it became evident to the managers of the properties that the only thing feasible was consolidation and that consolidation would lead to direct circuits, with tariffs reduced because of unification of management and the obviolation of a variety of individual charges for each system.

I have a memorandum prepared for me by Mr. Holmes of our tariff bureau showing the result of the consolidations. It is exceedingly interesting, and as it briefly states the situation I can not do better than to read it to you. (Reading:)

"Previous to the consolidation of 1866 few of the telegraph companies appear

to have had anything like a system of rates. The rates of the old Western Union were 25 cents for distances, by wire, of 25 miles, and an additional 5 cents for each additional 25 miles, modified according to the judgment of the general superintendent. There was also a system of rates in the Southern States. All of the offices of each company were, however, supposed to know their own rates; and for rates to other companies they added to their own rate the rate of the connecting company from the nearest transfer point.

"Shortly after the consolidation in 1866 the rates from Washington, north and south; from Louisville, north and south; from New York, east and west; Buffalo, east and west; Chicago, east and west; Omaha, east and west, and in various directions from other places, were printed and distributed to all telegraph offices in the United States. By adding the rates of the various lines and companies thus listed, offices obtained their rates for through business in any direction and for any distance.

"The following are some of the rates which were in force from New York in 1866, viz. to Buffalo, 75 cents; to Cleveland, Ohio, \$1.45; to Chicago, Ill., \$2.20; to Omaha, Nebr., \$4.45; Denver, Colo., \$7; Salt Lake City, Utah, \$7.25; San Francisco, Cal., \$7.45; Portland, Oreg., \$10.20; Victoria, B. C., \$11.55; Washington, D. C., 75 cents; Richmond, Va., \$1.25; Atlanta, Ga., \$2.35; New Orleans, La., \$3.25; Galveston, Tex., \$5.50.

"The rates of the East were lower than those in the Middle and Western States, and those in the Middle States lower than those for like distances in the South.

"It was, at the time of the consolidation, impossible to make a uniform scale of rates between the offices of the consolidated companies without cutting the Western and Southern rates down to the Eastern, and therefore to an unprofitable scale, but the Western and Southern rates were nevertheless very much reduced, and the system known as the square-and-State-rate system, by which an approach to uniformity was secured, was adopted. This was in October, 1869.

"The new scale of rates when applied to the business of New York City, which was in the zone of low rates, effected a reduction of 20 per cent. At Western and Southern places the reduction was much higher, and to the Territories of Washington and Oregon and the southern part of California, the high rates were reduced from \$10 and over to \$7.45 and \$6.

"In 1872, 3 years later, new rates were issued and further reductions were made and another step taken toward a uniform scale. In the long-distance rates the maximum was made \$5. In 1873 another revision of rates cut the maximum down to \$2.50, and the rates for maximum distances were further reduced from \$2.50 to \$2, and this to \$1.50, and later, March, 1884, to the present maximum of \$1.

"The rate from New York to Buffalo, which was 75 cents, finally became 25 cents, which is the rate to all other places in New York State; Cleveland, \$1.45, is now 40 cents, which is the rate to all other places in Ohio; Chicago, Ill., which was \$2.05, is now 40 cents; other places, 50 cents; Omaha, Nebr., \$4.45, is now 50 cents; Denver, Colo., \$7, is now 75 cents; Salt Lake City, Utah, \$7.25, is now 75 cents; San Francisco, Cal., \$7.40, is now \$1; Portland, Oreg., Seattle, Wash., and Victoria, B. C., which were from \$10.20 to \$11.55, are now \$1; Washington, which was 75 cents, is now 25 cents; Richmond, which was \$1.25, is now 35 cents; Atlanta, Ga., which was \$2.35, is now 50 cents; New Orleans, La., \$3.25, is now 60 cents; Galveston, Tex., which was \$5.50, is now 75 cents.

"As far as it has been possible to carry it, the uniform scale has been applied East, West, North, and South, and, wherever practicable, the divisions by squares have been abandoned and the rates fixed by States."

So the result of this consolidation of the service and the bringing together of the capitals of the different companies and the unification of the service and making it possible to effect economies, and by and by to reduce rates, has been beneficial to the public in every way. It also put the property on a final basis of capitalization not nearly as high as the capital of the chief exponent of government ownership in Europe, that is, Great Britain and Ireland. Of course, I know that it has been claimed that a large price was paid by the British Government for the lines there. Well, what of that? If a man has a successful business and it is bought out by anyone else, is it to be bought out on the bare cost of the skeleton of his plant? Is there nothing for the ability that has been expended, nothing for the development of the business, nothing for what is known in ordinary commercial parlance as good will? To any reasonable man, to anybody with any business experience, anyone with any political conscience, such a question is absurd and should be dismissed even without the attention I am giving to it now. Our rates as they stand to-day have been devised so as to have them follow the development of the business all the time, and with an earnest desire on the part of the company to keep them as low as is consistent with a proper

return on the capital and provide for the very expensive maintenance of a peculiar property, which is more exposed to deterioration than perhaps any other property in existence.

A great many attempts have been made to radically reduce the rates that have been established by the Western Union Telegraph Company, as a result of its large experience and of its better comprehension of the conditions governing the management and the effect of telegraph properties but, every time that effort has ended in failure. The last really serious attempt was made by the Baltimore and Ohio Telegraph Company, and I think you all know what was the result of that effort. That company had to give up the business, and the Western Union took the property and made it a part of its system. And so it has been right straight along, that a proper regard for business considerations and a proper regard for the capital represented by the company have justified the present rates and made it impracticable for us to do more than follow the development of the business, which we are continually doing, in making the rates reasonable and keeping the service equal to the demands.

Another phase is taken up by the advocates of Government ownership, or by the opponents of private ownership, on some rather curious estimates of the cost of reproducing the property. One gentleman naively says that you can produce telegraph lines at the rate of about \$120 or \$130 a mile. Therefore you have only to take the mileage of the Western Union Telegraph Company, use that figure as a multiplier, and lo, you have got it all; there it is; why, it is next to nothing. You can almost produce a telegraph plant by a sort of Aladdin process without the expenditure of any trouble or any care or anything of that kind.

It is true that you may be able to build under favorable conditions a telegraph line with, say, 2 wires, for somewhere in the neighborhood of \$150 to \$175 a mile. I take those figures as an average; I am not giving the exact sum. But does that constitute a telegraph system for this country? Why, there is only about 30 per cent of the lines of the Western Union Telegraph Company that have 2 wires, I think, and all the rest run up from 3 to 200 wires. Will a plant that will support wires and provide for business in remote rural districts accommodate the business of this country? Look at your lines between here and New York, lines with 40 wires apiece on them. Look at the terminals that are necessary in large cities, buildings that cost millions of dollars, work to connect up the whole system, that, instead of costing you a \$150 a mile, will sometimes cost you thousands and thousands of dollars per mile. In one instance, for 3 miles, it cost us \$100,000 a mile in our underground and pneumatic system between our uptown and downtown offices in New York. These are essential features of the telegraph. It is not the cost of the line out on the prairie, it is not the cost of the line in the woods that can determine the value of the system. The expensive terminal facilities that are necessary in all the large centers to provide the means for collecting, distributing, and handling the business all over the country as it comes through are even larger factors in the question. Therefore any estimate of cost or any attempted gauge of this question by making a calculation on any such basis as these gentlemen have undertaken to make it on is absolutely absurd and should have no credence whatever. The property as it stands to-day represents in a large part several renewals, because the reconstruction of the lines is always provided for before any balance is struck of the earnings for the year; in fact, it must necessarily be so or new capital must be provided. I may say, in round numbers, that since 1866, for reconstruction and general line repairs to keep the property up and in a fit condition for business, there has been expended upon it between \$50,000,000 and \$60,000,000. That is entirely outside of construction in any way, and the result of this is—referring again to the capitalization question, say in 1873—that the capital per mile of wire stood higher by—I can not tell exactly how much, than it does to-day. An additional value is also given to the lines in their reconstruction by the use of much better material than formerly; that is, we are using copper wire now, which is much more expensive than the iron wire was when it went into these lines, and a much more substantial and effective plant is all the time being reconstructed as the old lines go down, without impinging upon any capital account in any way; consequently the rate of capitalization per mile of wire is continually going down.

That is about all on the financial side of the question. I do not know exactly what the other questions are that you wish to consider, but I should like to put in here a remark that was made by the chancellor of the British exchequer, in 1893, in which he said while laying before the House of Commons his annual budget, "That the operations of the British Government telegraphs for the fiscal year showed a 'bad revenue,' and an excess of actual working expenses over receipts of £115,000 (\$360,000), to say nothing of the interest on the £10,000,000 of

stock issued for their acquisition." He also said that since the purchase by the Government of the telegraph lines, including the moderate interest they ought to have paid upon their cost, the loss on that transaction had been \$4,500,000 (about \$2,000,000), "which result was founded on a miscalculation, and, for anything that can be seen to the contrary, it is a revenue which is going from bad to worse, and not likely to improve." His apprehension seems to have been well founded, since the deficit of the present time is about \$40,000,000.

Therefore if that result comes in the comparatively limited territory of Great Britain and Ireland from trying to extend the telegraph system without commercial considerations to remote and insignificant places, what would be the result in this country, which is twenty-five times as large and not nearly so thickly populated, with distances much longer, with territory less productive, and with a public that can not provide the argument for the use of the telegraph that is continually grounded on social questions? What I mean is this, that we are a very busy people in the United States. Great Britain, besides being a very busy, very active, and thickly populated commercial center, is also one of the playgrounds of the world. Take, for instance, the steamer after steamer that goes from the United States loaded with people who are continually sending social messages while they are on "the other side." London is filled with tourists and visitors from all parts of the world at all times of the year. There is also there a very large class of people of leisure who freely use all means of communication for their social engagements, the like of which we have not here in any way. And if the extension of the system to out of the way and remote points is supposed to serve a social need, I doubt whether that social need exists with us as it does in a country like England, while the financial result is bound to be very much more serious to the general taxpayer than it has been, even in England.

Q. You can give the earnings now.—A. I suppose we might as well take last year's figures as found in the report of the last fiscal year, June 30, 1900.

Q. (By Mr. CLARKE.) That is the report of the Western Union?—A. The report of the Western Union, of which I will give you a copy if you wish to have this table inserted. It might be well to do it. Our gross earnings were \$24,758,569.55. Our expenses, gross, were \$18,593,205.87. This left a balance of \$6,165,363.68, of which there was expended for dividends, at the rate of 5 per cent on the stock of \$97,370,000, \$4,867,983.75; for interest on bonds, \$896,305.60; for sinking funds; \$9,797; in all, \$5,774,086.35, which carried to our surplus about \$391,000.

The expenses for the year were made up of operating and general expenses amounting to \$13,220,009.44; for rentals of leased lines, \$1,566,704.65; for maintenance and reconstruction of lines, \$2,959,998.23; for taxes, \$529,469.09; for equipment of offices and wires, \$317,024.46; in all, \$18,593,205.87.

You will therefore see that for the fiscal year 1900 we expended practically \$3,000,000 in reconstruction and maintenance of lines. Of the operating and general expenses for salaries—that is, for direct expenditures for salaries in the transmission and delivery of our business—the amount was about \$9,000,000, or practically 50 per cent of the whole expense. Then there is included in the maintenance and reconstruction item a large amount for salaries for regular linemen, special line gangs, foremen, and general labor expenses.

As to the number of messages, I might say here the report shows that we transmitted 63,167,783 messages during the year. That does not represent the total use of the wires, because we have a large number of wires leased to the press and to merchants and individuals. Apportioning the use of those wires on a very conservative basis would add certainly 7,500,000 more messages sent over the company's system during the year than this number given in the report; but, of course, we can not take note of that business because we do not handle those messages, and I am merely making this statement as an explanation if any comparison on the number of messages sent is made.

Q. (By Mr. KENNEDY.) There are two other subjects in the topical plan, Mr. Chairman—charters of various States and State taxation and supervision.

A. Well, I can very quickly dispose of one of them. We have no State charters at all; that is, except from the State of New York, where we are organized under the general laws of 1848. But as to taxes and supervision, those questions seem to be among the vagaries of the States; they differ in every State in the Union. The total taxes that we paid last year were about \$529,000. That is assessed upon us in various ways in different States. Each State has a law of its own. We think, as a rule, that the taxes are very high, while wishing to pay on fair assessments the same as anyone else. The values that the taxes are based upon are sometimes a proportion of the capital, and sometimes the estimated value of the property. The State of Connecticut makes a charge upon each mile of wire, and in one case, in Texas, I think, a tax is laid on the messages, one cent upon

each message. That law is still in existence, I think. The whole question of taxation is very intricate, being subject to legislation in each of the States, and we try to treat it as fairly as we possibly can, and pay what we think is right on the same basis of valuation as that of other property. I will mention as one of the troubles of such things that a law was recently proposed in the State of New York taxing all authorized capital at the rate of 1 mill and a quarter. That meant \$125,000 per year on the capital of the Western Union, to say nothing of the capital of other companies that it is responsible for, in that State alone, outside of the taxes in all the other States. That law has not been passed. An amendment to it has been suggested and I believe is to be made. There is no uniform law of taxation in the States. Is there any other subject that you think of just now?

Q. (By Mr. KENNEDY.) There is one other large subject that is not included in the plan that I would like to hear Mr. Clark upon, and that is the subject of labor.—A. Well, I do not know that there is a great deal to say on that subject except that we have a large number of employees. There are about 35,000 people in the United States concerned in the handling of the business of the Western Union Telegraph Company, as you know. Many of them are constructive employees of the Western Union Company only. They are the agents of the railroad companies with which we have contracts, and they handle the commercial messages at small stations where the telegraph business is not sufficient to justify the employment of an independent operator or the establishment of an independent telegraph office. But while we do not pay them directly we pay for their services in other ways under our contracts with the railroad companies. Just how many of them there are I could not give you offhand.

As to the general question of operators it is a question of supply and demand, and we pay wages that are satisfactory, as far as I know, to the men everywhere. There is nothing else to say about it. Our wages are higher than they are in Europe, but it is very difficult to say just exactly how much higher because the classifications are entirely different. In Europe, of course, operators come under civil-service rules, and their salaries are not governed so much by supply and demand as they are with us. The telegraphs are administered by the Government service there entirely.

Mr. LITCHMAN. I would like also to ask the witness about the relations between the Western Union Company and the Bell Telephone Company.

The WITNESS. There are no relations between the two companies except that the telephone company collects and delivers messages for us for which we pay it.

Q. Is it not true that there is some sort of a contract, or that there has been some contract, between the Bell Telephone Company and the Western Union?—A. There was a contract, but it expired with the expiration of the Bell patent.

Q. (By Mr. CLARKE.) Is it your pleasure now to explain your relations to the railroad companies?—A. Yes; I can explain that relationship. I do not think there is any objection. Our relations to the railroad companies in a general way are that we construct lines along their roads and give them the use of wires for running their systems, and in return they employ operators who do their own telegraphing over those wires and incidentally any commercial business at small stations for us. We also give the railroad companies the use of our wires beyond the lines of the roads to certain agreed amounts for them to do their business throughout the country generally. That is practically all there is in it. Of course, each contract stands upon its own particular basis, according to the circumstances and conditions under which it is negotiated.

Q. Is there substantial uniformity in those contracts throughout the country?—A. Practically so; yes.

Q. Would you have any objection to submitting one of those contracts as part of your evidence?—A. I should not feel at liberty to do that. There are two parties to a contract, and I do not think I should do that on my own responsibility or the responsibility of the Western Union Telegraph Company without consulting the other parties. That is all there is in it. We issue franks by which the officers of the railroad companies send messages, the numbers of which are noted on the message and entered, and an account is made up and rendered to the railroad company at the end of the month. They also render an account to us of the receipts taken in at their stations for our lines.

At 12.50 p. m. the commission took a recess until 2 o'clock p. m.

The commission reconvened at 2.05 p. m. after recess.

Q. (By Mr. CLARKE.) Have you any further statement to make before being interrogated by the commission?—A. I think not, Mr. Chairman. There may be something I may want to say after the questions are asked. I have so far

endeavored to outline the salient points of the subject; there may be some details that may come up in the course of your questions that I have purposely glided over so as to get the main features in your minds first.

Q. (By Mr. KENNEDY.) What is the comparative cost of putting down and maintaining a cable line?—A. What cable? We have cables between New York and Nova Scotia, connecting with our Atlantic cables.

Q. Do you have one between Key West and the mainland?—A. Yes; and one between Key West and Habana.

Q. Can you give the comparative cost of these lines?—A. The general cost of the cable is about \$1,000 a mile.

Q. How does that compare with the cost of the land lines?—A. That has only 1 conductor, while on the land line you may have several wires.

Q. The cables are very much more costly?—A. Infinitely more costly; and the question of maintenance is also very much more costly, because if you have a cable broken in deep water you have to fit out an elaborate expedition, a large ship, and she is dependent on wind and weather. She may be out a few days or she may be out weeks. We have had vessels out 3 months without effecting a repair; and then 2 months more on the same work—that is, in Atlantic work.

Q. Suppose you were to send a telegram from Washington to Key West; can you state what the cable expense of the telegram would be?—A. No, I could not; we work straight through.

Q. Have you any figures that would show?—A. I have not. I do not quite understand your question, I think. You mean the proportion of the cable expense?

Q. Yes; the proportion that you pay on account of cable carriage or transmission.—A. I could not give you any figures on that point for the reason that the maintenance of land lines goes on all the time and can be met by a continuous comparatively small expense. If a cable is broken it is necessary to send out a ship. You must either have a ship in commission all the time or fit out a ship, as we frequently do. When a cable breaks on the reefs off Key West we have to fit out a ship in New York, man it, send it down and bring it back, and it costs several thousand dollars to make the repair, whereas a break in a land line would be repaired in half an hour.

Q. What are the cable rates from New York to Great Britain?—A. Twenty-five cents a word, and the same rate is made to France or Germany as well as to Great Britain.

Q. What does distance have to do with the rate. Would half the distance cut it down much?—A. You would have less cable and, of course, less money invested.

Q. You made a comparison between sending a message from New York to Boston and sending a message from London to Liverpool, or from London to Paris?—A. Yes; that was on the 21-word basis.

Q. I want to ask you if that was a fair comparison, taking into view the fact that part of the distance between London and Paris is by the channel cable?—A. I think so. The cable is a short one. It is only 209 miles the whole distance.

Q. That was one instance where it was part land and part by cable?—A. Yes.

Q. Could you not pick out a similar distance on the mainland; say from Paris to some point or between any two points in the countries you mention where there would not be such a great difference?—A. It would be practically the same thing. The tariff between Paris and Berlin—I do not know the exact distance—is 4 cents a word. I do not think there would be much difference on that.

Q. What is the rate from Washington to Key West, do you know?—A. No.

Mr. HOLMES. One dollar for 10 words.

Q. What is the distance from Key West to Washington?—A. About 1,300 miles.

Q. Can you state the tariff from here to Pensacola?—A. Sixty cents.

Q. So the difference in the rate to Pensacola and to Key West would be on account of the cable rate?—A. There is a long distance from Pensacola on land to the cable.

Q. I would have liked to have a European comparison made over all-land lines the same as made in this country over all-land lines.—A. I have not the figures as to distance, but by the map you will see there is not much cable between Great Britain and France.

Q. It is a cable line?—A. Oh, yes; of course. It did not occur to me. I have not the distances between points on the Continent. I could not give you that, but I think the comparisons I have made are about fair.

Q. You do not know what the French rate is for 10 words?—A. It is 10 cents, I think, for 12 words.

Q. (By Mr. KENNEDY.) In England it is a cent a word?—A. It is 6d. for 12 words. Then you must remember the words are limited to 10 letters in these European counts whereas there is no limit with us.

Q. Can you give us a statement of the cost of erecting these telephone lines with iron poles; what the difference is, if any, between the cost of erecting their through lines and the cost to the Western Union?—A. No; I have no information on that point at all. Iron poles are used in India and in South America, but I do not know anything about their use here.

Q. There was something said about a former contract that you had with the Bell Telephone Company. Can you state to the commission the general terms of that contract?—A. The Western Union Company agreed to go out of the telephone business. There was a long fight on the patent question and it was compromised by the telephone company paying so much of its royalties to the telegraph company for the term of the contract; and the telephone company took over the plant that the Western Union had built. That is all.

Q. Was there any contract in regard to the division of territory?—A. None at all.

Q. In regard to the joint use of the patents of both companies?—A. The Bell Telephone Company had the use of all the patents, because it had the Bell patents.

Q. That contract is not in force now?—A. It expired in 1896.

Q. Could you furnish a copy of this contract to the commission?—A. I do not think I could agree to furnish any contract without the consent of the other parties. I do not think it would be businesslike or fair; I should object on my own part if anybody else were asked to furnish a contract to which I was a party.

Q. (By Mr. LITCHMAN.) We expect to have some one here before us representing the Bell Telephone Company. If they are willing, you have no objection?—A. None at all.

Q. (By Mr. KENNEDY.) You are doubtless aware, Mr. Clark, that the International Typographical Union has had what it calls a telegraph committee in Washington for several years trying to have a bill brought up for the Government to take over the telegraph companies, and one of the arguments they made is that if the Government were to assume control of the telegraph the rates would be the same to everybody; that there would be no news monopolies; that there would be more newspapers started in the country; more work for printers and pressmen and for everybody connected with the printing trade. Have you given any thought to that subject?—A. This is the first I have known there was any news monopoly. There are 3 press associations.

Q. I am not saying there is; I am only giving the statement of this committee.—A. I am only answering it in my own way. There are 3 press associations. Every newspaper is free to get any quantity of service it wishes on the same basis. The rates are open to all associations alike, and there is no discrimination at all on the part of the telegraph company, nor do I know of any on the part of the newspapers.

Q. Would any new association that sprang into existence have the privilege of getting the same rates that all the other companies get?—A. Exactly the same; for the same service exactly the same rates.

Q. Is there any contract with any one of the associations by which in case of storm, if there is only 1 or 2 wires left working, that association shall have the wire?—A. No.

Q. (By Mr. LITCHMAN.) Would the rate to the association depend on the number of papers served?—A. No; not if they have the same wires. If they had 1 circuit, they would be put on the same basis as that given to any other press association. A circuit provides that there shall be a terminal place and not less than 4 drops to begin with. The rate is for the first 300 miles. A rate of one-sixteenth of a cent for each 100 miles is added and a rate of one-eighth of a cent for each connection made.

Q. So that a new association starting would have the same privileges that the Associated Press has at the present time?—A. Absolutely.

Q. (By Mr. KENNEDY.) You say there is no arrangement by which newspaper associations or newspapers have a priority in the use of the wires?—A. Not at all; not that I know of. If there has ever been, I do not know anything about it.

Q. Did you ever have a contract with any New York or Philadelphia papers by which, in case of storm and frost and but one wire running, they should have the use of that last wire ahead of everybody else?—A. I never heard of it, but if such a condition ever did exist it does not exist to-day, and has not existed since I have known anything about the service.

Q. You would not speak for other companies, of course?—A. No; I am only speaking for the Western Union Company, but I think the same course would be taken by every other company.

Q. You spoke about a deficit of \$40,000,000 a year in England?—A. Not a year; no.

Q. For a certain period?—A. Since 1869.

Q. Was that on account of the telegraph alone or did it include the usual postal deficit, if there is any?—A. The English post-office makes a large profit every year, and the telegraph department is its only deficiating department.

Q. That \$40,000,000 was for the telegraph alone?—A. For the telegraph alone. The postmaster-general of Great Britain in his report for 1899 winds up by saying: "The postal revenue for the year, including the value of services rendered to other departments, was £13,394,335, an increase of £345,018 on that of the previous year. The postal expenditure was £9,683,704, an increase of £493,698 on that of the previous year. The net profit was thus £3,710,631, or £134,199 less than last year. The telegraph revenue of the year was £3,460,492, showing an increase of £200,347; the telegraphic expenditure £3,748,930, an increase of £266,912 upon the previous year. The net deficit on telegraphs was thus £288,438, or £66,569 more than last year." That is the working expense. If allowance be made for interest on capital, £10,868,663 for the purchase of the telegraph, the deficit for the year is raised to £387,326.

Q. (By Mr. CLARKE.) Do you know of any reason why the British Government could not raise its rates a little and thus overcome that deficit?—A. I had never thought of it, but it is a very hard thing to raise rates when once they have been put down, and particularly by a government whose chief reason for making them low is to serve the interest of all the people, or rather to serve the interest of the comparatively limited number of people who use the telegraph, at the expense of all.

Q. (By Mr. LITCHMAN.) Is not the extension of lines and cost of production a charge against that deficit?—A. I have taken that out in my statement of capitalization.

Q. How much was that?—A. The whole thing?

Q. I am talking about that particular year.—A. I think I analyzed that. The receipts for 1900 were £3,460,492. The expense for general operating was £3,394,900. The surplus was £65,592; interest on stock for the original purchase (the net interest on the rest of it is given in, as I explained this morning, on the general budget), £293,888, making a deficit of £133,296. Now, if you add to that the expenditures for extensions and buildings, £354,030, you make the deficit £487,326. Figure it as you will, you can make the British post-office telegraph department nothing but a department that makes a deficit every year, which has been growing larger and larger. Figuring it in the way that you suggested just now, it only takes in the interest of £293,888, which was the interest on the original grant of something over £10,000,000. Now, the £2,126,000 that has been spent for extension since the original grant of £10,000,000 was exhausted has gone into the general budget, and the interest has passed under the national debt in the usual way, I suppose. No charge has been made in any way on the interest of that £2,126,000. To do that would swell the deficit still more.

Q. Now, if that increase had taken place in your company it would have been provided for by the issuance of stock?—A. We would have had to provide for it.

Q. It would be a perpetual burden on the public, would it not?—A. It would have been an interest charge on the company, of course.

Q. If this debt of Great Britain is at any time paid, it ceases to be a burden on the people after it is paid?—A. Which debt; the national debt?

Q. Yes.—A. Oh, you have to come back to the question or decision whether you are going to tax the whole people for the benefit of the limited number for a function of the Government in that way.

Q. Is it not true that a decrease in the use of the telegraph, in the number of messages, increases the cost?—A. Yes; but there is a vanishing point of profit; you have a point where you can operate the plant for profit, and there is a point where you operate it for neither profit nor loss, and beyond that point you operate it for nothing but loss.

Q. Is not that point of profit determined by the original cost of the plant?—A. Not always; there may be conditions that will cause it to vary.

Q. If the original cost of the plant is an inflated cost and that remains a permanent charge, does it not have a material effect on the calculations?—A. Provided the conditions remain the same; but if you are applying that consideration to the telegraph, it has not been so. As I showed you this morning, \$50,000,000 have been put in the property to maintain it as an efficient working property that otherwise would have to be provided for by additional capital.

Q. Is it not true that when the Western Union Telegraph Company absorbed the Atlantic and Pacific and the American Union there was a very large increase in its capital stock?—A. Yes.

Q. And is it not true that in 1869 the president of your company in his report

estimated the cost of the Western Union line at \$22,000,000?—A. I do not remember that. I have not those reports. I laid them out to bring with me and forgot them. But I would like to answer your question about the Atlantic and Pacific and the American Union by quoting the decision of the United States court of appeals. Judge Earl, in the case of *Williams v. The Western Union*, on the question of the consolidation with the American Union and the Atlantic and Pacific, made this decision after a long trial and a very exhaustive examination of the whole question (reading): "On the 19th day of January, 1881, the property, franchises, and privileges belonging to the Western Union Telegraph Company were worth more than the amount of its capital over and above its indebtedness, and the property, rights, and franchises of the Atlantic and Pacific Telegraph Company were fully and fairly worth the sum of \$8,400,000, and the property, rights, and franchises of the American Union Telegraph Company were worth \$15,000,000; and such, on that day, were the estimates of the values made by the directors of the respective companies. The actual value of the investments of the surplus earnings of the defendant, the Western Union Telegraph Company, as they existed January 19, 1881, was estimated by the directors of the company; and it was their judgment that the amount of the stock to be distributed among the stockholders of the Western Union Telegraph Company represented no more than the investments of the surplus earnings of the company since July 1, 1866; and such surplus earnings were worth the sum of over \$15,526,500."

Q. (By Mr. LITCHMAN.) It is a fact that in 1869 the president of your company in his report assumed or estimated the cost of the line roughly at \$22,000,000. The capital at that time was \$40,000,000?—A. I do not remember that report. That is going back rather far.

Q. That difference between cost and capital still remains, does it not, in the \$97,000,000 of your capitalization?—A. I think not; because I have shown you that the capitalization per mile of wire has steadily gone down, for the reason that the property has been reconstructed without adding additional capital to it, and that steadily the capitalization is coming down all the time.

Q. Of course the amount expended for reconstruction has been taken out of the earnings of the company?—A. Exactly, as the reconstruction of all telegraph property must be provided for; otherwise you would have an inflation that to these gentlemen who on their theories are talking about it would simply be appalling. Every time you put in a new pole or new wire you would have to have a new issue of stock if it were not so. The life of a telegraph property is limited. It is different from a railroad roadbed, or even railroad rolling stock. It is subject to the constant effects of the weather: the rotting of the poles in the earth; and in case of iron wires, disintegration of the wires. We are using copper wire nearly all the time and putting in a superior quality of material. Since hard-drawn copper has been made practicable, nearly all our reconstruction has been made of that. To-day the property is made up of within a fraction of 20 per cent of copper wire.

Q. The claim is made that if the telegraph were under Government management this cost would go in as a part of the construction and not as stock, to become a burden on the users.—A. Where would the money come from for the construction under those circumstances?

Q. Would it not be accumulated in a system of sinking funds that would eventually wipe out the first cost?—A. No; I do not think it would.

Q. Is not that the plan by which waterworks and electric lights are paid for by municipalities?—A. I dare say some are; but a sinking fund—that practically comes to the same thing. If you provide the money for the reconstruction without issuing securities against it, it does not make any difference whether you call it a reconstruction fund or a sinking fund and divide it in that way; you have got to earn it. You have either got to take it from the outside as a new investment provided by somebody, either by stockholders of the company or by the Government, if it is a Government ownership, or you have to provide it from the earnings of the property, and if you call it a sinking fund it comes to precisely the same thing.

Q. Would there not be this difference—that in the case of a sinking fund the original cost is gradually wiped out, whereas in the case of stock it is a permanent charge upon which dividends have to be credited?—A. You have got to make a beginning somewhere.

Q. (By Mr. FARQUHAR.) Have you a sinking fund at all in connection with your bonds?—A. No; there was on the bonds that matured a little while ago, on one class of the bonds, but they have been paid off.

Q. (By Mr. LITCHMAN.) Could you give us the average cost of constructing a mile of poles with one wire?—A. You can not make an average. This country

has a surface of great geological variety. You may be able to dig a hole in the prairie and set a pole very quickly; then I have known of miles and miles of lines where we had to blast out every hole with dynamite to set the pole—to get it in the ground.

Q. I asked the question to ascertain whether there was some way of finding out the cost, on an average, of erecting a mile of wire and then of adding additional wire, so as to get at the expenditure of the company for extensions in a series of years by dividing the total expenditure by the number of miles of wire in the same period, and to ascertain whether you could in that way get at an approximation of the cost of the plant.—A. I do not think it can be shown with any degree of reliability. You can use such figures to answer any theory you choose; but upon the practical question of how much it costs to reproduce a system equal to the Western Union, to answer the same purposes, surviving the same difficulties, and being as efficient as that service, you can not. It fails because the conditions are entirely different.

Q. Has there been any reduction in the telegraph rates in the last 15 years as shown by dividing the receipts by the total number of messages?—A. In the last 15 years? No; I do not think that there have been any material reductions. We are reducing our rates in localities as fast as we can.

Q. You referred to the extreme cost of terminal construction. Could you give us some idea of the proportion which the expense of these terminals bears to the expense of ordinary construction?—A. No; I could not, because of the great variety of lines constructed throughout the country and the conditions in the different cities. For instance, take New York. We have a building there that cost us in the neighborhood of \$5,000,000, to start with, without any equipment. These are things which the people do not seem to understand—which they do not seem to give us credit for in any way. All the wires in New York are underground. We have to have subways to put them in and pay \$800 a year for every duct that we use, and so on. Take Chicago. We have a building there that cost from \$2,000,000 to \$2,500,000, absolutely necessary for our business. So it is. The moment you approach the ganglia of the system, the centers from which the whole system comes in and goes out, the cost accumulates beyond any theory of calculation based on lines built in the open, the basis that has been talked about.

Q. Is your building in New York used exclusively by your company?—A. No; not exclusively. We rent, I think, one floor to the Associated Press; but you have to have the building because you have to have the area—the space. Where you have 800 people working you have to have enough space for them to work in.

Q. I only asked the question to see if the income from the rents of the building were sufficiently appreciable to be an offset.—A. It does not amount to anything.

Q. Your company keeps a construction account, does it not?—A. Yes.

Q. That shows the items?—A. Only the total is taken, whatever the estimate may be for the year.

Q. Could you not supply that account when you revise your testimony, so as to show the cost per mile of wire and the cost set aside for terminals?—A. No. As I explained to you, the cost of construction this year may be of an entirely different character from what it may be next year. We may this year make extensions where it is exceedingly easy to build; next year we may have to go through rocks, where we may encounter all sorts of difficulties. I want to give you all the information you want; but, candidly, I can make no generalization of value concerning the construction of a system like ours that has to meet all sorts of conditions and overcome all sorts of difficulties. The expenses are so varied and so changed by conditions that I do not think it would be fair to us and I do not think it would lead to a right judgment on the part of the commission. Understand, I do not desire to withhold anything, but to give you all that will help you to come to a fair opinion, as well as to treat us with fairness.

Q. Would not that difficulty be met by a calculation covering a series of years?—A. Then you must get the character of the lines.

Q. What is the life of a mile of wire?—A. That all depends. Put a wire through Pittsburg or a place like that, where there are large numbers of factories, with acid fumes in the atmosphere all the time, and it lasts hardly any time at all; while a wire in the dry climate on the prairies will last a long time. Those are the conditions that make it difficult and absolutely impossible to supply useful information. I say in the light of long experience and in the light of very careful judgment on the matter that any generalization on the cost of reproducing a system like the Western Union, serving a large country like the United States, is fallacious and not fair as a valuation of that system. It is only inexperience that would try to make a valuation on that basis.

Q. (By Mr. KENNEDY.) Has the long-distance telephone cut into the receipts of the Western Union Telegraph Company appreciably?—A. No, sir. Our receipts are steadily growing.

Q. I would like to ask you about the practice of giving complimentary books to different classes of people by which they are able to send messages free. What is the principle on which that is done; also whether it is a good thing for the telegraph company, and whether it is a good thing morally to do?—A. As to the principle of the practice, it is a matter of personal courtesy only. As to the morals of it, I do not know that it has any moral effect, and I do not know that it has any immoral effect. I do not see where the immorality would be likely to show itself. If your question leads up to the point made by one of your witnesses that the telegraph companies try to debauch the legislatures by giving them franks and things of that kind, I think the best answer would be the existence of the complex State tax laws I mentioned this morning. And I do not know that we have received any great favors from Congress. On the contrary, I have been down here several times this winter fighting measures that would have been decidedly disadvantageous to the company, and I have had to use arguments, not franks.

I wish to say further, as to the idea of corporations debauching legislatures, that so far as the Western Union Company is concerned that company, to my knowledge, has never spent 1 cent, either directly or indirectly, for State or national legislation. I make that statement with all the impressiveness it is possible for me to employ. I should like also to say that I make this statement because Professor Parsons—I might as well name him—concluded his testimony before this commission by saying that he understood from Mr. Wanamaker that when his desire to make a Government telegraph was not adopted there was "a feeling of \$1,000,000 in the air around him," and Professor Parsons drew the conclusion, or rather he left the inference to be drawn by us—by you and by those who heard him—that the Western Union Telegraph Company was prepared to spend \$1,000,000 to defeat that measure. I merely wish to brand that statement as absolutely without any foundation in fact or justification in any way.

Q. You say the giving of passes is a personal courtesy. Is there any thought that they will bring a return to the company in any way by favors done, or are they given in any sense for favors done?—A. What favors? I do not know of any favors. I have just shown you that we do not get favors.

Q. It is entirely a matter of personal courtesy?—A. Yes; and it does not amount to anything. The amount of messages that are sent free by the Western Union Company in that way on this personal courtesy would not amount to a very small fraction of 1 per cent of all the messages sent.

Q. Do you keep an account of the expense to the company of this kind of messages?—A. No. We have an account, of course, of all the messages sent under franks charged up under the railroad contracts, as I have mentioned this morning.

Q. If the frank system were abolished would it make any difference in the rates?—A. No.

Q. (By Mr. LITCHMAN.) The question was asked of the Postal Telegraph man, and so we will ask it of you: Would these favors be given if a quid pro quo was not expected in return?—A. Yes; I do not know what quid pro quo could be expected. I do not know what the recipients could give us.

Q. That is what we are trying to find out.—A. That is what I would like to find out.

Q. (By Mr. KENNEDY.) Why don't you cut them off?—A. Why don't people cut off courtesies in other lines of business? Why don't theaters cut off deadheads?

Q. Is it not a fact that most members of Congress and State legislators have these franks?—A. Not that I know of; some do; but when you say most of them, that means a great many.

Q. Are they given voluntarily or do they ask for them?—A. I do not know. I really do not know anything about that. [Laughter.]

Q. Are the employees of the Western Union Company organized in what is known as labor unions?—A. Not that I know of.

Q. Is the company opposed to labor organizations?—A. That is a very large question that I do not care to answer. There was an organization in 1883, which the company refused to recognize; and I think, perhaps, that is the best answer. The company is always ready to deal with the personal grievances of its employees if they have any and put them on a fair basis, and we have every reason to suppose the employees are perfectly contented as they are.

Q. Have you any figures showing the wages paid to operators in different parts of the country?—A. I can give you an idea. They vary according to the experience and the age and the ability of the operator. In the large centers operators

are paid all the way from \$100 per month down, and in small offices outside they are paid smaller salaries where they are beginning. There is a regular scale as there is in every business.

Q. Was there any reduction of wages during the years of depression from 1893 to 1897?—A. No.

Q. Has there been any increase since then?—A. Not on the regular scale. There are increases going on all the time. As vacancies occur and men advance their salaries are increased as they fall into more responsible work.

Q. Is there any increase of wages resulting from the general prosperity of the country during the last few years?—A. The regular scale of wages has stayed about the same.

Q. (By Mr. FARQUHAR.) Are the wages now any greater than they were in 1883?—A. I have not the scale of 1883. I could not answer that question. Since then the operators have been paid for overtime and Sunday work.

Q. In the time since 1883 have the hours of labor been shortened by the day?—A. No; I think the scale has been the same ever since that time. I do not remember any changes in it.

Q. Did you pay on the 10-hours' scale at that time?—A. I have not the figures in mind. Nine hours for the 6 days in the week, and Sunday pay extra. That is the regulation, and it is the same all over the system.

Q. In 1883 you paid the extra hour of time?—A. Yes.

Q. And that has continued ever since?—A. Yes.

Q. Where do you get your supply of operators from?—A. From the young people in the offices. They begin in the large offices as check boys and check girls; and in the small offices they are generally friends of the operators and get the opportunity of learning there, and then they gradually work up in the business. There is also a school in the Cooper Union in New York that supplies a certain number. To that school the company makes a contribution, but I forget just how much it is.

Q. Do you take any graduates from the commercial colleges and schools?—A. We do not discriminate at all. If there is a vacancy and there is an applicant, and he is tried and found competent, he is employed. As I have said, it is entirely a question of supply and demand, as it is in every other business.

Q. Is the supply more than the demand all the time?—A. I should think it is. I would not be prepared to make a general statement, but I should say in a general way it is.

Q. In the working of your lines are the operators on your lines and on railroads interchangeable?—A. Yes.

Q. (By Mr. LITCHMAN.) I would like to ask a question right in that connection. Are the wages paid to girls the same as those paid to men?—A. No; not quite as much. The girls do not do as heavy work. They can not work as heavy wires. We have about 2,500 women altogether in the service, but they are necessarily not doing as constant and heavy work on the heavy press wires and circuits that require more energy as the men are.

Q. You spoke of having 2,500 women on the system. What proportion is that of the entire number?—A. As I pointed out this morning, we have, constructively, 35,000 people, but a large number of these—perhaps a fair estimate would be half of them—are employed by the railroads under the contracts that I spoke of. But for the handling of the public telegraph business they are, constructively, the employees of the Western Union Telegraph Company, which, of course, pays for their services in another way; and they are subject to the rules of the company in the transaction of the public telegraph business.

Q. Could you give the actual average rate for telegrams in the United States?—A. Yes; our annual report shows that for the messages we handled it is about 30.8 cents, and the expense is about 25.1 cents, that is on the 63,000,000 messages handled by the company after making proper deductions for the expense of maintaining leased wires over which a great many messages are sent by the lessees of which we do not get any account.

Q. How do you make it 30.8 cents?—A. By apportioning to this number of messages the full share of the expense.

Q. One is the gross and the other is the net?—A. Yes.

Q. What is the actual average rate of telegrams in Great Britain?—A. That I do not know.

Q. Is this average rate obtained by dividing the total receipts by the total number of telegrams?—A. No; by dividing the total receipts from the messages handled by the company, not putting into the proceeds receipts from leased wires, and stripping the receipts of everything but the proceeds from messages, and stripping from the expenses everything except that which is fairly chargeable to the messages we handled.

Q. Is not the same rule adopted in estimating the cost of messages in Great Britain?—A. I do not know. I have never seen anything about the cost of messages there. I do not know of any official statement that has ever been made—any estimate of the cost of the handling of their messages.

Q. Does the report you have there state the receipts from inland messages?—A. I do not know. I will say this, you must not take the inland messages alone. We do not do it. You have also to take cable messages and international messages. If you base any calculations of that kind on merely the inland messages you get false figures. For instance, we include all messages that we send over the Atlantic cables; that is, our proportion of the tolls from the point of origin to the cable point, and so we think you must include cable messages sent in the same way and the proportion of the messages sent to the Continent. By any other method, merely based on the inland messages, you get a figure that is absolutely wrong.

Q. If you divided the receipts from inland messages by the number of inland messages—A. (Interrupting.) But can you do that?

Q. I understood you could.—A. I understood you were dividing the gross receipts on the inland messages.

Q. From the testimony the inland messages yielded £2,280,574, and the number of messages was 74,151,385. That would give an average per message of 15 cents, would it not?—A. I do not know where you get those figures. However you may get the total receipts and total cost of messages you can not get away from the fact that the operation of the postal telegraph lines in Great Britain means a burden of at least \$2,000,000 per year on the taxpayers. You may figure and figure and figure, but still that result stares you in the face.

Q. You made a calculation this morning on the basis of 21 words as the average message in the United States; is it not true that the average message in Great Britain is 15 words?—A. I do not know.

Q. If that be true is it a fair comparison to make a calculation on the basis of 21 words where the other is only 15?—A. Pardon me. I think I was making the calculation on the basis not of the number in Great Britain, but on the number of words that would probably be used for a communication between Great Britain and the Continent.

Q. (By Mr. LITCHMAN.) Well, right there; what proportion of telegrams sent by Great Britain go abroad?—A. I do not know. What I say is this: If you send a message from New York to Chicago, to John Smith, 572 Dearborn street, Chicago, you name but one street. The chances are that if you send a message to London you have to name several streets; for instance, you may have to address it to John Smith, 6 Mornington Crescent, Hampstead Road, Camdentown, London, N.W.

Q. That being the case, and where messages average 15 words, is it fair to compare with the United States where the average is 21 words?—A. That basis for Great Britain, I judge, is on business that goes to small places where a man is known, for instance. In that case you would have it John Smith, Hampstead, whatever it may be.

Q. It is based on seventy-four million and odd messages?—A. That is all right, but a large number of the people whose messages you leave out of account of the cost there are paying a guinea a year for registration of a single word address: that is, two words—one for the name and street and one for the place, to cover John Smith, 543 Main street, Manchester, whatever it may be, or Henry Smith & Co., 760 River street, Huddersfield, or something of that sort.

Q. Well, if the total receipts are £3,000,000 they can not amount to a great many.—A. When you are trying to get at the average number of words in a message on which a fair basis of comparison of rates must be made for the general public, you must take that into consideration.

Q. Your basis of 21 words to the message involves the cost of 25 cents for 21 words, does it not?—A. Yes.

Q. Those 21 words would have cost, according to the foreign tariff, 21 cents, would they not?—A. In England.

Q. If the average message, then, in England is 15 words, the average cost would only be 15 cents?—A. That may be.

Q. And the comparison would be between 15 cents and 25 cents, and not between 21 cents and 25? That is the point I wanted to bring out.—A. That might be. That is, on the same basis; but please bear in mind that you are only comparing a limited territory. You could not apply that at all in this country without driving any telegraphic corporation into bankruptcy.

Q. I understand all these averages. I am not pinning you down and do not wish to do so. There is only one question to ask in that connection: What effect on the rate is had by the fact that different countries own the lines in Europe? Does not

that increase the cost?—A. Yes. That is shown by the statistics I have given you of the international lines. The messages passing over international lines in Europe are very much higher in tariff, figure as you will, than they are over the same territory with the unified system in the United States.

Q. (By Mr. FARQUHAR.) Suppose the British tariff schedule of rates was brought up to a paying condition, how much would they be advanced to cover the deficit that was made last year and the year before, for instance? What would be the cost of a message if it was taken at a paying rate to the Government?—A. They would have to increase them nearly 3 cents.

Q. That would bring the rate almost to the same tariff scale we have in this country?—A. Yes.

Q. In consideration of the shorter lines, too, there is 2 or 3 times the length on general messages?—A. Yes; there there are closer communities and compactor population.

Q. You hold, apparently, according to your annual report, a very large amount of securities of companies which have been taken over, I presume, in time?—A. Some of them have been and some of them have not.

Q. Do you issue a stock share of the Western Union Company that covers these shares at par value brought over from these other companies?—A. No; all of those are outside.

Q. Entirely outside?—A. Yes; they are leased companies that are included in the stocks of the guarantee companies that are not in the Western Union. Some of them I accounted for in the amount of the capitalization. I want to say that the stocks of other companies bearing the guarantee of the Western Union Company and not owned by it have been accounted for, but no stock has been issued to cover them at all.

Q. No stock has been issued to any of these companies?—A. No, sir; the stocks of companies for which Western Union stock has been issued have been taken in, of course, and canceled.

Q. Have you any idea as to the number of stockholders you have in the company?—A. Yes; about 11,000, in round figures.

Q. Can you give an idea as to how many stockholders hold large blocks of your stock?—A. No; I have not looked that up for some time. There are some large holders.

Q. Would they amount to over a hundred?—A. I do not believe they would amount to nearly a hundred. I should think, speaking offhand, 50 would be an extravagant estimate.

Q. What is your average dividend?—A. Five per cent is our regular dividend per annum. That has been the annual dividend for a number of years.

Q. Does your surplus go to extensions and betterment of lines?—A. It goes to construction.

Q. As a business man, do you know of any business in this country, corporate or otherwise, that can be brought under a rule of its worth being the cost of reproduction?—A. No; no successful business. If it is not successful, it is sold as a bankrupt concern.

Q. You know nothing of railroads, telegraph, or anything else where the theory of reproduction as to worth of the stock would hold good?—A. No, sir.

Q. Do you know of any business men in New York or elsewhere that ever held that opinion?—A. The opinion I expressed?

Q. No; I mean the expression of cost of reproduction.—A. No; not only no business man, but the decision that I have quoted to you of the appellate court of New York, distinctly, after examining the question, declared precisely as I do.

Q. (By Mr. LITCHMAN.) Right in that connection, supposing a company of capitalists should start to build a competing company of the Western Union Telegraph, would their business be based upon the capitalization of the Western Union Telegraph or upon the cost of construction of the line duplicating it?—A. That is a question I should not like to argue.

Q. You have answered a hypothetical question. Why is that not equally pertinent? I will state why I asked that question. I saw it stated not long ago that Mr. Rockefeller was contemplating duplicating the line of the Western Union Company, and that Mr. Russell Sage said if that was done he would be willing to dispose of his stock in the Western Union Telegraph Company even if he could not get but 50 cents on the dollar for it.—A. That is a matter of business contingency which I do not feel called upon to answer. I am only giving evidence here on the conditions as they exist.

Q. Would you object to saying what commission is paid to the Bell Telephone Company for receiving and delivering messages?—A. Fifteen per cent; about on the same basis of every other collecting and delivering agency on all our lines.

Q. You were asked the question what would be the added cost in Great Britain

to messages under certain contingencies, and you answered 3 cents?—A. I said I supposed so, by taking the amount of deficit and dividing by the number of messages. That is the only way I can get at it.

Q. That would not be added to 21 cents if it cost only 15 cents per message?—A. You say that the average is 15 cents; I do not know how you get at those figures.

Q. Assuming it is 15 cents, it would make the cost 18 cents?—A. Yes.

Q. For the sake of comparison in making up some tables in the office here, could you furnish reports of your company back for a number of years?—A. No. The annual reports contain statistics that run back to 1866. There is a table that has been printed over and over again.

Q. It does not cover the cost of construction during those times, does it?—A. No; I can't give that.

Q. (By Mr. KENNEDY.) Is there any increased cost to the public by reason of using the telephone in conjunction with the telegraph company?—A. Sometimes there is. If it is an independent line that runs into some place, they sometimes charge a small tariff for sending the message in, and then of course we have to charge that, whatever it may be.

Q. Ordinarily, it is not?—A. Not for the ordinary collecting and distributing through the telephone companies; the message goes to and from their subscribers, and we are the subscriber under those circumstances.

Q. (By Mr. LITCHMAN.) What do you think would be the effect of a general reduction in rates throughout the United States on an increase in business of your company?—A. As our facilities are about equal to the demands of the business, and we keep them there all the time, and the result is shown by our annual report, I think there is only one answer to that question: That it would mean loss to the company, because the physical capacity of wires and transmitting business has a limit. You can put all the wires you like into the woods of Michigan and across the prairies and into the mountains, but there is only so much business, and that is all you can get; and there is so much money necessary to spend to get it, and the facilities to these remote places now are more than enough all the time to meet the wants.

Q. Would there be, in your judgment, a sufficient increase in the income by an increase in the number of messages to counterbalance the loss by a reduction in the rate if the rate was fixed at 20 cents instead of 25?—A. I should think it would be a very serious question. You mean in New England?

Q. Let the reduction of 5 cents apply all around on the rate charged.—A. I think it would be a very serious question, which would require very careful consideration. We have considered those questions, and we have not seen our way to make that rate. That rate has been tried, as I said this morning, by the Baltimore and Ohio and several companies, and the result has been bankruptcy, and they have had to come to us.

Q. In the postal service a decrease in the postage has been followed by a tremendous increase in the number of letters.—A. But you do not make a parallel of that, I hope. The postal department is simply using the capital expended by corporations; it is only a matter of putting on another car on a train, if you want it. But once a telegraph wire is filled, you have got to construct another one the whole distance wherever you need it. There is no parallel between any public service of the Government that I know of and a Government telegraph, because the Government uses the facilities of other people for all other departments of its service. If you have business for a telegraph line, you have got to build a line for it the whole distance. If your mail matter increase 1 ton or 5 tons, the railroad simply puts on another car and carries it. No capital is expended; the track is there, the engine is there. But in the telegraph business it is entirely different. I think that a parallel between the British post-office and the post-office of the United States is about as good as you can get. The post-office of the United States is run at a loss of about \$3,000,000 a year, is it not?

Mr. FARQUHAR. Four millions.

The WITNESS. A year. The United States post-office gets 4 cents, 6 cents, 8 cents, where the British post-office gets 2 cents; and 4 cents where it gets 1. Yet with all that, with their higher rate, without the investment of capital to provide facilities for the service, they make a very great loss, while the British post-office goes on and makes a large profit. Now, then, if you are going to extend the telegraph in the United States on the same principle that is claimed by the advocates of the Government ownership idea, as was done in Great Britain, to carry it to every hamlet, you can not employ the capital of any other person to do it; you have got to go to the Government, you have got to provide the means somehow to build the lines out to every nook and corner. Those lines must be taken care of if you get business or if you do not; and if with the facilities I have shown

you this morning, the number of places we reach, and the number of places over a thousand inhabitants in each State are all provided with communication, we can only make enough at our rates to-day to provide for a small profit, and the Government is going to take over the system and spread it out with the necessary attendant expenses and put down the rates as has been advocated before you, it seems to me the result would be a deficiency, compared with which the deficiency in Great Britain would be a flea bite.

Q. (By Mr. LITCHMAN.) In speaking of the deficit of the United States post-office, is it not fair also to take into consideration the vast distances which mail matter is carried?—A. That is just the point I am making. You have just the same difference with the telegraph, and therefore will have a deficiency if you try telegraphs on that plan; the great differences in the distances will create a relative deficiency, just exactly as the present deficiency is compared with the British post-office.

Q. Well, the question originally asked was whether a decrease of the rate per message would not be followed by a large increase in the number of messages sent?—A. Yes; I said perhaps it would, but at a loss.

Q. Was not that the fact in the case of reduction in English telegraph rates in 1885?—A. Oh, yes; but was it not a fact that the deficiency ran up and is now running up to two million and a half every year?

Q. It is said to be a fact that messages increased two and one-half times in number in Great Britain.—A. You are talking about the question of increasing the business at a reduction of rate. Now, I say this to summarize the whole thing: You are asking me, as I understand it, whether if the company should put down the rate there would not be a great increase in business, with the inference that we would also make a profit. I say that the experience in Great Britain that you cite of the increased number of messages after the rate had been put down simply proves that the same thing could only be done here at a very serious loss to the companies. That is my deliberate judgment, in the light of the experience of other companies who have tried it and have gone into bankruptcy, and because of our own experience. We are studying the question and have studied it for years. We have a bureau that does nothing else except to look after the question of adapting our rates to the business and social demands of the country, with a proper regard to the vested interests of which we are trustees. I can only say that the present rates are fair, and that any radical reduction of rates such as was made in Great Britain would be followed by disastrous consequences to the owners of the property. Such a policy would be of no possible benefit to the people, and if the Government had the telegraph it would simply shift the burden from the stockholders to the taxpayers.

Q. When the Baltimore and Ohio Telegraph Company ran an opposition company to the Western Union, did not the Western Union make competing rates?—A. Yes, and stopped its dividends, while the Baltimore and Ohio Company became bankrupt.

Q. (By Mr. FARQUHAR.) You say that the press associations stand on all fours so far as rates are concerned?—A. Yes.

Q. The International Typographical Union's committee have been asking to have governmental control of the telegraph, so that these telegraph facilities could be extended to all papers in the United States. Is not that the plea they have made?—A. I believe it is, but it is a matter that does not concern us in any way; we are only the carriers of the reports of the associations; we have nothing to do with procuring or furnishing them.

Q. So you would say if there was any monopoly or discrimination it lies in the associations themselves?—A. Precisely. No telegraph company has any voice in that question at all. It is merely the transmitting agent of the press associations to the addresses given. If it sends the matter, or leases its wires to associations for their own uses, any association can get exactly the same terms in either case.

Q. You said also there was no priority in business. Is there not a priority for all Government business?—A. Yes; that is a part of the agreements with the Government which will be printed as exhibits—that Government business shall have priority. And I should like to say just one thing while we are talking about Government business: That the Western Union Company's service to the Government is not confined to the business specified in those contracts. You may not know it, but all of the business, the telegraph business, of this Government with Cuba throughout the Spanish campaign and since has been transmitted and is to-day transmitted free over the cable of the International Ocean Telegraph Company, which is leased and operated by the Western Union Telegraph Company. In one year we did more business over that cable for the United States Government than we did for the Spanish Government for the preceding 30 years.

of the concession, and we are doing it to-day. We are not making any face about it, but, on the contrary, we are very glad to put the United States Government in the same position as the Spanish Government was in. I wanted to say that to show that we are not so black as some of our socialistic friends like to paint us.

Q. (By Mr. LITCHMAN.) Is not the Western Union pursuing this course to keep the Postal Telegraph Company out of Cuba?—A. No, sir; we are simply keeping our contract like honest men. We have a concession in Cuba that provided that business of the Spanish Government should go free between Cuba and the United States until 1906. When the United States Government came into control, we put it in the same place as the Spanish Government, and all we ask is that the United States shall respect that contract as the Spanish Government has done.

Q. It is a fact that you are fighting the Postal to keep that company from getting a foothold in Cuba?—A. Pardon me; we are fighting to try and keep them from breaking down our rights.

Q. They are trying to get in, and you are resisting the attempt?—A. They have been trying to get in, but Congress has not done anything yet.

Q. (By Mr. KENNEDY.) Has there been an attempt made to bring about a consolidation between the Western Union and the Postal Telegraph companies?—A. Not that I am aware of. I have seen a report to that effect in the papers.

Q. Is there any community of ownership between them?—A. No, sir; not a dollar.

Q. Have you spoken as to the arrangements by which the ruinous competition of former years is done away with, etc.?—A. The Postal Telegraph managers found that they could not do anything in the matter of low rates, so they followed the rates of the Western Union.

Q. Was not that by mutual agreement?—A. There was an agreement, yes. That agreement was practically abolished; they simply follow the rates that we make.

Q. You make the rates and they follow?—A. The rates are generally understood. Anybody can get our rates by going into an office and asking for them.

Q. Is it desirable to bring about a consolidation of the two companies?—A. That I am not prepared to answer.

Q. (By Mr. LITCHMAN.) You have an interchange of messages?—A. Yes; that is, they turn messages over to us if they take them for any place they do not reach, and we transmit them.

Q. You prorate on these messages?—A. No.

Q. The additional tariff of your zone is added to their tariff?—A. Yes; or they may take them for our through rate, and turn them over to us at their point of origin, turning over the whole rate to us.

Q. (By Mr. CLARKE.) If the telegraph were to be owned and operated by the Government, would there be any saving in the employment for it of certain employees of the Government now in other occupations, like postmasters and clerks?—A. I should hardly think so, because a prerequisite would be a knowledge of telegraphy; in small offices particularly the postmaster would have to combine his ability as postmaster with the ability of a telegraph operator.

Q. That is the case with railroad station agents now, is it not, to a large extent?—A. Yes; they would be on the same basis, but there are, I imagine, a large number of postmasters that do not know anything about telegraphs.

Q. Was not that true somewhat of the railroad station agents?—A. Yes.

Q. One man can learn as well as the other?—A. Yes.

Q. Is it not true, then, that a very large number of small offices could be managed by the same person who does some other branch of Government work?—A. Yes; I think that is true. It is true of several of our offices in small places which are in the post-offices now.

Q. It has been charged that private or company ownership keeps out of use some of the latest and best inventions for operating the telegraph. Is there anything in that charge?—A. If the person or persons who make that charge will kindly name the apparatus, I should be very glad to know it.

Q. What is the policy of the Western Union Telegraph Company in reference to new inventions?—A. To develop every invention that it can lay its hands on that will improve the service, as I think its history proves with the quadruplex and other systems.

Q. Is the printing telegraph in use by the Western Union?—A. I do not know what you mean by the printing telegraph.

Q. The telegraph which uses the alphabet instead of the telegraphic signs.—A. Oh, the old-fashioned printing is in use, but we have an automatic system in use by which a message is sent over a punched slip, the same as the Wheatstone, and

received in printed Roman letters at the other end on an ordinary blank, ready for delivery.

Q. Is there not some invention by which messages are sent in Roman letters and are received in Roman letters?—A. Not that I know of. There have been a great many theories about such things. I know of no practical system of that kind.

Q. Is it practicable to send signatures and outlines of pictures, etc., by telegraph?—Yes; for short distances. That is a very old invention. That is Gray's telautograph, which is a development of several systems of that kind. The first one, I think, was an invention by Casselli, in Italy, some 20 or 30 years ago or more. I have forgotten the date. Then it was taken up by Edison and others.

Q. If that can be done, why is it not equally feasible to transmit Roman letters?—A. It is done, but only for short distances. It requires 2 or 3 wires, and is too slow—too slow to compete with the ordinary transmission of messages.

Q. Do you know of any reason why the Government could not operate the telegraph just as successfully as a company, provided it practiced good business methods?—A. Do you mean merely to operate it physically?

Q. Own it, and operate it, and maintain it, and keep it up to public demands.—A. I suppose the Government could do it by employing the same class of ability that the companies employ for management and for operation; but I do not think that the general history of Government operation of any system like a telegraph without an organized and permanent civil service, would make it satisfactory to the public. As to the financial part of it, I can only repeat what I have already said—that if the Government should own and operate the whole system of telegraphs in the United States it could only do so at a large annual deficiency, because there would undoubtedly be political clamor for extension of lines to all sorts of localities without regard to any sort of financial considerations, of financial profit. The result would simply be similar to that of the British post-office and, as far as I know, the financial results of the systems of other countries, except that with the larger extent of territory, the greater variety of climatic conditions and commercial conditions in the United States, the result would be very much more expensive than it is in other countries of which we have any record.

Q. Do you think, as a practical telegraph manager and financier, that the principle upon which the European countries which own and operate telegraphs administer that branch of the Government, namely, not to make the companies profitable, but to afford the largest possible service to the public, is a correct principle?—A. No; in the presence of a system that serves the public as well as the present system does, and of the evidence that there is very little territory—that there is no territory, in fact—where there is a great demand for the telegraph that it has not gone or does not reach by means of the telephone connections for collection of messages and distribution of messages, as I pointed out this morning, I think that no good public end would be served by it.

Q. Suppose the Government applied good business principles to the operation of it so as to make it yield a fair revenue, sufficient not only to pay all its current expenses, but to keep up the plant in good condition and to extend it as fast as there was a reasonable demand for it and to yield a small profit in addition to all that, what objection could you then see to Government ownership and control?—A. If you are speaking to me now as merely a citizen, that is another question. I see, then, a political difficulty and objection, and I imagine that a permanent civil-service arrangement such as prevails in all European countries would be distasteful for the telegraph or any other department in this country. Without it, the periodical shifting of operators, or managers of the offices, with political changes, would seriously demoralize the substantial business of the country, the business that depends on quick and steady communication; and values of produce, values of securities, and values of all kinds might be very materially interfered with. Under the present system instantaneous communication is maintained unbrokenly between the centers of commerce, and has to be. On that point you must also bear in mind that all governments who take over the telegraph systems at once start in by disavowing any responsibility for delays, for errors, for damages of any kind resulting from defective service, while the private ownerships are held responsible by the courts for the conduct of their business, and mulcted in damages for neglect or failure that very often they ought not to be responsible for. By that means very strict discipline is necessarily enforced, automatically almost. Under the Government ownership any complaint or claim is met simply by the statement that His Majesty's Government is not responsible for any mistake made on the telegraph line.

Q. In your opinion, could the mail service of the Government be carried on by private companies better than the Government does it?—A. I should not like to express an opinion on that subject; I do not know enough about it.

Q. If there were no deficit in the Post-Office Department, but, on the contrary, a profit, would not the Government administration of that public facility be a good strong argument in favor of operating the telegraph also?—A. I think not, because, as I said in one of my answers to Mr. Litchman, the conditions are entirely different. In the one case, the Post-Office employs the vehicle provided by the capital of corporations on railroads, and by a large number of individuals, as I understand it, for animal and like conveyances in the country districts. To meet the same conditions for the telegraph, it must necessarily provide a great deal of capital, much of which would necessarily be unproductive, and that would simply mean an additional burden on the taxpayer.

Q. Is there an active and strong demand in new regions of the country for telegraph facilities?—A. Yes, sir; where there are developments. I may mention an instance to you. The other day an oil well was found at Beaumont, Tex. Instantly there was a rush of people there, but by the time they got there we had some quadruplex instruments on the ground and had so increased the facilities that we were able to handle the business before they were down there. By the time business was well under way a wire was strung from Houston down, and complete provision made for that business.

Q. Would not a large number of places be accommodated with the telegraph if the Government owned it which now it does not seem an object to the company to bring into the field?—A. I think that it was the policy of extending the telegraph to unprofitable places in Great Britain that caused the deficiency. As I showed you this morning, the number of telegraph offices and connections with them so far exceeds the number of places with over 1,000 population in each State of the United States that the places not so reached must be very small and very remote, and any further extension could only be to such unprofitable places except as they are developed.

Q. That would be a public convenience not only to those places, but to people in other parts of the country who might wish to communicate with them, would it not?—A. Yes; it would come back to the question of who was to bear the expense.

Q. The same is true in regard to mail service in this country, is it not?—A. Yes; but there are much fewer places in this country with the post-offices. We have a larger percentage of telegraph offices to post-offices in this country than there are in Great Britain, as I showed you this morning.

Q. The fact remains, nevertheless, that there is a very large area not yet reached by telegraph?—A. Yes; where there is a shifting population, where there are ranches, and places of that kind, but I do not believe there are any places of any consequence where there is any demand for communication that we do not reach or that we are not in touch with.

Q. The Government sends mail, does it not, to thousands of offices, the business of which does not pay the cost?—A. I suppose so.

Q. Might it not do the same with telegraph messages and have the loss made up from business in more thickly settled portions of the country?—A. I should say no. If they can not do it in Great Britain, where the population is close together, where the country is thickly populated, and where, taking in Ireland and the highlands of Scotland and all those waste places, the population is still 333 to the mile, while our population is 76 to the mile, it seems to me that the result would be that the loss would grow in proportion to the size of the country.

Q. Well, could not the Government of Great Britain do it if it charged higher rates?—A. Suppose they were to charge higher rates; I do not see that that makes any argument here, where the distances are so much longer, and where conditions are so entirely different from what they are there.

Q. The long and short of it is this: Can there not be a rate that will be remunerative, not necessarily from every office, but taking the rates at large over the whole country?—A. I do not think you can make a juster or fairer division of rates than we have now.

Q. Suppose the Government accepted your scale of rates, then, entirely; could not they make it up?—A. Anybody, given the same conditions we have, could, I suppose, step into our shoes. But, as I understand it, the whole idea of Government ownership is that the Government has only to put its hand on the lines, reduce the rates so as to produce a tremendous increase in messages, provide an unlimited increase in facilities, and by some magic defy the ordinary law of the ledger and strike a balance somehow where expenses are more than receipts, without a deficit; and I do not see how it can do it.

Q. You think, then, that the chief danger of the Government making a failure of it if it undertook it, would be, first, that it would not do the business on business principles, and second, that it would be influenced by local considerations and political considerations?—A. I should think that these are obvious dangers, obvious possibilities.

Q. (By Mr. LITCHMAN.) Will you tell me the capacity of a cable?—A. Yes; with pleasure. It depends somewhat on the length of the cable. For an Atlantic cable, for instance, a cable that is laid in the Atlantic Ocean, that is from 1,800 to 2,500 miles long, the only guarantee any contractor will give you is 17 words a minute.

Q. It is substantially only one wire?—A. One wire right in the center, insulated and covered with iron or steel sheathing wires to protect it from friction outside.

Q. I wanted to bring out the fact of the relative capacity of a cable with a line of land wire.—A. You can put as many wires on a land line as the poles will carry. Submarine cables have only one conductor each. There is a cable [showing a drawing]. This is the insulation. This space is filled in with jute [indicating]. These wires are laid on the outside and the whole thing is about as big as your two fingers. A ship sails along and you commit your property to the mercy of the deep.

Q. (By Mr. CLARKE.) These side wires [indicating] are merely to give it strength?—A. That is all. Sometimes cables are laid in 2½ miles of water and you must have the necessary strength to stand the strain of lifting them from that depth for repairs.

Q. (By Mr. LITCHMAN.) How far, in comparison—referring to the question asked you by Colonel Clarke, between this country and Great Britain—would the difference in universal education in this country modify the view expressed by you?—A. I do not think it would influence it very much. I think that our people who want to telegraph, do telegraph. What I wanted to say this morning is that Great Britain is a good deal of a playground. London is peopled all the time with a swelling stream of strangers from all over the world. You take a traveler who goes over and lands at Queenstown. The first thing he does is to telegraph to London to see if his hotel accommodations are all right. There is a large amount of social telegraphing all the time, and the whole country is simply filled with large houses where house parties are going on all the time and there may be 20 people in the house telegraphing about servants —

Q. (By Mr. KENNEDY.) Can you "quad" the cable?—A. There is a fortune for you if you can do it. No; we can duplex it.

Q. (By Mr. FARQUHAR.) If the Western Union and Postal were taken over by this Government, it would be in the hands of Congress in the Post-Office committees?—A. Yes.

Q. The whole management of the appropriation, just as the appropriation is now for the postal service?—A. Yes.

Q. Do you see a danger in the usual way of Congressmen getting everything for their districts they can, in covering every Congressional district of the United States with the telegraph to every farm house or every crossroads in the country?—A. Well, I think that an opinion on that point can only be given in the light of experience.

Q. Do you not think that this giving a Congressman this opportunity to make extensions all over the United States in his district would in a larger measure bring in this selfishness that is contained in the river and harbor bill?—A. That is just what I do think.

Q. Do you not think that is really enough to wreck any proposition of Government ownership?—A. I think so, decidedly, and I think that that is the opinion of everyone who has really, carefully, conservatively, and intelligently thought over the question.

Q. (By Mr. KENNEDY.) I would like to ask if the post-office system is a political question? I would like to know if Government ownership of the telegraph would likely be any more a political question or a political machine than the Post-Office Department?—A. Well, is it not true that the postmasters are all changed with every new administration? And if you should undertake to change all the telegraph managers and operators with every administration, I think that the whole business of the country would be absolutely demoralized.

Mr. CLARKE. Can you think of anything further?

When your testimony is sent to you for revision, you can supply any data that you have neglected to supply here.

The WITNESS. There is one thing that I want to put in there. I said something about values on tax returns. That is all nonsense. The taxable valuations are on a real estate basis nearly all through the property, but that has no relation at all to the questions we have been considering.

Testimony closed.

Whereupon, at 4.10 p. m., the commission adjourned until to-morrow morning at 10.30 o'clock.

EXHIBIT A.

FOREIGN TELEGRAPH STATISTICS, 1898.

The figures on the right show the United States with the largest area (except greater Russia) and the fewest people per square mile, with only 0.33 mile of wire per square mile; have 76 people to every wire mile, and gives one person 0.0131 mile of wire to use. Great Britain, with a denser population and a network of wires (2.53 miles per square mile¹), has 130 people to every mile of wire, affording them but 0.0076 mile of wire each. In this way the United States is superior to all countries.

Countries.	Population.	Miles of line.	Miles of wire.	Offices.	Em- ployees.	Messages.	Receipts.	Cost of main- tenance.	Area, square miles.	People per square mile.	Miles of wire to square mile territory.	Number of people to square mile of wire.	Miles of wire to 1 person.
Austria.	23,895,413	21,627	67,121	5,172	5,033	12,765,890	901,735	\$1,063,519	250,373	118+	0.27	356	0.0029
Belgium.	6,669,732	3,964	20,732	1,058	5,033	6,119,111	901,735	\$1,063,519	250,373	118+	0.27	356	0.0029
Bosnia-Herzegovina.	1,568,092	1,754	4,463	1,119	291	1,497,434	82,279	102,569	23,577	66+	1.19	351	0.0028
Bulgaria.	3,153,259	3,259	6,728	189	1,581	1,253,667	206,498	27,538	27,538	115+	.25	468	0.0021
Croatia.	2,519,000	2,519	10,687	271	782	1,095,338	239,362	384,083	214,780	147	.59	249	0.0019
Egypt.	5,560,000	2,519	10,687	271	782	1,095,338	239,362	384,083	214,780	147	.59	249	0.0019
France.	38,517,975	79,413	400,590	12,460	70,369	42,490,048	9,098,210	218,460	218,460	184+	1.93	96	0.0104
Germany.	5,925,031	76,464	278,584	22,895	11,813	2,961,619	379,749	665,396	305,000	19+	1.08	257	0.0031
Greece.	52,279,801	76,464	278,584	22,895	11,813	2,961,619	379,749	665,396	305,000	19+	1.08	257	0.0031
Great Britain.	40,276,570	43,507	308,436	10,816	159,942	90,067,720	16,021,940	15,341,940	120,678	333	2.55	130	0.0026
Hungary.	12,438,806	6,099	7,098	221	974	1,221,920	242,334	865,340	24,977	98	.29	341	0.0023
Italy.	17,469,291	13,640	18,715	8,665	2,843	4,957,091	714,110	1,303,814	12,780	409	1.02	389	0.0023
Luxembourg.	30,847,291	25,174	79,061	5,411	5,411	10,646,320	2,827,825	800,830	110,655	271	.70	333	0.0031
Netherlands.	2,177,883	880	646	151	46	1,399,771	12,511	16,079	16,079	186	1.12	712	0.0065
Portugal.	2,050,000	7,487	17,621	540	98	90,394	12,890	536,031	124,415	86	.12	712	0.0065
Romania.	5,406,249	4,257	10,930	539	6,437	2,478,705	598,076	44,315	44,315	117	.23	410	0.0014
Russia.	129,211,000	89,579	185,850	5,297	16,381,369	16,381,369	12,747,925	41,727,262	8,660,393	415	.02	699	0.0014

¹ France only.

² Algeria only.

³ General staff not given.

⁴ In Europe; 2,100,000 square miles, 98,000,000 population, 47 people to square mile.

FOREIGN TELEGRAPH STATISTICS, 1898—Continued.

Countries.	Population.	Miles of line.	Miles of wire.	Offices.	Em- ployees.	Messages.	Receipts.	Cost of main- tenance.	Area square miles.	People per square mile.	Miles of wire to square mile territory.	Number of people to 1 mile of wire.	Miles of wire to 1 person.
Spain.....	18,226,040	19,890	45,819	1,428	3,814	5,274,415	1,614,979	1,522,632	196,173	93	.23	397	.0025
Spain.....	18,069,411	19,890	45,819	1,428	3,814	5,274,415	472,865	402,149	172,876	29	.09	314	.0031
Switzerland.....	2,917,819	4,439	13,100	2,039	2,871	2,530,520	569,507	531,280	15,361	183	.82	222	.0046
Total.....	1,383,178,871	425,600	1,585,207	75,764	295,846	256,584,166	347,542,222	25,393,342	410,886,619				
United States:													
Western Union.....		192,705	933,153	22,900		63,167,783	24,758,569	18,593,205			.30	81	.0122
Postal.....		29,882	184,933	42,709		16,528,444					.06	410	.0024
Total.....	75,997,687	222,587	1,118,086	25,609		79,696,227	24,758,569	18,593,205	3,062,679	24+	.36	491	.0147

¹ Egypt not given. Egypt in = 308,678,871.

² Austria, Germany, Hungary, Luxembourg, and Russia not given.

³ Austria, Germany, and Hungary not given.

⁴ Austria, Bulgaria, France, Germany, Hungary, Luxembourg, and Roumania not given.

⁵ Austria, Bulgaria, France, Germany, Hungary, Luxembourg, and Roumania not given.

⁶ The United States above does not include Alaska in population or area.

⁷ The United States above does not include Alaska in population or area.

⁸ The United States above does not include Alaska in population or area.

⁹ The United States above does not include Alaska in population or area.

¹⁰ Only 1,693 not competitive with Western Union operations.

¹¹ The United States above does not include Alaska in population or area.

¹² The United States above does not include Alaska in population or area.

¹³ The United States above does not include Alaska in population or area.

¹⁴ The United States above does not include Alaska in population or area.

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⁴⁷ The United States above does not include Alaska in population or area.

EXHIBIT B.
TELEGRAPH STATISTICS—THE UNITED STATES.
Extent of service by Western Union Telegraph Company.

State or Territory.	Number places 1,000 people and over in United States.				Number telegraph and telephone offices in United States.				Number of places less than 1,000 people reached by telegraph and telephone in United States.	Population.	Area.	Number of people to square mile.
	1,000 to 2,499.	2,500 to 4,999.	5,000 and over.	Total places.	Western Union telegraph offices.	Other line tele-telephone offices.	Tele-telephone communication.	Total tele-telephone offices.				
Alabama.....	44	14	8	62	376	29	116	546	484	1,826,697	51,540	35+
Arizona.....	22	19	5	41	46	46	28	118	113	125,931	112,920	25+
Arkansas.....	22	11	1	31	223	21	247	514	473	1,317,564	152,040	9+
California.....	16	20	3	43	307	106	395	1,040	955	1,485,033	155,945	9+
Colorado.....	3	4	29	36	188	8	75	322	290	998,550	103,645	16+
Connecticut.....	3	3	1	13	69		21	99	86	184,735	1,960	91+
Delaware.....	1	1		2	206	49	133	394	276	528,542	54,240	10+
District of Columbia.....	18	27	13	58	28	23	183	324	318	2,216,392	83,980	97+
Florida.....	6	4	1	11	67	4	83	157	143	1,048,581	54,530	19+
Georgia.....	246	18	52	316	1,453	50	254	1,757	1,471	4,821,550	56,000	86+
Idaho.....	3	8	42	53	737	13	396	1,163	968	2,516,462	35,910	70+
Illinois.....	131	21	24	176	1,065	67	180	1,341	1,256	2,470,095	81,154	13+
Indiana.....	73	19	19	111	788	2	31	833	724	1,470,095	81,700	18+
Iowa.....	20	17	15	52	273	48	609	932	870	2,147,174	40,000	54+
Kansas.....	16	6	11	33	206	307	605	1,012	953	1,831,025	45,420	30+
Louisiana.....	16	5	11	32	206	94	321	617	511	1,460,016	9,860	12+
Maine.....	19	7	7	33	205	24	142	369	367	1,190,690	9,860	12+
Maryland.....	72	7	7	86	405	6	355	860	800	2,865,346	8,040	349+
Massachusetts.....	168	72	79	317	337	337	337	337	1,109	2,420,882	57,340	42+
Michigan.....	180	19	13	212	621	99	56	716	1,257	4,031,384	67,310	60+
Minnesota.....	80	40	6	126	621	99	56	716	504	1,451,270	46,019	32+
Mississippi.....	35	36	19	90	750	32	251	1,003	1,172	3,106,665	69,137	45+
Missouri.....	60	9	10	79	453	27	103	583	261	243,329	17,351	14+
Montana.....	1	1	2	4	55				40	1,048,335	110,679	1+
Nebraska.....	7	1		10	37	1	12	50				

TELEGRAPH STATISTICS—THE UNITED STATES—Continued.
Extent of service by Western Union Telegraph Company—Continued.

State or Territory.	Number places 1,000 people and over in United States.				Number telegraph and telephone offices in United States.			Number of places of 1,000 people reached by telegraph and telephone in United States.	Population.	Area.	Number of people to square mile.
	1,000 to 2,499.	2,500 to 4,999.	5,000 and over.	Total places.	Western Union telegraph offices.	Other line telegraph offices.	Telephone connection.	Total telegraph and telephone offices.			
New Hampshire.....	78	17	10	105	194	11	221	447	411,588	9,005	46—
New Jersey.....	79	36	38	153	628	15	17	128	1,083,683	8,523	252—
New Mexico.....	16	3	2	21	71	124	664	859	198,310	128,719	135+
New York.....	222	65	72	359	1,573	31	102	2,147	7,268,012	52,674	36—
North Carolina.....	31	10	9	50	329	59	592	980	1,893,810	40,879	45+
North Dakota.....	162	54	62	278	1,059	1	43	1,173	4,319,546	38,955	110+
Ohio.....	10	3	3	16	82	22	104	238	388,245	96,838	43—
Oklahoma.....	19	97	5	31	106	74	707	2,385	413,586	45,928	137+
Oregon.....	218	9	9	36	346	3	57	394	1,088,843	1,044	44+
Pennsylvania.....	25	12	4	41	273	4	82	281	1,340,316	31,044	43+
South Carolina.....	13	17	3	23	243	10	543	817	2,020,616	45,056	45—
South Dakota.....	122	38	26	186	632	8	71	1,168	3,058,711	86,111	11+
Texas.....	35	5	3	43	99	21	263	457	276,749	9,135	37+
Utah.....	62	17	6	85	168	37	380	585	343,641	42,330	44—
Vermont.....	22	7	7	36	40	56	459	742	218,163	20,574	31+
Washington.....	27	6	5	38	217	39	384	620	918,400	25,805	38—
West Virginia.....	69	25	31	126	646	11	33	1,061	2,069,042	65,805	31+
Wisconsin.....	7	1	2	10	69	116	116	106	92,581	97,876	1—
Wyoming.....											

Places of less than 1,000 people reached by telegraph and telephone, in round numbers, 28,000; post-offices in United States, 76,000; all telegraph and telephone districts, 38,000; post-offices, 38,000; telegraph offices, 38,000; telephone offices, 38,000; telegraph offices, 38,000; telephone offices, 38,000.
Great Britain has 10,816 telegraph offices and 34,000 post-offices (estimated).
Western Union Telegraph Company reaches practically 50 per cent of United States post-offices. Great Britain only 25 per cent.

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EXHIBIT D.

RATES OF PAY FOR GOVERNMENT COMMUNICATIONS BY TELEGRAPH.

ORDER }
No. 742. }POST-OFFICE DEPARTMENT,
Washington, D. C., June 30, 1900.

Pursuant to the authority vested in the Postmaster-General by the act of Congress entitled "An act to aid in the construction of telegraph lines, and to secure to the Government the use of the same for postal, military, and other purposes," approved July 24, 1868, and by the Revised Statutes of the United States, Title LXV, I hereby fix the rates at which such communications as the said statutes prescribe (not including those passing over circuits established by the Chief of the Weather Bureau, Department of Agriculture) shall be sent during the fiscal year beginning July 1, 1900, and terminating June 30, 1901, by the several companies within the effect of said statutes, as follows:

For day messages containing not more than twenty (20) words, exclusive of place from and date, twenty (20) cents, not exceeding one thousand (1,000) miles, and one cent for each additional word. One quarter of this rate to be added for each five hundred (500) miles, or fraction thereof, but no rate on a message of twenty (20) words to be more than forty (40) cents, nor on an additional word more than two (2) cents. The rate between all points in any State, Territory, or the District of Columbia shall be twenty (20) cents for twenty (20) words, and one cent for each additional word.

In cases where the price of a message, determined as herein provided, shall include a fraction of a cent, such fraction, if less than one-half, is to be disregarded; if one-half or more, it is to be counted as one cent.

For night messages not exceeding twenty (20) words, exclusive of place from and date, fifteen (15) cents for any distance within two thousand (2,000) miles, and for greater distances twenty-five (25) cents; in each case one cent for each additional word.

Instead of computing the actual distances of transmission, the distance for payment shall in all cases be taken absolutely to be the number of miles between the capital of the State or Territory, or from the city of Washington, if from within the District of Columbia, from within which (whatever the place) the message is sent, and the capital of the State or Territory, or the city of Washington, if within the District of Columbia, within which (whatever the place) the message is received, as shown in the accompanying table, wherein such distances are given as computed upon the shortest practicable route between such capitals, and which is to be taken as part of this order.

But it is provided that if, on the 1st day of July, 1900, or at any time during the ensuing year, any such company shall charge the public for a message of ten words or less, exclusive of the date, address, and signature, a less rate than is herein fixed for twenty words, exclusive of place from and date, the rates here prescribed shall, as to such company, thenceforth during the year be reduced to the rates so charged to the public.

The statutes provide that telegrams between the several Departments of the Government and their officers and agents, in their transmission over the lines of any such company, shall have priority over all other business. All officers of the United States sending such telegrams should indorse thereon the words "official business," and should report to the Postmaster General any failure to transmit them in such priority, and any charge made in excess of the rates above prescribed.

Each company will be allowed to charge for messages received from another line at the same rate as if received from the Government direct, at the point of transfer for transmission over its own line.

CH. EMORY SMITH, *Postmaster-General*.

Schedule of rates for Government telegrams on and after July 1, 1900.

Number of words.	Rate for twenty words and multiples of twenty, and for words additional to twenty or any multiple thereof.						
	Day messages.					Night messages.	
	1,000 miles.	1,500 miles.	2,000 miles.	2,500 miles.	3,000 miles or more.	2,000 miles.	Over 2,000 miles.
20	\$0.20	\$0.25	\$0.30	\$0.35	\$0.40	\$0.15	\$0.25
40	.40	.50	.60	.70	.80	.35	.45
60	.60	.75	.90	.90	1.05	.55	.65
80	.80	1.00	1.20	1.40	1.60	.75	.85
100	1.00	1.25	1.50	1.75	2.00	.95	1.05
200	2.00	2.50	3.00	3.50	4.00	1.95	2.05
300	3.00	3.75	4.50	5.25	6.00	2.95	3.05
400	4.00	5.00	6.00	7.00	8.00	3.95	4.05
500	5.00	6.25	7.50	8.75	10.00	4.95	5.05
1	.01	.01	.02	.02	.02	.01	.01
2	.02	.03	.03	.04	.04	.02	.02
3	.03	.04	.05	.05	.06	.03	.03
4	.04	.05	.06	.07	.08	.04	.04
5	.05	.06	.08	.09	.10	.05	.05
6	.06	.08	.09	.11	.12	.06	.06
7	.07	.09	.11	.12	.14	.07	.07
8	.08	.10	.12	.14	.16	.08	.08
9	.09	.11	.14	.16	.18	.09	.09
10	.10	.13	.15	.18	.20	.10	.10
11	.11	.14	.17	.19	.22	.11	.11
12	.12	.15	.18	.21	.24	.12	.12
13	.13	.16	.20	.23	.26	.13	.13
14	.14	.18	.21	.25	.28	.14	.14
15	.15	.19	.23	.26	.30	.15	.15
16	.16	.20	.24	.28	.32	.16	.16
17	.17	.21	.26	.30	.34	.17	.17
18	.18	.23	.27	.32	.36	.18	.18
19	.19	.24	.29	.33	.38	.19	.19

EXHIBIT E.

RATES FOR TELEGRAPH SERVICE FOR THE WEATHER BUREAU, OVER WESTERN UNION, INTERNATIONAL OCEAN, AND POSTAL TELEGRAPH-CABLE COMPANIES' LINES, FOR THE FISCAL YEAR ENDING JUNE 30, 1901.

FOR MISCELLANEOUS MESSAGES.

For messages containing not more than twenty words, exclusive of place from and date, twenty cents, and for each additional word one cent, for all distances not exceeding one thousand miles.

For distances over one thousand miles, one-fourth the price of messages for one thousand miles to be added for every five hundred miles or fractional part thereof: *Provided*, That no message shall be more than two times the price of a message for one thousand miles. (Fractional parts of a cent to be dropped in all amounts.)

The rates between all points within the same State, Territory, or the District of Columbia shall be the same as for one thousand miles, to wit, twenty and one.

The distances from all points in one State, Territory, or the District of Columbia to all points in another State, Territory, or the District of Columbia, shall be taken arbitrarily to be the distance between the capitals of such States, Territories, or District, respectively, by the shortest practicable route, as shown by the published distance tables of the Post-Office Department. But it is provided that if, on the first day of July, 1899, or at any time during the ensuing year, the public shall be charged for a message of ten words or less, exclusive of the date, address, and signature, a less rate than is herein fixed for twenty words, exclusive of place from and date, the rate here prescribed shall, thenceforth during the year, be reduced to the rate so charged to the public.

FOR CIRCUIT REPORTS.

For weather reports in code words, over circuits as now or hereafter arranged for the purpose, each station copying all the reports sent from the other stations on the circuit, two and one-half cents per word over each circuit not exceeding one thousand miles in length and having not more than four intermediate and two terminal stations; one-half cent per word additional for circuits over one thousand miles in length: *Provided*, That no circuit shall exceed fifteen hundred miles in length; one-eighth cent per word to be added for each additional drop-copy station; one-eighth cent per word to be deducted for each drop-copy station

that may be discontinued beyond the four intermediate stations. Copies of all circuit reports, in installments of not more than two sheets at a time, must be delivered to the Weather Bureau observers promptly after their receipt at the stations on the different circuits, where messenger service is maintained.

SPECIAL RATE FOR CERTAIN FORECAST, AND ALL COTTON REGION, SUGAR AND RICE, AND CORN AND WHEAT REGION MESSAGES.

For all forecast messages distributed from designated circuit centers other than Washington, D. C., Chicago, Ill., San Francisco, Cal., and Portland, Oreg., on each day that they are telegraphed, the rate for miscellaneous messages will be charged for the first message and ten cents for each additional message.

For all forecast messages distributed from the circuit center of Washington, D. C., Chicago, Ill., San Francisco, Cal., and Portland, Oreg., to points other than regular Weather Bureau stations, on each day that they are telegraphed, the rate for miscellaneous messages will be charged for the first message and ten cents for each additional message. For all forecast messages telegraphed from Washington, D. C., Chicago, Ill., San Francisco, Cal., and Portland, Oreg., to regular Weather Bureau stations the rates for miscellaneous messages will apply. The message destined to the farthest point from the designated circuit centers shall be considered as the first message in each case.

For all cotton region, sugar and rice, and corn and wheat region messages on each day that they are telegraphed, twenty cents for the first message received at each circuit center and ten cents for each additional message.

Forecast, cotton region, sugar and rice, and corn and wheat region messages to be counted the same as miscellaneous messages, and one cent allowed for each additional word over twenty.

For rent of cable between Fort Point and Lime Point, California, at fifty dollars per month.

It is agreed that the above-named telegraph companies shall require their operators and agents to give priority to all Weather Bureau business, in accordance with the provisions of the act of Congress approved July 24, 1866, which provides that telegrams between the several departments of the Government shall have priority over all other business.

Schedule of word rates.

[All words, except place from and date, to be counted. Messages of less than twenty words to be charged at the rate of twenty words.]

Number of words.	Rate.					Number of words.	Rate.				
	1	1½	1½	1½	2		1	1½	1½	1½	2
	Distances 1,000 miles or less.	Distances 1,001 to 1,500 miles.	Distances 1,501 to 2,000 miles.	Distances 2,001 to 2,500 miles.	Distances over 2,500 miles.		Distances 1,000 miles or less.	Distances 1,001 to 1,500 miles.	Distances 1,501 to 2,000 miles.	Distances 2,001 to 2,500 miles.	Distances over 2,500 miles.
20	\$0.20	\$0.25	\$0.30	\$0.35	\$0.40	40	.40	.50	.60	.70	.80
21	.21	.26	.31	.36	.42	41	.41	.51	.61	.71	.82
22	.22	.27	.33	.38	.44	42	.42	.52	.63	.73	.84
23	.23	.28	.34	.40	.46	43	.43	.53	.64	.75	.86
24	.24	.30	.36	.42	.48	44	.44	.55	.66	.77	.88
25	.25	.31	.37	.43	.50	45	.45	.56	.67	.78	.89
26	.26	.32	.39	.45	.52	46	.46	.57	.69	.80	.92
27	.27	.33	.40	.47	.54	47	.47	.58	.70	.82	.94
28	.28	.35	.42	.49	.56	48	.48	.60	.72	.84	.96
29	.29	.36	.43	.50	.58	49	.49	.61	.73	.85	.98
30	.30	.37	.45	.52	.60	50	.50	.62	.75	.87	1.00
31	.31	.38	.46	.54	.62	51	.51	.63	.76	.89	1.02
32	.32	.40	.48	.56	.64	52	.52	.65	.78	.91	1.04
33	.33	.41	.49	.57	.66	53	.53	.66	.79	.92	1.06
34	.34	.42	.51	.59	.68	54	.54	.67	.81	.94	1.08
35	.35	.43	.52	.61	.70	55	.55	.68	.82	.96	1.10
36	.36	.45	.54	.63	.72	56	.56	.70	.84	.98	1.12
37	.37	.46	.55	.64	.74	57	.57	.71	.85	.99	1.14
38	.38	.47	.57	.66	.76	58	.58	.72	.87	1.01	1.16
39	.39	.48	.58	.68	.78	59	.59	.73	.88	1.03	1.18

Schedule of word rates—Continued.

Number of words.	Rate.					Number of words.	Rate.				
	1	1½	1½	1½	2		1	1½	1½	1½	2
	Distances 1,000 miles or less.	Distances 1,001 to 1,500 miles.	Distances 1,501 to 2,000 miles.	Distances 2,001 to 2,500 miles.	Distances over 2,500 miles.		Distances 1,000 miles or less.	Distances 1,001 to 1,500 miles.	Distances 1,501 to 2,000 miles.	Distances 2,001 to 2,500 miles.	Distances over 2,500 miles.
60	\$0.60	\$0.75	\$0.90	\$1.05	\$1.20	131	\$1.31	\$1.63	\$1.96	\$2.29	\$2.62
61	.61	.76	.91	1.06	1.22	132	1.32	1.65	1.98	2.31	2.64
62	.62	.77	.93	1.08	1.24	133	1.33	1.66	1.99	2.32	2.66
63	.63	.78	.94	1.10	1.26	134	1.34	1.67	2.01	2.34	2.68
64	.64	.80	.96	1.12	1.28	135	1.35	1.68	2.02	2.36	2.70
65	.65	.81	.97	1.13	1.30	136	1.36	1.70	2.04	2.38	2.72
66	.66	.82	.99	1.15	1.32	137	1.37	1.71	2.05	2.39	2.74
67	.67	.83	1.00	1.17	1.34	138	1.38	1.72	2.07	2.41	2.76
68	.68	.85	1.02	1.19	1.36	139	1.39	1.73	2.08	2.43	2.78
69	.69	.86	1.03	1.20	1.38	140	1.40	1.75	2.10	2.45	2.80
70	.70	.87	1.05	1.22	1.40	141	1.41	1.76	2.11	2.46	2.82
71	.71	.88	1.06	1.24	1.42	142	1.42	1.77	2.13	2.48	2.84
72	.72	.90	1.08	1.26	1.44	143	1.43	1.78	2.14	2.50	2.86
73	.73	.91	1.09	1.27	1.46	144	1.44	1.80	2.16	2.52	2.88
74	.74	.92	1.11	1.29	1.48	145	1.45	1.81	2.17	2.53	2.90
75	.75	.93	1.12	1.31	1.50	146	1.46	1.82	2.19	2.55	2.92
76	.76	.95	1.14	1.33	1.52	147	1.47	1.83	2.20	2.57	2.94
77	.77	.96	1.15	1.34	1.54	148	1.48	1.85	2.22	2.59	2.96
78	.78	.97	1.17	1.36	1.56	149	1.49	1.86	2.23	2.60	2.98
79	.79	.98	1.18	1.38	1.58	150	1.50	1.87	2.25	2.62	3.00
80	.80	1.00	1.20	1.40	1.60	151	1.51	1.88	2.26	2.64	3.02
81	.81	1.01	1.21	1.41	1.62	152	1.52	1.90	2.28	2.66	3.04
82	.82	1.02	1.23	1.43	1.64	153	1.53	1.91	2.29	2.67	3.06
83	.83	1.03	1.24	1.45	1.66	154	1.54	1.92	2.31	2.69	3.08
84	.84	1.05	1.26	1.47	1.68	155	1.55	1.93	2.32	2.71	3.10
85	.85	1.06	1.27	1.48	1.70	156	1.56	1.95	2.34	2.73	3.12
86	.86	1.07	1.29	1.50	1.72	157	1.57	1.96	2.35	2.74	3.14
87	.87	1.08	1.30	1.52	1.74	158	1.58	1.97	2.37	2.76	3.16
88	.88	1.10	1.32	1.54	1.76	159	1.59	1.98	2.38	2.78	3.18
89	.89	1.11	1.33	1.55	1.78	160	1.60	2.00	2.40	2.80	3.20
90	.90	1.12	1.35	1.57	1.80	161	1.61	2.01	2.41	2.81	3.22
91	.91	1.13	1.36	1.59	1.82	162	1.62	2.02	2.43	2.83	3.24
92	.92	1.15	1.38	1.61	1.84	163	1.63	2.03	2.44	2.85	3.26
93	.93	1.16	1.39	1.62	1.86	164	1.64	2.05	2.46	2.87	3.28
94	.94	1.17	1.41	1.64	1.88	165	1.65	2.06	2.47	2.88	3.30
95	.95	1.18	1.42	1.66	1.90	166	1.66	2.07	2.49	2.90	3.32
96	.96	1.20	1.44	1.68	1.92	167	1.67	2.08	2.50	2.92	3.34
97	.97	1.21	1.45	1.69	1.94	168	1.68	2.10	2.52	2.94	3.36
98	.98	1.22	1.47	1.71	1.96	169	1.69	2.11	2.53	2.95	3.38
99	.99	1.23	1.48	1.73	1.98	170	1.70	2.12	2.55	2.97	3.40
100	1.00	1.25	1.50	1.75	2.00	171	1.71	2.13	2.56	2.99	3.42
101	1.01	1.26	1.51	1.76	2.02	172	1.72	2.15	2.58	3.01	3.44
102	1.02	1.27	1.53	1.78	2.04	173	1.73	2.16	2.59	3.02	3.46
103	1.03	1.28	1.54	1.80	2.06	174	1.74	2.17	2.61	3.04	3.48
104	1.04	1.30	1.56	1.82	2.08	175	1.75	2.18	2.62	3.06	3.50
106	1.06	1.31	1.57	1.83	2.10	176	1.76	2.20	2.64	3.08	3.52
106	1.06	1.32	1.59	1.85	2.12	177	1.77	2.21	2.65	3.09	3.54
107	1.07	1.33	1.60	1.87	2.14	178	1.78	2.22	2.67	3.11	3.56
108	1.08	1.35	1.62	1.89	2.16	179	1.79	2.23	2.68	3.13	3.58
109	1.09	1.36	1.63	1.90	2.18	180	1.80	2.25	2.70	3.15	3.60
110	1.10	1.37	1.65	1.92	2.20	181	1.81	2.26	2.71	3.16	3.62
111	1.11	1.38	1.66	1.94	2.22	182	1.82	2.27	2.73	3.18	3.64
112	1.12	1.40	1.68	1.96	2.24	183	1.83	2.28	2.74	3.20	3.66
113	1.13	1.41	1.69	1.97	2.26	184	1.84	2.30	2.76	3.22	3.68
114	1.14	1.42	1.71	1.99	2.28	185	1.85	2.31	2.77	3.23	3.70
115	1.15	1.43	1.72	2.01	2.30	186	1.86	2.32	2.79	3.25	3.72
116	1.16	1.45	1.74	2.03	2.32	187	1.87	2.33	2.80	3.27	3.74
117	1.17	1.46	1.75	2.04	2.34	188	1.88	2.35	2.82	3.29	3.76
118	1.18	1.47	1.77	2.06	2.36	189	1.89	2.36	2.83	3.30	3.78
119	1.19	1.48	1.78	2.08	2.38	190	1.90	2.37	2.85	3.32	3.80
120	1.20	1.50	1.80	2.10	2.40	191	1.91	2.38	2.86	3.34	3.82
121	1.21	1.51	1.81	2.11	2.42	192	1.92	2.40	2.88	3.36	3.84
122	1.22	1.52	1.83	2.13	2.44	193	1.93	2.41	2.89	3.37	3.86
123	1.23	1.53	1.84	2.15	2.46	194	1.94	2.42	2.91	3.39	3.88
124	1.24	1.55	1.86	2.17	2.48	195	1.95	2.43	2.92	3.41	3.90
125	1.25	1.56	1.87	2.18	2.50	196	1.96	2.45	2.94	3.43	3.92
126	1.26	1.57	1.89	2.20	2.52	197	1.97	2.46	2.95	3.44	3.94
127	1.27	1.58	1.90	2.22	2.54	198	1.98	2.47	2.97	3.46	3.96
128	1.28	1.60	1.92	2.24	2.56	199	1.99	2.48	2.98	3.48	3.98
129	1.29	1.61	1.93	2.25	2.58	200	2.00	2.50	3.00	3.50	4.00
130	1.30	1.62	1.95	2.27	2.60						

EXHIBIT F.

Statistics of the Western Union Telegraph Company.

The following table exhibits the mileage of lines operated, number of offices, number of messages sent, receipts, expenses, profits, and average tolls and cost per message for each year since 1866:

Year.	Miles of poles and cables	Miles of wire.	Offices.	Messages.	Receipts.	Expenses	Profits.	Average tolls per message.	Average cost to company of message.
1866.....	37,380	75,686	2,250						
1867.....	46,250	85,291	2,565	5,879,282	80,508,925.36	83,944,005.63	\$2,624,919.72	104.7	68.4
1868.....	50,183	97,594	3,219	6,401,595	7,004,660.19	4,362,849.32	2,641,710.87	89.3	54.2
1869.....	52,099	104,584	3,607	7,931,933	7,316,918.30	4,568,116.85	2,748,801.45	75.5	51.2
1870.....	54,109	112,191	3,972	9,157,646	7,138,737.96	4,910,772.42	2,227,065.54	66.2	43.8
1871.....	56,032	121,151	4,606	10,649,077	7,637,448.85	5,104,787.19	2,532,661.66	69.5	45.7
1872.....	62,033	137,190	5,237	12,141,499	8,457,065.77	5,666,863.16	2,790,202.61	66.2	43.8
1873.....	65,737	154,472	5,710	14,156,832	9,333,018.51	6,575,055.82	2,757,962.69	62.5	43.4
1874.....	71,575	165,218	6,188	16,329,256	9,262,753.98	6,755,733.82	2,506,520.15	54.9	33.5
1875.....	72,833	179,496	6,565	17,153,710	9,564,574.60	6,335,411.77	3,229,157.83	54.4	35.2
1876.....	73,532	183,832	7,072	18,729,567	10,034,983.66	6,635,473.69	3,399,509.97	50.9	33.5
1877.....	76,955	191,323	7,500	21,158,941	9,812,352.61	6,672,224.94	3,140,127.67	43.6	29.8
1878.....	81,002	206,202	8,014	23,918,894	9,861,355.23	6,309,812.53	3,551,542.70	38.9	25
1879.....	82,987	211,566	8,531	25,070,106	10,900,610.46	6,160,200.37	4,800,410.09	38.6	25.2
1880.....	85,645	233,531	9,077	29,215,569	12,782,894.53	6,948,956.71	5,833,937.79	38.5	25.4
1881.....	110,340	327,171	10,737	32,500,000	11,393,543.85	8,485,264.13	5,908,279.72	38.4	25.6
1882.....	131,060	374,308	12,068	38,842,247	17,114,169.92	9,996,095.92	7,118,070.00	38.2	25.8
1883.....	144,294	432,726	12,917	41,181,177	19,454,902.98	11,791,553.40	7,660,349.58	38	26
1884.....	145,037	450,571	13,761	42,076,226	19,682,939.60	13,022,503.90	6,610,435.70	36.5	25.2
1885.....	147,500	462,283	14,184	42,096,583	17,706,833.71	12,065,909.68	5,700,924.13	32.1	24.9
1886.....	151,832	489,607	15,142	43,289,807	16,298,638.55	12,378,783.12	3,919,855.13	31.3	23.4
1887.....	156,814	524,641	15,658	47,391,530	17,191,909.95	13,154,628.54	4,037,281.41	30.4	23
1888.....	171,375	616,218	17,211	51,463,955	19,711,164.12	14,610,592.18	5,070,571.91	31.2	23.2
1889.....	178,754	617,607	18,470	54,108,326	20,783,194.07	14,565,152.61	6,218,041.46	31.2	22.4
1890.....	183,917	678,997	19,382	55,878,762	22,387,028.91	15,074,303.81	7,312,725.10	32.4	22.7
1891.....	187,981	715,591	20,098	59,148,313	23,631,326.50	16,428,741.81	6,605,584.75	32.5	23.2
1892.....	189,576	739,105	20,700	62,387,298	23,706,104.72	16,307,857.10	7,398,247.62	31.6	22.3
1893.....	189,936	769,201	21,078	66,591,858	24,978,142.96	17,482,405.68	7,496,037.28	31.2	22.7
1894.....	190,363	790,792	21,166	68,632,237	21,892,655.09	16,060,170.21	5,792,484.88	30.5	23.3
1895.....	190,714	802,651	21,300	68,307,315	22,218,019.18	16,076,029.97	6,111,389.21	30.7	23.3
1896.....	190,918	826,929	21,725	68,730,444	22,612,736.28	16,714,756.10	5,897,980.18	30.9	24
1897.....	190,614	841,002	21,509	68,151,684	22,638,859.16	16,906,656.03	5,732,203.13	30.5	24.3
1898.....	189,817	874,420	22,210	62,174,749	23,915,732.78	17,825,581.52	6,090,151.26	30.1	24.7
1899.....	189,856	904,633	22,285	61,398,157	23,994,312.05	18,085,579.19	5,808,732.86	30.8	25.1
1900.....	192,705	933,153	22,900	63,167,783	24,758,569.55	18,591,205.87	6,165,363.68	30.8	25.1

WASHINGTON, D. C., April 17, 1901.

TESTIMONY OF MR. A. L. RANDALL,

Chairman International Typographical Union committee on Government control and ownership of the telegraph.

The commission met at 10.55 a. m. At 2.38 p. m., Mr. Litchman presiding, Mr. A. L. Randall appeared as a witness and, being duly sworn, testified as follows:

Q. (By Mr. LITCHMAN.) For the sake of the record, you will kindly give your name, post-office address, and your occupation.—A. A. L. Randall, 1510 North Capitol street, Washington, D. C.; assistant foreman, Government Printing Office.

Q. You are a member of the International Typographical Union committee on Government ownership and control of telegraphs?—A. Yes; chairman of that committee and have been since 1893.

Q. In that connection have you obtained certain knowledge and information in relation to the matter that may be desirable for us to hear?—A. I have. I may not be as well informed as I was 4 or 5 years ago. Since the Spanish-American war we have dropped down a little bit because we could not get a hearing on that account.

Q. Have you any prepared statement that you care to present in your own way?—A. Yes, sir.

Mr. LITCHMAN. Mr. Randall may make his statement and any members of the commission can ask such questions as may occur to them as being pertinent in connection with the inquiry.

The WITNESS. In 1893 the International Typographical Union of North America, at its forty-first annual session, held in the city of Chicago, put itself on record in favor of governmental ownership and control of the telegraph of this country, by adopting resolutions offered by myself, and directing its officers to appoint a committee, whose duty it should be to work and watch to further the interests of the measure. I was a delegate to that convention from Columbia Union, 101, of this city. A distinguished member of this commission, Mr. John L. Kennedy, was a colleague of mine. I was appointed chairman of the committee, and we at once proceeded to organize the country on this measure. In a short time petitions and resolutions from every nook and corner of the country began to pour into Congress, and after petitions bearing something like 300,000 signatures, besides hundreds of resolutions had been offered and referred to the House Post-Office and Post-Roads Committee, we succeeded in having a date fixed for the hearings to begin. May 4, 1894, was the date for the first hearing. I had the honor to open the hearing with a statement why our organization desired the Government to own and operate the telegraph lines of this country, and was followed by Mr. Samuel Gompers, president of the American Federation of Labor, who spoke at length on the great good the people of this country would derive if only the Government owned and controlled telegraphic communication, and he closed with an earnest appeal to the House committee to open their eyes to the present condition of the subject-matter.

We had six different hearings in all before that committee, and among those who made arguments and statements before the House committee, besides the above-mentioned gentlemen, were: Congressman Maguire, of California; John Davis, of Kansas; Gardiner G. Hubbard, father-in-law of Alexander Graham Bell, of Bell telephone fame; Marion Butler, of North Carolina, who was at that time president of the National Farmers' Alliance and Industrial Union, and later a United States Senator; Samuel H. Bell, and William McCabe, of the International Typographical Union committee. Some of these gentlemen spoke several times.

Very few members of either body were found who declared themselves in direct opposition to the measure. With only a few exceptions, all conversed with admitted that it was not only the right, but the duty of the Government to furnish the speediest and most efficient postal service in operation in any nation on the globe; that the people were not only entitled to the best, at the lowest possible cost, but that the demand for a postal telegraph, repeated with increasing force and persistency from year to year, would soon have to be met by the utilization by the Government of electricity for the speedy transmission of the urgent correspondence of the people, and that they ought not to be compelled to wait upon the more slow and antiquated methods and process of so-called "fast mail trains."

At a hearing granted to us by the Senate Post-Office Committee in 1896, Mr. P. B. Delany, a famous electrical expert and inventor, was among those who made arguments in favor of this measure. Mr. Delany, who has personally investigated the workings of the governmental telegraph systems of nearly every country in Europe, and who is especially familiar with the postal telegraph in Great Britain, on the lines of which country one of his more important inventions has been for some time in successful operation, then made an elaborate argument, from the standpoint of an expert, in favor of the annexation by the United States of the telegraph to its postal service.

During the period of active operations at the Capitol my committee frequently received timely and valuable advice and assistance from a very distinguished member of your commission, ex-Congressman John M. Farquhar, who from 1860 to 1882 was president of the National Typographical Union. Mr. Farquhar is the oldest ex-president of our organization now living. Veteran unionist, as he is, he has lost none of his old-time interest in our organization and its affairs.

We have also been successful in having public mass meetings throughout the country for the purpose of agitating the question and bringing it to the attention of all classes of people, thus enabling the business community to form a more intelligent idea of the advantages of the proposition, and also give the measure wider publicity and place the people in possession of essential facts regarding the scheme, which have heretofore been but little understood.

An organic opposition to a monopoly of any sort may be stated as my general reason for advocating the governmental ownership and control of the telegraph. I have received hundreds of letters from business men in different sections of the country, claiming that the rates are extortionate; that they are levied so as to yield large dividends, not only for the stocks paid for in money, but on what is

called "watered stocks," which are understood to be quite considerable in amounts. There is no doubt that at least two-thirds of the entire stock now outstanding on the Western Union is clear and unmingled water. This company, with its millions of capital, and with its monopoly of the business of the telegraph, is independent of any legal control for the protection of the rights and interests of the people—a condition of things which no just government should tolerate.

The telegraph has become a very important agency for the communication of intelligence, and the telegraph system of this country has been concentrated in the hands of a comparatively few persons, and has become a monopoly with power to levy such exactions on telegraphic communications as those who control the system may choose to establish. Too frequent exercise of the subtle and dangerous power possessed by this monopoly in thwarting the public will has resulted in a demand by the people that the Government shall own and operate the lines in the interest of all. Such ownership and control would be only a return to original conditions. The first telegraph line in America (from Washington to Baltimore) was built with an appropriation from Congress, and was operated by the Post-Office Department for 3 years.

For a great many years there has been a demand for the utilization of the telegraph for cheaper and speedier messages. The demand has been for some method of governmental control, but the influence of the few who have made a monopoly of this useful service has been sufficient to defeat so reasonable and just a demand.

Almost every Postmaster-General since 1846 has been in favor of the Government owning the telegraph.

I will quote the two following paragraphs from Postmaster-General Wanamaker's report of 1892, which is a splendid presentation of the case:

"I am fully convinced that the Government will never properly do the postal work committed to it until it uses electricity in some form, and therefore I advocate the utilization of both the telegraph and telephone at the earliest practicable day. To receive letters and other mail and store them away for shipment in bulk, more or less slowly once a day, or even every hour, when a wire and telegraph instrument might connect the major part of the post-offices seems an antiquated anomaly. It is true that a large part of the mails must always go by rail. But there is another considerable part that seeks quicker transit that does not find convenient the 10,000 railroad telegraph offices, often distant from villages, and does not find the telegraph carried within the reach of working people.

"The mail and telegraph are the life current of business, and to a large extent of social life, and the private monopoly of either system must result in creating a preferred class, to which high rates may not be objectionable. The humbler citizen must do without. It was said long ago that the telegraph was a monopoly, and so is the postal system; but the difference is that one is operated for private gain and the other for public good. The Government follows a settler across the plains and into the mines and establishes a post-office, in order that his family may have letters and newspapers and be more content in a frontier home. The telegraph goes where it can find paying business only; and so it falls out that only a sixtieth part of the people of the United States, owing, not to the need, but to the inconvenience and charges, employ the telegraph. The post-office helps to settle, serve, and satisfy the country—literally to make the country—and of all its adjuncts, the most important, that which would afford the quickest mode of communication between families near and far, apparently can not be made available in any way. The fact is that in some respects the telegraph seems to get farther and farther away as the capital and the power of the corporation increase."

Let us briefly trace the growth of this gigantic monopoly.

In 1858 the capital stock of the Western Union was \$385,700. The stock dividends declared between 1858 and 1866, a period of only 8 years, amounted to \$17,810,146, and the stock issued for new lines was \$1,937,950, making the capital stock on July 1, 1866, \$20,133,800. In that very year new stock was created to the amount of \$20,450,500, this making the capital stock on July 1, 1867, \$40,584,300. The largest dividend declared by the company up to 1874 was 414 per cent. The investors got their money back four times in 1 year. The largest amount of stock ever divided at one time was \$10,000,000, and for a period of 7 years the dividends were about 100 per cent a year on its average capital. In 1874 the company bought up its own stock and the stock of other telegraph companies and accumulated a fund of \$15,000,000, which was held in the treasury of the company. The following are some of the dividends declared: In 1862, 27 per cent; 1863, 100 per cent; 1864, 100 per cent. In 1878, \$6,000,000; in 1881, one of \$15,000,000 and another of \$4,300,000. It realized \$100,000,000 in 25 years by its extortionate charges. An investment of \$1,000 in Western Union stock in 1858 would have received up to 1890 stock dividends of more than \$50,000 and cash dividends equal

to \$100,000, or 300 per cent of dividends in a year. In 1890 its capital stock was \$83,960,000; but, from the last report I have been able to see of the Western Union, it took a jump which raised it to about \$115,000,000.

Says Mr. Wanamaker again:

"I believe that a telegraph company could make a great deal of money on a uniform 25-cent 20-word message to all parts of the country. The increase of business on lower rates would be so large that the profits of the telegraph company, in my judgment, would not be diminished. It can not be questioned that the Government, by reason of what it would save in the use of existing postal machinery, could easily by this time have afforded much lower rates than the present telegraph charges if it had continued to operate the lines it began. The people think more about these things than they are commonly supposed to do, and they are restive under conditions which they feel that the Government should change."

Just think of it! Sixty-one per cent of the telegraph lines of the world are under government ownership. All the countries of Europe own their telegraph lines. The rates for service are as follows:

England, 12 cents for 12 words; Germany, 17 cents for 10 words, and a discount of 14 cents for every word less than 10; Italy, 18 cents for 15 words; Switzerland, 10 cents for 10 words; Belgium, 9 cents for 10 words. In France the rate is 10 cents for 10 words within the country, and 2 cents per word from the French-African possessions, a 10-word message from North Africa costing but 20 cents. Distance is not considered in making the rate. No more charge is made for 100 miles than 1 mile, the same principle being applied as that governing our postal system. Most of these countries derive their revenue from the service. This is effected by combining the telegraph with the post-office. In Italy in 1890 the gross earnings of the lines was \$3,010,974; the expenses, \$2,703,137; leaving a net profit of \$306,837.

Here is what a telegraph operator says in regard to the monopoly imposing upon the people. Seldom is it that we can get one of them to say anything:

"Careful investigation shows that the Western Union favors one class of business and willfully neglects to do justice to another. Certain business, mostly brokers' messages, has special rights over everything else. The operator who is sending death messages, messages that summon children to the bedside of dying parents, or transact legitimate business of merchants and manufacturers, is often obliged to lay them aside in order that the wires may be used for the business of a trust, a monopoly, or a ring of speculators.

"Many broker companies hire wires for use during a few hours in the middle of the day. The leasing practice has grown to such proportions with the Western Union as to make it impossible for the regular volume of legitimate business to be handled readily, with the few wires retained for that purpose. What is the consequence? From 9 a. m. to 3 p. m. there is a large accumulation of business in repeating offices. The brokers' wires are then free, and they are manned to handle the business which has been obliged to wait."

In his report for 1880 Postmaster-General Maynard says:

"During my visit to the British post-office I examined with much interest the system of telegraphy, for several years past connected with the postal service. This method of correspondence is thought to have made a great advance since it was changed from the management of private corporations, responsible to nobody, hardly to public opinion, and placed under the control of the Government. The business has increased many fold, the cost of sending messages has been largely reduced, and the service is performed in many localities it never would have reached under the pecuniary stimulus of private enterprise. At the same time it yields a margin of profit to the royal treasury."

Postmaster-General Gresham in his report for 1883 said:

"The same principle which justified and demanded the transference of the mail on many chief routes from the horse-drawn coach on common highways to steam-impelled vehicles on land and water is equally potent to warrant the calling of the electro-magnetic telegraph in aid of the post-office in discharge of its great functions of rapidly transmitting correspondence and intelligence."

This measure has been indorsed heretofore by every commercial body of men in the United States—by every board of trade and chamber of commerce. The people who furnish 34 per cent of all the telegraph business ought to count. The national board of trade, at almost all of its sessions for the last 12 years, has resolved, in the strongest kind of language, that the necessities of the people of the country demanded that the Government should take control of the telegraphic system or build another system.

Here is what Hon. Henry W. Blair, of New Hampshire, had to say in connection with governmental ownership and control of the telegraph before the Henderson committee in 1894:

"I do not suppose the time has ever been, since the Government has existed, when they have not assumed control, for the benefit of the people universally, of the means of intellectual communication—the communication of intelligence as between individuals. That is the very starting point of society, and is one of the lines of demarcation between men and the brute creation. In fact the brutes themselves, so far as they have any capacity whatever, except mere force and inertia, have some method of communication between themselves. Away back we began with the postman. Then time and distance were the two obstacles to be overcome. The postman went with regularity; he went with comparative cheapness; he became a public vehicle and he was available to everybody; he was the first force or starting point; he was an educative force; he was of use in business; he was of use in social life; he was a necessity; he was a governmental institution.

"Then we went further and appropriated the horse because he could annihilate distance more rapidly and was a better means, when combined with postman, of accomplishing the same end—a social business educator.

"Then steam force was discovered. We appropriated that through the Post-Office Department to overcome time and distance in intercommunication, and that, too, without reference to the pecuniary ability or capacity of the Government to meet expenditure. It was a public benefit. It was educational—to educate the people in the establishment of a general system of post-offices and post-roads. Now we come in these later days to miraculous interpositions, as it were, to facilitate intercourse between the people. When we discovered the telegraph and telephone we appropriated the lightning. And right here, at this point, it would seem as though God had interposed in our favor to place within our control a means of communication vastly more important than all others before that, for the lightning actually annihilates both distance and time. So that the business man residing in San Francisco can sit down, as it were, side by side with another business man in New York and be brought into contact, where they can converse for 5 minutes or half an hour, their business communication, and oftentimes personal communication, being flashed across the continent instantly. So with the telegraph—not so great a convenience, to be sure, as the telephone.

"To make it all brief, it seems to me that we are not justified in promoting any private institution or system of private institutions or organizations of forces to step in here between the people and these modern discoveries and thus practically double the burden which is to be imposed upon the masses of the people at large, in order that we may avail ourselves of the whole of those means.

"I doubt whether we should stop and insist upon knowing whether it will pay by actual book account. But these agencies will pay in a thousand ways, pay in the saving of expenditures that all men in the course of their lives must make sometimes. So I think this comparatively cheap means of intercommunication that annihilates time and distance should be adopted.

"Then there are the matters of detail. You can work those out. I believe you can put these ideas into a bill and provide, if you please, that in some reasonable way existing companies should, if they find the interference of the Government in this general way—not for present uses but for general public uses—ruinous to vested capital, either have their properties purchased by the Government or be left to hold such field of occupation as may be proper. And there will be one. There will always be a large special field, which they can occupy with profit, for the transmission of business messages between brokers and all that. Leave the field open to them in the future in some way, so they may still find a profitable business, or by total or partial compensation, if necessary, prevent anything like a sequestration of vested capital. Provide some way so as to do justice all around, some proper and natural way, as has been found in foreign countries, where they are more accustomed than our people to the use of these two great miracles of intercommunication, the telephone and the telegraph. It seems to me that we ought to do that.

"Speaking of how monopolies have grown, I know myself how the Associated Press, with their arrangements with the telegraph companies for the sending of press dispatches, are an obstacle in the way of the establishment of newspaper enterprises throughout the country. In our own State, New Hampshire, we found very great difficulty—in fact, we have found it impossible, in the State where I live, to establish and maintain an important newspaper which we designed to establish, and for which the capital could easily have been obtained

without any difficulty. This has been so for many years, at least for 10 or 15 years."

You may wonder why the printers of the country are taking such an active interest in the governmental ownership and control of the telegraph. I will endeavor to tell you. It is true that we, as printers, have a selfish motive in desiring governmental ownership. The moment a law providing for governmental ownership should pass Congress that moment would the twin monopoly be broken, and then, we believe, in almost every city in the country at least one new paper would start. You may ask why new papers can not start now. Because the avenues in which the news is gathered are closed excepting to those who are so fortunate as to be members of the Associated Press, which has, by arrangement with the Western Union Telegraph Company, a monopoly of the telegraphic news gathering and distribution of the whole country. This association is thus enabled to serve its members with this class of news at a rate which places it out of reach of competition because of the favored rates granted by the Western Union.

In connection with this I wish to say that there was a time right here in the city of Washington when a syndicate desired to start a paper. They tried to buy a franchise which was not in use, and was locked up in a safe, but the owner wanted \$20,000 for it. I think that was the amount. Just think of it—\$20,000 for the mere privilege of buying the news! Just about enough to pay for a good newspaper plant. I am here to tell you that the syndicate never started the aforesaid paper. Through this failure a large number of situations were lost to our members here in Washington.

Government ownership of the telegraph will make it possible for all who desire to enter the daily newspaper field to get their telegraphic news on even terms. There are several hundred places where, I believe, new papers would start, thereby creating a demand for thousands of printers, not to speak of the other thousands of persons in kindred callings who will thus be put in the way of permanent employment.

I will leave it to you to judge what a relief and godsend it would be to the members of my craft if the Government would reassume ownership and control of the telegraph lines of this country and destroy these twin monopolies. The press rates could then be reduced so low that every country weekly paper could and would afford to print the latest telegraphic dispatches on the day of publication, and a telegraph or telephone could be at every country post-office.

Senate Report 242, Forty-third Congress, first session, page 5, says:

"The operations of the postal-telegraph system would result in a speedy termination of this alliance—the telegraph and news association and groups of favored papers—and will be a very important step toward the freedom of the press."

The Western Union people tell us there is no discrimination; that they treat all alike. We know this is not true. Prof. Frank Parsons, in Senate Doc. 63, Fifty-sixth Congress, first session, page 136, says:

"We have seen in part 6 (Arena, June, 1896) how rates were raised on papers that criticised the Western Union's president or advocated a postal telegraph too vigorously; how papers were ordered not to criticise news reports under penalty of loss of news facilities, etc. It is interesting to note that even the largest and most influential papers do not always escape persecution. In his speech in the House March 1, 1884, the Hon. John A. Anderson, of Kansas, tells us that "the Chicago Inter Ocean had the lease of a private wire from Washington to Chicago, and published Washington news every day. A few weeks since Senator Hill spoke for the postal telegraph. The Inter Ocean published the speech verbatim. That evening word was sent to the Inter Ocean that the lease was terminated. The manager of the Inter Ocean said afterwards that their relations with the Western Union were still friendly, but he had to be, of course, in order to keep the general dispatches."

Mr. Thomas F. Clark, vice-president of the Western Union, when before this commission last month, said in answer, when Mr. Kennedy asked him if the Government were to assume control of the telegraph whether the rates would be the same to every one, that there would be no news monopolies; there would be more newspapers started, etc. This is the first he had ever heard that there was a news monopoly. He said every newspaper was free to get any quantity of services it wishes on the same basis, and that there was no discrimination at all on the part of the telegraph company, and he said he did not know of any on the part of the newspapers.

I want to impress upon the members of the Industrial Commission that while Mr. Clark makes the statement that his company makes no discrimination, there is discrimination, as you would soon find out if you undertook to start another press association and asked the same privilege on the same basis given to the

existing news-gathering association. The Western Union says, "We don't discriminate." The Associated Press says, "We limit the field." Mr. Quigg, a member of the Henderson committee in 1894, said in this connection: "No doubt about that. To my mind that is one of the greatest evils we have to contend with—the fact that newspapers combine to create press associations, and thereby shut out other newspapers."

In Senate Doc. 65, Fifty-sixth Congress, first session, pages 55-56, Professor Parsons says:

"The final responsibility, however, rests with the Western Union. It is Western Union favor that gives the press associations their power of life and death over so many dailies. It is the fact that the Western Union serves a paper in the association for a fraction of the price that must be paid for the same service by a paper not in the association. It is this fact that enables the press association to control the newspaper field. If the Western Union would stand for fair play and equal rates to all, and make it a part of the press agreement that all papers should receive the news at fair rates without discrimination, the Associated Press would lose its tyrannical power of exclusion. But the Western Union prefers to be a coconspirator in the building of a press monopoly, because in return for its aid it gains a mighty hold upon the press. * * * The understanding between the telegraph company and the press association secures the latter low rates and the power of excluding new papers from the field, and to the former a strong influence upon press dispatches, the support of the papers in such associations, and the exclusive right to transmit and sell the market quotations. Besides the force of direct agreement and the powerful motives of mutual support that naturally develop between two individuals or corporations working together year after year with an ever-present consciousness in each of the vital relations to its prosperity that is sustained by the other—besides all this, the men who run the Western Union control a number of papers directly, and can control others whenever it may be thought best. The Western Union not only has its power of causing serious loss to newspapers that oppose it—it has millions with which to buy the stock of an obnoxious paper, so capturing the fortress entire and spiking the guns or turning them against its enemies."

The Washburn committee reported that "the associations themselves, and consequently the newspapers, are completely in the power of the telegraph companies, which can at any moment raise the rates for news telegrams to a par with those charged for private messages, and thus prevent their transmission almost altogether."

President Orton testified that the company had a compact with the Associated Press by which the latter agreed to stand by the Western Union.

Here is a copy of the agreement:

CONTRACT OF TELEGRAPH COMPANY WITH THE PRESS.

[Extract.]

And said Associated Press agrees that during the continuance of this agreement they and their agents, and all parties furnished by them with news for publication, and the agents of such parties, shall employ the said telegraph company, exclusively, to transmit to and from all places reached by its lines all telegraphic messages relating to the news or newspaper business; and that they will not in any way encourage or support any opposition or competing telegraph company.

PRIVATE CIRCULAR. (NOT FOR PUBLICATION.)

[Extract.]

CINCINNATI COMMERCIAL OFFICE, April 15, 1867.

To the Members of the Western Associated Press:

Your attention is invited to the clause in our contract with the telegraph company which forbids us to encourage or support any opposition or competing telegraph company. That clause was to the telegraph company a valuable consideration for the favorable terms upon which they contracted with us.

M. HALSTEAD,

Executive Committee, Western Associated Press.

I understand that when that matter was brought out at the time previous to this (I do not remember what committee it was before) that Brother Marean, who is present now, made a statement. The point my committee makes is that there is some such contract in vogue at the present day, although we can not prove it.

After the above-mentioned extracts had become public the Western Union rises up in all its glory and says that contract was "abrogated 20 years ago." But it shows the spirit that did exist which actuated this great corporation, and I feel satisfied in my own mind that there is an understanding between them to-day, if not another contract.

Before the Blair committee D. H. Craig said: "The Western Union and the Press Association work together to ruin a paper that buys news from any competing telegraph line."

I would like to say right here that Mr. Craig was the originator of the Associated Press of the United States. He adopted the carrier pigeons for that purpose in Boston years and years ago, and at one time he was the head one, as Brother Marean undoubtedly recollects himself, although he is not quite as old a man as Mr. Craig was before he died.

The editor of the only morning journal in one of the largest interior cities in New York State began to take news from a rival company and refused to discontinue. The Western Union complained to the Associated Press, and its manager negotiated with the publisher of an evening paper to run a morning edition, pledging him free and exclusive telegraphic press reports for a year. The rebellious editor quickly yielded.

And even at this late date—last month—Vice-President Clark, of the Western Union, tells this commission that this is the first he had known that there was such a thing as a news monopoly. It is too bad about him. But then a great many of his statements are like those of President Green and other Western Union people that have appeared before different committees on this subject. He says there is no discrimination at all on the part of the telegraph company, nor does he know of any on the part of the newspapers. Just think of that statement for a moment.

How does Mr. Clark account for these two statements?

Said Mr. Hubbard to the Hill committee:

"The man who rules the Associated Press has an instrument for shaping the opinions of the millions which, by the constancy and rapidity of its action, defies competition. The events which take place in all business, political, and religious centers, together with the actions of public men and their imputed motives, are all presented simultaneously to the public, from ocean to ocean, through this instrumentality. The agents who collect the news respond to the central authority at New York, and are subject to removal at its pleasure. Here is a power greater than any ever wielded by the French Directory, because in an era when public opinion is omnipotent, it can give, withhold, or color the information which shapes that opinion. It may impart an irresistible power to the caprice of an individual, and the reputation of the ablest and purest public man may be fatally tainted in every town and village of the continent by a midnight dispatch. It is incompatible with public safety that such an exclusive power to speak to the whole public in the same moment, upon every subject, and thus to create public opinion, should be under the absolute control of a corporation."

Before the Bingham committee Mr. Thurber, representing the national board of trade, said this in the course of his remarks:

"One reason why, perhaps, we have not had a postal telegraph long ago has been the fact of the close relations existing between the Western Union Telegraph Company and the Associated Press, which latter corporation has daily educated public opinion in the opposite direction. Mr. Wiman (a Western Union director who had just spoken) is evidently a fair man, but unless Mr. Wiman sees to it that both sides of this question, as presented here to-day, are sent out with equal fairness over the wires, you may be sure that all the points he has made will go flashing out to all parts of this country, and that all those that have been made against him will find their resting place only in the published proceedings of the national board of trade."

I could go on and quote other gentlemen who have made statements on this subject, some of them even stronger than these, but I will not detain you longer at this time. If Vice-President Clark is right in his statement, these gentlemen evidently do not know what they are talking about. I presume, however, if Mr. Clark would only stop for a moment and put on his thinking outfit, he might have a vague recollection that there was just a little discrimination both on the part of the Western Union and the Associated Press.

Again, Vice-President Clark makes a very "fishy" answer to some questions propounded to him while before this commission in March. He was asked the question if it was true that his company keeps out of use some of the best inventions for operating the telegraph. His answer was: "If persons who make that charge will kindly name the apparatus, I would be very glad to know it."

He was also asked what was the policy of his company in reference to new inventions, and he replied: "To develop every invention that it can lay its hands on that will improve the service."

It seems so foolish that a gentleman of the caliber of Mr. Clark would make such a statement that will go out to the public. He must have a very poor opinion of the general public to think for one moment that they would believe the answers that he makes to the above questions. It is confidently maintained by those having personal and expert knowledge of the subject that the existing telegraph companies do not make use of any of the recent improvements in telegraphy, thereby giving the people the benefit of a cheaper and quicker service.

I was invited to witness an exhibition of a new system, and I am confident that, if put into general use by the Government, it would revolutionize the telegraph business of the country. This system is more simple and reliable than any form of the Morse system, and is not affected by wet or changeable weather. It is called Machine Telegraphy, and has ten patents upon it.

To enlarge the sphere of the telegraph and make it eventually a part of the postal system (as it is already in every other civilized country of the world), two conditions are necessary. One of these is that we must utilize to a greater extent than at present the natural capacity of a wire for carrying electrical impulses. Practically, and in ordinary circuits of 300 to 500 miles, the limit has been demonstrated to be about 400 impulses per second by the Morse system—equal to 1,000 by the Morse quadruplex—equal to about 25 to 100 words per minute.

By the Machine system the Morse system can be more than doubled, and it can be operated perfectly in the heaviest rain storms in circuits of 1,000 miles, with 15,000 practical electrical impulses per second, equal to 1,000 words per minute. In circuits of 500 miles, the Machine system yields 30,000 practical impulses per second, equal to 2,000 words per minute. These are, of course, rates of speed strictly mechanical, and utterly beyond the capability of the human hand.

It is evident, then, that progress lies in the direction of utilizing the capacity of wires, or, in other words, in making one wire, operated mechanically, do the work of 20 to 50 under manual labor. This means a large reduction in the cost of plant, maintenance, etc., aggregating at least 50 to 75 per cent as compared with the most advantageous telegraph system now in use.

The actual cost of telegraphing by this new system, all things fairly considered, is rather less than more than one-fifth of the whole necessary expenses of the best form of telegraphing by the Morse or any other form of hand telegraph.

With this system, telegraphing of 50 words by day and 100 words by night can be afforded, with reasonable support from the public, at one-half (or less) the present tariff of the existing telegraph companies for telegraphing 10-word messages.

The system admits of an endless number and variety of cipher forms, whereby messages or letters may be telegraphed in cipher without the possibility of translation without the cipher key.

Should any interruptions occur in the line while messages are coming over the wire, even at 2,000 words per minute, the operators in charge can, by means of a telephonic attachment to the wire at either or both ends, instantly detect the loss of a single letter or word without any inspection of the record.

The matter to be telegraphed by this system must first be perforated upon a machine. These machines have key boards like those of typewriters, and are operated with equal ease and speed.

This system is especially adapted to newspaper reporting for individual journals or associations of journals, from 30,000 to 60,000 words (depending upon the length of the reports) being easily telegraphed over one wire in an hour, in all weather, in any circuit of 1,000 miles, twice this speed being assured in circuits of 500 miles. In circuits of 3,000 miles about 500 words per minute can be sent, as against 60 words, which is about the limit of the present hand system now in use.

The United States is the only Government that persists in carrying its mails by a slow conveyance in preference to a fast one. No valid reason can be advanced why a letter should be delayed 27 hours between Washington and Chicago, when it can be telegraphed and delivered by a postman within an hour, at a cost of 25 cents per 100 words by day or 200 words by night.

The change from train to the telegraph as a means of carrying letters is quite imperative, and fully as warrantable, as was the substitution of the train for the stagecoach many years ago.

Can there be any doubt about the willingness of the public to pay 25 cents to gain 27 hours between Washington and Chicago? The same argument may be applied to the mails between all other large cities throughout the country. The mails between Europe and China could be telegraphed between New York and San

Francisco, effecting a saving of 6 days. Letters for towns adjacent to the large cities throughout the country could be telegraphed to the nearest point reached by the Machine system. Newspaper reports would all go by this system on account of the immense decrease in cost and the lightning speed of transmission. Correspondence generally would immediately undergo a complete change, and the public would at once begin to reap the advantages of letter telegraphy, which must surely come through Government ownership and control of the telegraph and the adoption of some of the recent improvements in Machine telegraphy.

The above system has been thoroughly tried and approved. It was not only operated successfully 4 weeks consecutively over a wire 1,027 miles long between New York and Chicago, but it was subjected to a series of eminently successful practical tests by experts. Every claim made for it can thus be verified by incontrovertible proofs. We hope in the near future to have a joint committee appointed from the Senate and the House to investigate all improvements in Machine telegraphy, and to report the result of said investigation as soon as practicable to the Senate and House of Representatives.

It is all bosh what Mr. Clark says in regard to recent inventions. The Western Union is not favorable to new inventions, and it is almost impossible for any man to have a new invention tried by the Western Union. A man goes to the Western Union and says: "I have a new invention; I want you to try it."

The Western Union says, "Will you give it to me?"

"No."

"Will you give me the control?"

"No."

"Then you can't try it."

Whether that invention is a valuable one or not nobody can tell.

There are plenty of improvements in recent years in telegraphy, as anyone can find out if he will read the Official Gazette of the Patent Office regularly, but the existing companies secure them by purchase (I don't mean that they secure all of them, for if it be one that they are not afraid of they will not bother with it) and at once lock them up in their safes and thereby deprive the public of the great benefits that they would reap if they were put into general use. If the existing telegraph companies would put in use some of the recent improvements they now possess, there would be such a howl from the public at large for cheaper tolls that the companies would be compelled to reduce the tariff more than one-half of the present rate, and thereby cut off their enormous dividends.

No; they do not intend to use them unless compelled to do so. They would rather have their large dividend and continue with their power to rob at their pleasure by unreasonable charges all those who are compelled to use the telegraph. Are not the people of this country as capable of conducting a Government-owned telegraph as those of all European countries? A vast majority of the public demands that a business which touches the press, the public and private life, and the commercial operations of the entire nation at almost every point should no longer remain in private hands.

The International Typographical Union, which I represent, is asking the Government to control the telegraph in order that its membership may be benefited. As I said before, we have a selfish motive. If these twin monopolies are destroyed, all the papers throughout the land will be able to get the press reports on even terms. If the Government reassumes the operation of the telegraph it will at once adopt some one of the recent inventions similar to machine telegraphy, and can offer the existing press associations low rates—not more than one-half what they are now—and still have a revenue to the Government, with the promise that they will allow any and all papers to have the service on equal terms. That is the main thing that my organization is striving for. And I know, and you know, if the Government adopts this course it will not do as the Western Union is doing. It will at once put into general use some of the recent inventions whereby it can furnish the service at greatly reduced rates over what they are to-day. There are more ways than one of killing a dog. The press associations will stick to the Western Union until they see something cheaper, and then they will be willing to drop it. They are afraid to say anything at the present time. The Western Union holds them under its thumb and has dictated to them for years, and still Mr. Clark, vice-president of the Western Union, comes before this commission and makes the statement that the Western Union never did discriminate, and that he never knew that the Associated Press was a monopoly and that it discriminated. God knows that it is its stock in trade to discriminate. If it did not, the organization which I am representing here to-day would not be making the fight it has made for several years.

I hope this commission will consider well all the arguments, pro and con, on this subject, and trust that it will see its way clear to recommend to Congress this coming session that a special committee of 5 Senators and 5 Representatives be appointed to investigate recent improvements in telegraphy, and to report the result of such investigation as soon as practicable thereafter. This much I do hope this commission will do. The Western Union would not refuse to hire that committee a line in order to try inventions, which they most assuredly would do with a private citizen.

With this I conclude my general statement.

I have a statement as regards this machine telegraphy, the cost of a line from Washington to New York; that is, the expense of a line carrying 280,000 words daily and nightly per month, exclusive of the cost of the line.

(Reading:) "The actual cost of labor and materials for telegraphing 280,000 words, daily or nightly, between New York and Washington would be, exclusive of the cost of line:

23 perforators, working 7 hours daily, at \$30 per month	\$13, 820
27 copyists, at \$50	18, 600
Telegraph paper, at 5 cents per 1,000 words	5, 096
4 telegraphers, at \$80	3, 840
2 helpers, at \$30	480
Rent of 4 offices	5, 300
Fuel, lights, etc	1, 000
Stationery and incidentals	1, 000
Total cost	46, 236
"Or 5 cents for 100 words—one-half mill per word."	

[The witness thereupon produced certain papers bearing upon the question in hand, which are printed as an exhibit at the close of his testimony.]

Q. (By Mr. LITCHMAN.) You have claimed in your statement, if I understand it correctly, that the telegraphic service in foreign countries is cheaper than the service given in the United States?—A. Yes.

Q. The evidence given to this commission, considering the extent of territory and the fact that only the bare message is paid for here and not the address and signature, is that the difference is in favor of the United States. Have you gone into a comparison on that basis?—A. They do charge over there and we do not here, but the limit of messages generally falls below 10 words, and they are based upon a cent a word. For instance, in England 1 cent a word, and the charge would bring it up to about 15 cents for 15 words. That would take in the address and the signature, while in this country, of course, they only charge for the bare message, which would be 10 words or less, not counting the signature. But taking it right through and through, it will even itself up year in and year out, month in and month out. It is a great deal cheaper than it is here. They do not consider distances over there, and we should not here. I believe that the same system should prevail here that prevails there, the same thing that pertains to our Post-office Department; that there ought to be a uniform rate for messages throughout this country. While lots of people that are advocating Government ownership or operation of the telegraph, some advocate a uniform rate between certain sections, and then from that another uniform rate, so that everybody could know what the rates would be. And I do believe that if the Government owned and controlled and operated the telegraph of this country and adopted some of the recent inventions—there may be something a great deal better than this Anderson's machine telegraph—they could reduce the rate so they could make it a uniform rate throughout this country.

Q. Have you ever given any attention to the zone system of telegraphy?—A. No; not recently. A few years ago, when we were more actively engaged at this matter than we are now, when we were more in touch with it, we did have the zone part down, but I could not explain that satisfactorily now.

Q. Your idea, if I catch it, then, is that the distance should not be considered in telegraphy any more than in the carrying of the mails. Is that it?—A. Yes; for this reason, that the telegraph company have their lines up from Maine to California. They hire their operators for so many hours a day, and those operators are supposed to get their pay, although it is meager, whether they work or play; and it does not cost the Western Union Company or any other company, nor the Government, if it took hold of it, one cent more to send a message from here to San Francisco, notwithstanding they say so, than it would to send one from here to Alexandria. The wires are up and are in working order, and they

make it pay. Nineteen-twentieths of the telegraph business of this country is done within a radius of a thousand miles of New York, and those rates will pay what they call the long haul. The short haul will pay for the long haul.

Q. You have made certain statements in direct opposition to certain statements made by witnesses on the other side. The witnesses on the other side, if I remember, presented certain tables or statements to substantiate their claims. Have you any evidence to substantiate the claims you make further than what is given here in your statement?—A. I have not anything here with me.

Q. It is probably well that something of that sort should be submitted.—A. You say that they have some statements?

Q. They disclaim any discrimination, and they positively state that all parties are served under equal circumstances with equal service.—A. And that there is no monopoly in the new service? That is our main point; that is our committee's main point.

Q. They claim that there is no preference given to any combination that would not be given to any other combination or individuals under the same circumstances, and that equal service is offered to everybody now under the same circumstances.—A. But it is known, as I say in my statement, that just as soon as you would start to organize a company, just so soon you would find out the stump you were running against. If I was worth \$2,000,000 and wanted to start a newspaper in Washington, I could not get the press news; I would have to get specials, and the expense would be so far greater than the others that it would be ruinous to me. I could not get the press association dispatches unless the papers here agreed to it, and the papers here are combined together and agree not to do it; whereas if the Government should own and control the telegraph and reduce the rates and say, "Here, we will give you these special rates if your organization will give the same reports to any and all papers on equal terms," they would all come to it; they would leave the Western Union, but they are afraid to leave it now.

Q. What is the effect of the Illinois decision of the Chicago Inter-Ocean v. The Associated Press? Was not that to the effect that the Associated Press should serve all papers alike?—A. They do not serve them all. If Mr. Harris and myself should start a paper here, we could not get the service of the press unless the other papers agreed to it.

Q. Was not that decision in Illinois directly in opposition to your statement?—A. Yes, but the Inter-Ocean case was a peculiar one, but it does not work out. As I said, if we should start our plant in any city in this country where the association has a foothold, we can not get the press dispatches unless we get the consent of the established papers.

Q. The Inter-Ocean forced the Associated Press to give it the dispatches, did it not?—A. It is said that it did. Of course, there are peculiar influences which come up in different sections of the country that make things come around sometimes to your way of thinking.

Q. (By Mr. KENNEDY.) I would like to know something more about this machine system and who controls it; who owns it at the present time, and if the Government could get possession of it?—A. That would be rather a hard matter for me to state who owns it. I have an idea that the Western Union owns it to-day.

Q. Did you say you saw this system in operation?—A. Yes.

Q. (By Mr. LITCHMAN.) I want to ask if there is no other press association except the Associated Press?—A. Oh, yes; I believe there are 3 of them.

Q. What are they?—A. Associated Press, Scripps-McRae, and Laffan Bureau.

Q. Then there are other combinations that are receiving the news?—A. Yes; but they do not come up to the Associated Press. The Associated Press is the father of them all. They are the whole shooting match of this country.

Q. That is the only question I wanted to bring up. Now, Major, as I have got to go, will you kindly take charge of the committee?

The WITNESS. In connection with what Mr. Kennedy asked me here, I will read a little document that I have and also a letter following it, without giving the names; I do not desire to give the names.

Mr. KENNEDY. You ought to give the names, if you give it at all.

The WITNESS. I can give you the answer—

Mr. FARQUHAR (interrupting). We do not care about the matter as to whom it is addressed, if you will only give the signature of the man who makes the statement.

The WITNESS. It is addressed to me. I do not hold back my name. (Reading:)

"NEW YORK, February 18, 1895.

A. L. RANDALL,

*Chairman of Committee of Government Ownership and Control of Telegraphs,
Washington, D. C.*

"SIR: In reply to your inquiry at our interview of to-day asking as to what my position would be regarding the disposal of machine telegraphy in view of the fact that you are about to introduce a resolution in Congress for the purpose of establishing a committee to examine thoroughly into the merits of this system, and to preclude the premature disposition of these patents, thus rendering abortive all efforts heretofore made or to be made by your association looking to Government control of telegraphs, I would say that my plain duty in the premises, as I fully explained to you, is an absolute disposition of all these patents to the highest bidder; but recognizing the fact that the union as represented by you has done much preliminary work, and in view of the possible passage of such a resolution by this Congress, I am willing to cooperate with you in any reasonable way consistent with the position I am obliged to take.

"As I understand the situation, if this resolution is adopted by either or both Houses, your union will urge that control of a wire be obtained by contract or otherwise between New York and Washington, and a series of very exhaustive tests of this system undertaken, with a view of obtaining eventually from this committee a report favoring the position of your association, viz, that this system should be owned by, or at least controlled by the Government of the United States. I say to you now that if you succeed in passing this resolution and obtain control of a wire, and will promptly proceed to the making of these tests (which must be exhaustive in every particular), I will lock up any disposition of these patents during the term of the coming Congress, but no longer, reserving the right, however, if circumstances permit to dispose of these patents to anyone who may bid for the same, with a reserving clause that whoever takes the title to the same is precluded from transferring them to any existing telegraph company; and that they shall execute an agreement to put this system in public use as rapidly as they consistently can. But no disposition of these patents during this period shall be entertained or consummated by me until ample notice has been given to your association of my intention.

"I confess frankly to having no special interest in the aim and object of your committee in this matter, but if this resolution is passed you can further the wishes and desires of your association in no better way than by entertaining the proposition I made to you of taking an option on these patents, either in the name of your association or by such parties as your association can control, to purchase them at a fixed sum and thereby have absolute control of the entire system in your own hands to use and dispose of in such manner as you may deem to be the best interests of those whom you represent.

"Very truly, etc.,

W. L. CRAIG, *Executor.*

"P. S.—This letter is merely an index to the present situation, as I understand it, previous to the introduction or passage of any resolution in Congress. In case the resolution is passed, I think it is but fair to state that a legal document should be executed by us upon terms that are mutually satisfactory, with an absolute condition that pending a report and a final disposition of the same in the Fifty-fourth Congress, no sale or disposition of the patents should be permitted."

Q. (By Mr. KENNEDY.) That was evidently written by the party who had control of that patent there as owner of it?—A. He was executor.

Q. Then there is no doubt that the name of the party is known?—A. No doubt that Brother Marean (Washington manager of the Western Union) knows it.

Q. Why not give it to the commission? Are you violating any confidence?—A. No' his name is W. L. Craig, son of the old gentleman.

A second letter is as follows [reading]:

"NEW YORK, February 27, 1895.

"A. L. RANDALL, Esq.,

515 First street NE., Washington, D. C.

DEAR SIR: I have not heard from you since your return from Washington, and can only trust that you reached there safely. There are parties here that approached me yesterday in the matter of this machine telegraph, but whom they represent and whether outsiders or some existing telegraph company I can not say. Upon my notifying them that I could entertain no proposition until after the 15th of March, they returned to-day and were quite persistent in their endeavors to

find out what, if any, programme I had in view. I hope that you may be successful in this matter, and I wish very much that you would wire me of the result, whether favorable or unfavorable, not later than the day Congress adjourns.

"Very truly,

W. L. CRAIG, *Executor.*"

I think I wrote the gentleman a letter about a month later than that, and he wrote me that he thought that a campaign of education was too — slow for him, and he was willing to sell to the highest bidder. Then I wrote to him about a month after that again on the same subject in a different way, but I was completely snubbed; I never had an answer. I have met the gentleman twice, and he is head man of the health department of New York City.

Q. You say you believe the Western Union probably owns this patent?—A. I believe honestly, but I can not prove it. Mr. Craig said to me: "Mr. Randall, I have no sympathy with anything my father had to do with this, and I will sell this to the man that will give me the most; and as quick as he can give it, he will get it."

Q. (By Mr. FARQUHAR.) Who was the inventor of this system?—A. Anderson was the inventor. Mr. Anderson is dead. His wife owns a third interest, and D. H. Craig furnished the money and got the controlling interest, and this is Mr. Craig's son who is executor and has charge of it.

Q. How complete are the patents on this telegraph?—A. The last of 10 patents was issued in 1895. To use the slang phrase, it is a "lulu bird." After I returned from New York I took occasion to hunt up Brother Marean at his house where he would have plenty of time. I took this matter to show it to him one night about 10 o'clock [producing paper]. There is the one. That is the perforation of a message that I dictated over an artificial circuit to the president of our international body. Of course, you can not read it. That is the perforated part, and that is the way that came on the other end in the Morse characters [producing book and showing diagram]. This is the instrument here. There is the transmitter. You perforate here with the machine like a typewriter and you use it the same way, and it unrolls from a roll and rolls up as it is perforated, just as this matter is here, and as soon as you get through with your message you put it up under this part here. What I saw was on an artificial circuit, but we have the evidence of the experts that saw this work from New York to Chicago in all kinds of weather, and saw it do a thousand words a minute. That is the receiver over there. I stood right there and watched that; it was about as far as from here to Mr. Kennedy from me to the transmitter. That was no longer than a couple of years ago.

Q. (By Mr. FARQUHAR.) Well, to sum up on this Anderson patent, then, does the International Typographical Union or your committee intend to take any further action before Congress about this Anderson patent?—A. Our idea was that if we could get Congress to pass a resolution and appoint a committee to investigate this system that we would go to the Western Union and hire a wire. I went to Brother Marean in 1895 and asked him the price of a wire from here to New York, and I found I could not get it unless I used his instrument; could not secure it with any other instrument. We were going to attempt to form a little press association to run to New York for the purpose of agitating and educating the people in machine telegraphy, and thought we could get enough news to drop off at Wilmington, Philadelphia, and Trenton to contribute to the extension of this system, and at the same time we would have it in effect so that everybody would come to see it and give it a little showing through the country. That was our object. But Mr. Marean said no; that if we did not use his instruments he would refuse to give us a wire.

Mr. MAREAN. I do not think that is correct, because I know our leased wires are used for those purposes.

The WITNESS. Oh, no; I am talking honestly about what you told me down in your telegraph office in 1895. Do you not recollect?

Mr. MAREAN. We lease wires for doing business in competition with the others.

The WITNESS. Did you not tell me I could not put any instruments but your own on that? You have forgotten that.

Mr. MAREAN. There was a company that Abner McKinley was connected with for a few months—

The WITNESS. I have seen that worked, too.

Q. (By Mr. FARQUHAR.) Under the present operation of the Western Union Telegraph, the rate now is speeded up to 60 words a minute?—A. That is their highest limit when they use the Wheatstone.

Q. Would you say, then, that there is no opportunity of more speed under the present plan?—A. No; there is not unless they adopt some other invention.

Q. Then your idea is that you see in these patents a speedier system and one just as accurate as the Wheatstone if applied. But you have no positive practical knowledge, have you, that this Anderson system can be adopted by the Western Union?—A. I have only experts' testimony. I have experts' testimony that gave it a trial for one month between New York and Chicago; that is all. I will submit that report; but I would like to state that in the press reports they do not use this tape here [indicating]. They take a page length, line under line. That was done on the same machine, and it can be done on the same straight line, and for press reports, all that the compositor would have to do would be to learn the Morse alphabet. Then he could set it up better than he could with the ordinary manuscript, and he could set it up without making an error. When the papers adopted the type-setting machines every compositor had to learn to operate them, and it would not be any more for him to learn this than to learn the keys on the board, and after the printers once learned it they would have it down. Mr. Marean, have you seen that?

Mr. MAREAN. That would not permit the telegraphic editing of the dispatches.

The WITNESS. He can edit that the same as any copy; he can cut out there, and he can take it and write it there either way—scratch out or add to. That would not interfere. That can be used in case of press reports, so that it would not be any expense to copy it to the Government or the Western Union if they would put that system in effect—if they had it.

Q. Do you know or have you found out whether under the present plan of the Western Union they can cheapen their tariff?—A. They could cheapen it. You mean with the systems that they are using?

Q. Yes; I mean exactly as it stands.—A. The ones that they are using and not the ones that they have looked up?

Q. Yes.—A. That is a matter of their own. I can not tell that and you can not.

Q. What are the present limits?—A. Oh, 60 words a minute is the extreme they can go with the modes they use at the present time. That is the extreme limit they can go. They fall down to 15 and 25 words, but with circumstances and weather favorable they can go to 60 words with the Wheatstone patent.

Q. Would you say with the present system their rates are reasonable, considering the expense of operating their present lines?—A. No; certainly I do not. The trouble is, they have got to keep up all this watered stock, to strike a dividend, and if they would eliminate the water, they would make more money. They are making money anyway with the water, but I am claiming if they would use some of the recent inventions, they could make considerable reduction both in commercial and press reports.

Q. What connection have these press associations with the Western Union; any at all, or are they just separate commercial bodies?—A. There is a deal there we do not know.

Q. You do not know?—A. We do not know; no. We have ideas, of course, but that is not what you want to get—our ideas.

Q. You spoke of the country press being able to get these dispatches, even weekly papers, the day of publication, the latest dispatches. Who would collect those dispatches?—A. The statement I made was that if the Government took this machine telegraph system or some other recent ones that were better—but even though they were to take that and make a proposition to the Associated Press to cut rates down to so much, naming a figure where it could be almost half a mill, providing that association should give all newspapers, dailies and weeklies, throughout the length and breadth of the United States the same news on equal terms, the Associated Press would accept the arrangement, and by affecting this change we would break up that twin monopoly, as it now exists, as I believe, between the Associated Press and the Western Union.

Q. In other words, you would still maintain and keep up the Associated Press service only at a cheaper rate on account of cheaper appliances?—A. It would not be a monopoly then; everybody could get it. If I was out in a country town between here and Alexandria and had a dry-goods box and an Army press I could get as many words as I desired and pay the same rate I would pay between New York and Washington.

Q. Is it not a fact that this is the same contention of that legislative committee, that they shall furnish them service at a cheap, reasonable rate so that general intelligence, market reports, and everything of that kind shall be furnished to the newspapers at a much cheaper rate than they get it now? Practically that is where you stand.—A. That is what my committee is in existence for.

Q. Do you know what it costs any new paper to get into the Associated Press in the city of Washington?—A. None can get in.

Q. Provided the association were willing to let you in, I mean.—A. No; I do not know.

Q. Do you know what the privilege was ever offered to you for?—A. We tried to get it when we started the Times. The Times was started here by our local organization. I was chairman of the mass meeting that brought that paper into existence, and appointed the first committee on ways and means. We tried to get the telegraph news and we could not. At that time there was a fight, fortunately, between the Associated Press and the United Press. The Star had both concessions and for both morning and evening. They did not use the morning concession, and gave it to us and let us use the matter. We got the matter as long as we had the morning Times, but when we started the evening Times they shut us out.

Q. At what rate did you get in?—A. They paid \$25 a night as long as they used the matter.

Q. (By Mr. FARQUHAR.) You have no knowledge as to how much it takes to get into the association in other cities?—A. I do not know. I have heard at different times, but I do not recollect now, and I do not know whether what I heard was true at that time.

Q. Do you think that you can not get news service of any kind unless those that are in the local membership vote you in?—A. Oh, yes; that is understood; you have got to get in that way.

Q. It is exclusive?—A. Yes. If the Star and the Post say you can not come in here, you can not come in here; you can not come in here either morning or afternoon. You can get specials.

Q. The local papers have the right to name their own terms?—A. As far as I know they have the right to name the terms. I do not know whether they name the prices or not.

Q. Have you any knowledge that they name them, or ever have named them?—A. There is no doubt but what they do.

Q. Does the Associated Press in some capacity name the terms, whether in the local committee or in the general committee?—A. That I could not answer positively; I could not answer that positively. I think it is done both ways.

Q. You could not give a round sum at all, or any proposition that has been offered to get into this association and which has failed, could you?—A. No; the time we started the Times we did not make up any round sum. Printers as a general thing have not a surplus of money, and they did not have any big money to pay out on any such matter. We went there to try and get the telegraph news and we finally succeeded in getting the report until they made it an evening paper, and when they made it an evening paper then the Star shut us out.

Q. The case stands in this way, then. The Western Union Telegraph furnishes the lines for carrying the information; the Associated Press assembles or collects that information, and anyone going into the newspaper business has to be admitted into the Associated Press before he gets any of that news?—A. Yes; and it has been proved.

Q. And you say that the conditions and the rates in these local associations in cities are such that it would cost a man as much to get into the association as to start his newspaper?—A. Yes; but in nineteen-twentieths of the cases they would not give you a show even if you would raise the money.

Q. But if they would?—A. It would be too large for a man unless he had a large surplus to go in—and another thing with the Associated Press, it has been proven before committees of Congress, and evidence has been given to show that if one paper should get to advocating postal telegraph and Government ownership and control of the telegraph in different branches that the Western Union would take and put the screws down on the paper, and say, "Here, if you do not stop that we will take the news away from you." And the paper would stop. I have heard of lots of cases of that kind, but this I know to be a fact. A certain correspondent was sending matter to a paper of his, and it happened to be that he had been dropping in and giving his matter to the Postal Telegraph Company. It was only a few days until the Western Union came soliciting his matter, and wanted him to give them half of it. He told them no; that the Postal suited him better because it was handier, and he said, "I guess I will keep right on with the Postal." Well, it was only a few days, as I recollect, that this correspondent was notified from headquarters that "You must give the Western Union half of your work from this paper." They put the screws to him. It was not but a little while longer that he got a notice from headquarters again, saying, "You must give all your work to the Western Union." Put the screws to them again. And that is the way they have done to papers to crowd them out and push them down—papers that have been advocating Government telegraph in some form or other.

Q. Do you know whether the rates to other associations than the Associated Press are the same—that is, that they give equally as good rates, for instance, to the Scripps-McRae?—A. That I do not know.

Q. Or the Laffan Bureau?—A. I do not know; they keep their dealings to themselves.

Q. What is your authority for the statement of the laid-by messages—whether the laying by of domestic or family or general messages is done purposely to let through commercial or brokerage messages have precedence?—A. In answer to that question, take the business centers like New York and Chicago and places of that kind. Between 9 o'clock and 3 the work of the brokers and speculators generally is tremendous. The Western Union is in this business for money. We have got to bear that in mind. They are lending their wires to anybody for money, and they lease the wires between those hours. They own those wires, but the brokers and speculators do not have those wires as a general thing after 3 p. m. They use them between 9 and 3 p. m., and the other wires that are not leased to those brokers are overcrowded and the messages have got to lay by; and as soon as 3 p. m. arrives and the brokers' lease runs out for that day they man the wires and they unload those desks which were full of matter, ordering them to take their turn. Just like I saw in some statement before the House Post-Office and Post-Roads Committee several years ago, where some gentleman—it gave his name, but I do not remember it now—telegraphed from New York City to Terrence V. Powderly at Scranton that he would be there at 11 o'clock that evening, and he left New York about 20 minutes after he telegraphed. He got to Terrence V. Powderly's house and had been sitting there for 20 minutes at Scranton, Pa., before the message arrived. That was a case where the message was laid by. It was proven through this committee that there were several instances of that kind. The gentleman had arrived at Mr. Powderly's house 20 minutes before the Western Union message came notifying Mr. Powderly that he would arrive that night.

Q. Mr. Clark was questioned on that point very fully before this commission, and he gave the commission to understand that the facilities were so sufficient that the remedy would be simple.—A. It is almost impossible here in the city of Washington to get them out when Congress is in session.

If Mr. Clark made that statement, he knows very well that the Western Union can not handle the work at times with its slow way of handling—that is, in cities like New York, Chicago, and Boston. Lots of these people do make some very funny statements. Mr. Green, when he was president, several years ago when before a House committee, was asked a question as to how many telegraph companies he was president of. He stammered and said well, he did not know, but he thought it was 33 companies he was president of. This is a matter of record, too. He did not know how many companies he was president of.

Q. Is there any further statement you want to make, Mr. Randall?—A. Only that I would like to say it is a hard matter to find out the rates in this country. As I stated in my statement, we want a uniform rate, so everybody may know what the rates are to and from places. Of course, it is true that you can go into telegraph offices and ask how much it is to Oakland, Cal., and they will tell you, but you have got to go and ask them, and then you find that it will be a dollar. I therefore would like to have the following statement go along with this matter to show the difference, and as regards the difference in European countries:

Taking up the States alphabetically, the Western Union rates are:

Alabama, 10-word messages, 50 and 3.

Arizona, \$1 and 7.

Q. (By Mr. FARQUHAR.) Where is this from?—A. New York.

Q. (By Mr. KENNEDY.) What do you mean by \$1 and 7?—A. For 10 words, \$1, and 7 cents for each word in excess of 10. (Continuing:)

Arkansas, 50 and 3 and 60 and 4.

California, \$1 and 7.

Colorado, 75 and 5.

Connecticut, 25 and 2.

There is one good statement that Brother Clark did make, and he did tell the truth, that there were places in New England where they were sending telegrams for 25 cents.

Delaware, 25 and 2.

District of Columbia, 25 and 2.

Florida, 60 and 4.

Georgia, 50 and 3.

- Idaho, \$1 and 7.
 Illinois, 50 and 3.
 Chicago, 40 and 3.
 Indiana, 50 and 3 and 40 and 3.
 Indian Territory, 75 and 5.
 Iowa, 60 and 4, 50 and 3.
 Kansas, 60 and 4 and 50 and 3.
 Kentucky, 50 and 8 and 40 and 3.
 Louisiana, 60 and 4.
 Maine, 25 and 2.
 Manitoba, 75 and 5.
 Maryland, 25 and 2 and 30 and 2 and 40 and 3. There are three rates in Maryland.
 Massachusetts, 25 and 2.
 Minnesota, 60 and 4 and 50 and 3.
 Mississippi, 50 and 3.
 Missouri, 60 and 4 and 50 and 3.
 Montana, 75 and 5.
 Nebraska, 60 and 4 and 50 and 3.
 Nevada, \$1 and 7.
 New Brunswick, 50 and 3.
 New Hampshire, 20 and 1 and 25 and 2.
 New Mexico, 75 and 5.
 New York, 20 and 1 and 25 and 2.
 North Carolina, 50 and 3.
 North Dakota, 75 and 5.
 Ontario, 40 and 3.
 Oregon, \$1 and 7.
 Pennsylvania, 25 and 2 and 20 and 1.
 Quebec, 40 and 3.
 Rhode Island, 25 and 2.
 South Carolina, 50 and 3.
 South Dakota, 75 and 5.
 Tennessee, 50 and 3 and 40 and 3.
 Texas, 75 and 5 and 50 and 3.
 Utah, 75 and 5.
 Vermont, 25 and 2.
 Virginia, 40 and 3, 30 and 3, and 25 and 2.
 Washington, \$1 and 7.
 West Virginia, 40 and 3 and 35 and 2.
 Wisconsin, 50 and 3.
 Wyoming, 75 and 5.
- Q. (By Mr. FARQUHAR.) What figures are those?—A. They are the Western Union's figures.
- Q. The first figures cover the 10 words and the second figure is for each extra word?—A. Yes; that is right.
- Q. (By Mr. KENNEDY.) What is the date that schedule was in effect?—A. 1897.
- Q. Do you know whether the same schedule is in effect now?—A. Mr. Clark made the statement that in New England the rate is 25 cents. He claimed they had a bureau sitting continually systematizing and revising the tariff, but they do not revise it much. They are paying that commission an enormous salary to do nothing. And who pays it? The people who use the telegraph; and we would like to have the general public use it a little more than they do. Now, I have here special rates for newspapers, but I do not know whether there is any use in my offering them.
- Q. You know it is authentic?—A. Yes; I suppose it is. I got this from Mr. Marean himself, and I think he would not give me anything that was not right. The special rates are regulated by the commercial rates, day and night. Where the commercial rate is 20 and 1 and 25 and 1, the special rate is one-half of a cent in the day and one-fourth of a cent at night; where the commercial rate is 25 and 2, 30 and 2, or 35 and 2, the special rate is two-thirds of a cent in the day and one-third of a cent at night; where the rate is 40 and 3, 45 and 3, or 50 and 3, it is 1 cent in the day and one-half of a cent at night; where the rate is 60 and 4, it is 1½ cents in the day and two-thirds of a cent at night; where the rate is 75 and 5 the day rate is 1½ cents and the night rate five-sixths of a cent; where the commercial rate is \$1 and 7 the day rate is 2½ cents and the night rate 1½ cents. I think that is right.
- Q. (By Mr. FARQUHAR.) Is there any further statement you want to make?—A. After Mr. Roberts makes his statement I suppose I could add anything that

might come to my mind. There are quite a number of things I would like to make a statement of, but I can not just call them to mind. I would like to read this. It is from Senate Doc. No. 65, Fifty-sixth Congress, first session, page 60, speaking of franks. That was touched upon when Vice-President Clark was before your commission. (Reading:)

"Misgovernment and political corruption are evils to which the private telegraph contributes. Long ago the president of the Western Union said: 'The franks issued to Government officials constitute nearly a third of the complimentary business. The wires of the Western Union Company extend into 37 States and 9 Territories within the limits of the United States, and into 4 of the British provinces. In all of them our property is more or less subject to the action of the national, State, and municipal authorities, and the judicious use of complimentary franks among them has been the means of saving to the company many times the money value of the free service performed.'"

I would state in that connection that when Mr. Kennedy asked Mr. Clark the question here, Mr. Clark said that it was a mere matter of courtesy; nothing in it at all. At the same time I believe Mr. Kennedy asked why the company did not cut these franks off, and all the answer he got was "Why don't they cut the deadheads off at theaters?" I am here to state that just as soon as a man becomes a "statesman without a job" he doesn't have to be cut off. He doesn't have his franks after that. I know that when I was actively engaged in the agitation in 1894, 1895, 1896, parties came to me and showed me their franks; and some of them have since been left off for the reason that they took an active part in the agitation, and they have no franks now; if they asked for them they could not get them. But they did not used to have to ask for them when they were in office; they were sent to them. Yet Mr. Clark did not know anything about it; it was simply a courtesy.

During the strike of 1883 of the telegraphers in this country, the largest strike they ever did have, the newspapers asserted their independence. They came out and struck for Government ownership and operation. It oppressed them so that they could not get their news. I have a book here that is loaded down with extracts from newspapers all over this country, where the newspapers were contending that the Government could and ought to operate the telegraph, making a stronger argument than any we have made, or than is made in this document No. 65, notwithstanding it was prepared by Professor Parsons, who puts up about as strong an argument as any. But as soon as that strike was settled they had to go right back, or the screws would be put on them and they would lose the news.

There are one or two other things here on page 59 of this same document. Professor Parsons says this (reading):

"No person or corporation should have the power to mold the daily news or exclude any paper from printing it on equal terms with its rivals. The Western Union and the Associated Press are not the proper ones to decide whether or not a new paper shall be started or an old one depart this life. The success of a paper should depend upon its merit, not upon the favor of the Western Union or the assent of other papers.

"It is a good thing to gather the news to a central point and edit it to the country. An enormous amount of useless repetition is thereby avoided and a better distribution of news secured. But very careful provision should be made to secure the impartiality of such editing and distributing. If the association were open to all newspapers on equal terms, and the editor in chief were elected by all the newspapers, each casting 1 vote, and were sworn to impartial service, subject to removal by a vote of dissatisfaction on the part of 15 or 20 per cent of the constituent papers; if any paper or papers choosing to pay extra for a special representative could have one, entitled to a seat in the editing chamber, with full access to all materials received and authority to add a supplement to the chief's report to cover important matters omitted or misstated by the chief; if each and every paper were free to criticise the dispatches, then we should have laid the foundation for a free and impartial press. The very presence of the supplemental editors would probably, as a rule, prevent the necessity of supplemental reports by their potential effect upon the chief's report.

"The first step toward the establishment of an unfettered press is a national telegraph system, carrying the news or renting wires at very low rates on condition of impartial editing and distribution of dispatches on some such plan as that outlined above or a better one. The chains of the allied monopolies will thus be broken and the coordinate growth of intelligence and cooperation will gradually free the press in larger and larger degree from the limitations placed upon it by ignorance, prejudice, and the strife of competitive business and politics."

I guess I will close my remarks, inasmuch as it is getting late. We have quite a number of other things here, but I suppose I can revise this, and anything in that nature I can add.

Mr. FARQUHAR. Certainly; you can add what is pertinent.
(Testimony closed.)

EXHIBITS IN CONNECTION WITH MR. RANDALL'S TESTIMONY.

For a Postal Telegraph.

In Senate Doc. 65, Fifty-sixth Congress, first session, page 5, Professor Parsons says:

"The postal telegraph may be all right in Europe, but not in America. We don't want to imitate the monarchical systems and institutions of the Old World.' I wonder if the gentlemen who made this 'argument' and those who repeat it refrain from using the multiplication table and the ten commandments because they are in vogue in Norway and Sweden, Denmark, Belgium, etc. Do they abstain from wearing clothes because the wearing of clothes is an institution that exists in Russia? Do they go on their four legs for fear of imitating the kings and emperors by walking on two? We must not wear overcoats, or neckties, or trousers—the Germans do that. It was very dangerous, wasn't it, for us to adopt the idea of that monarchical Englishman, Stephenson, or the idea of that imperial Dutchman, Gutenberg, and it will be equally dangerous for us to adopt the idea of the despotic Gladstone that the telegraph is a good thing in a post-office, won't it? It does seem as though fast mails would be as valuable and sensible in a republic as in a monarchy. France thinks so, and Switzerland, the most democratic country in the world. New Zealand also, and the States of Australia. These are all republics, and each has a national telegraph system. We may imitate them if you insist on regarding the question as a matter of imitation; or we may take England as an example, for she is in every substantial sense as real a republic as the United States. In truth, such objections seem foolish and weak, and must arise from very careless thinking, reckless appeal to prejudice, or a desperate lack of good argument. I would not trouble the reader with a refutation were it not that men in high position have been known to repeat such absurdities and give them the impetus of their names, whereby insidious appeals are made to the thoughtless prejudice of unenlightened patriotism. True patriotism, wide awake, demands for America all that is good, whether it originates in Europe or the Fiji Islands. In the case of the telegraph, however, we have only to follow the lead of our own Government which was the first to adopt the electric telegraph and establish it in connection with the post-office, where it would have remained to this day had it not been for the power of private capital and the weakness of some of our legislators and the failure of others to foresee the enormous value of the telegraph.

"It will put the Government into the field of private enterprise.' Well, that is what the people have been doing since the dawn of civilization. Defense was once dependent entirely on private enterprise; so were education, justice, prevention and punishment of crime, guarding against disease, care of the sick, extinguishment of fire, manufacture of the weather, transmission of intelligence, etc. The people have put the Government into the field formerly occupied by private enterprise, because they have become aware that the Government could do the work better than private enterprise. In the present case of the telegraph, however, the quoted words at the head of this paragraph are not strictly true. It would have been more accurate to say of the postal telegraph, 'It will put the Government into the field of despotic monopoly.'"

The witness also submitted the following:

Again in Senate Doc. 65, Fifty-sixth Congress, first session, pages 9, 10, 11:

"Postmaster-General Bissell devotes three pages to the subject in his report for 1894. He opposes a postal telegraph. He thinks it would cause a deficit and be productive of 'wrangling and jealousy' through the 'limitless difficulty of determining the character, quality, and amount of service that should be accorded to the various sections of the country.' It is hard to see why the introduction of electric mails should cause any more wrangling and jealousy between different sections of the country or any more trouble in distributing the service than the introduction of steam mails or the adoption of the free-delivery system. Give fair facilities to all and better facilities where the amount of business warrants it. The test of population and business done determines the distribution of service now without the slightest difficulty and would do so just the same if the functions of the post-office were multiplied a hundredfold. As to the deficit, Mr. Bissell bases his belief on the assertion that the English postal telegraph does not pay

its operating expenses. This is not true, but if it were the conclusion of Mr. Bissell would not follow. If it is good logic to say 'England has a deficit on its postal telegraph, therefore the United States would have a deficit on its postal telegraph,' then it is good logic to say 'France, Switzerland, Sweden, Belgium, and other countries realize a profit on their postal telegraph, therefore the United States would make a profit on the postal telegraph.' As already remarked, the statement of the Postmaster-General in respect to England is not true, though he doubtless thought it was. He says, on page 48 of the report for 1894, that the interest on the English telegraph investment for the year 1893 was \$1,455,584. 'In the operation of the service there was a further loss of \$811,741.'

"The report of the English post-office for 1893 showed that there had been a large extension of lines to life-saving stations and other points, 673 new offices in all. I suspected that the cost of new construction had been included in the 'expenditures' assumed by Mr. Bissell to be operating expenses, so I wrote to the English postmaster-general, and here are the figures he sends me for 1893:

Total receipts	£2,536,312
New purchase and construction	185,609
Operating expenses	2,507,385
Total expenditure	2,692,994
Net profit on operation	18,927
Interest	298,888

"So there was a net profit on operation of \$91,635. I suppose someone who looks at the lump sums of the English postmaster-general's report for 1893-94 and does not think of inquiring about the items will be telling someone that there was a deficit in operation of almost a million, whereas the itemized account shows that, taking out the cost of new construction, there was a net profit of \$138,850. In 1890 the net profit was \$1,451,320, in 1887 it was \$442,420, in 1881 it was \$2,257,315, in 1875 it was \$435,375, in 1873 it was \$568,995; such are some of the figures taken at random. The profit varies, but every year from 1894 back to the first report in 1871, shows a considerable net profit in the operation of the telegraph. In the last 3 years and the 5 years from 1884 to 1888 the surplus was not sufficient to defray the cost of new construction or extensions; but in each of the other 16 years the net profit was a good deal more than sufficient for this purpose; the excess after paying for all extensions rising in some years as high as a million and a half of dollars. From February, 1870, down to the present time the actual cash received for postal-telegraph service in England has paid all operating expenses and all cost of extensions, new purchase, and construction, and turned into the treasury a net profit of \$6,683,610 besides rendering free services to other departments of the Government which at regular rates would have amounted to \$1,860,450. As we shall see hereafter, the English post-office has sent the telegraph into thousands of rural districts where the private companies did not and would not go, has established rates that are several flights of stairs below ours, and adopted the policy of raising the salaries of employees every year in a ratio of 2 to 3 per cent. In spite of all this the operating account shows the gratifying results above-mentioned—a financial as well as a social success. Yet the erroneous statement of Mr. Bissell will doubtless be quoted by persons opposing the postal telegraph without stopping to investigate its truth.

"As to capitalization and interest, we do not need to follow in the footsteps of the English post-office. We should not pay several times the value of existing lines if we buy, nor go into debt if we build. The whole matter can be managed without a dollar of taxation, as will appear hereafter, and our system can render good service at very low rates and still make a profit. Even if the English department had not made a profit in 1893, it would not follow that it must keep on at a loss, for its history shows that the surplus is small one year and large the next, moving up and down in an irregular line. Even if the English department made a loss every year it would not follow that we should do the same, for we need not carry the press dispatches at rates not only far below ours, but considerably below cost as England does. And, finally, even if a good postal-telegraph system in the United States should be operated at a loss (which need not be), still it would be no argument against its adoption until it were shown that its vast benefits were not worth the expense. And Postmaster-General Bissell should be the last one to raise such an objection, for on the first page of this very same report of his I find these words about the Post-Office Department: 'It can not and should not stop to consider little economies. It must needs exert itself to the utmost to secure the best possible results in the way of celerity, accuracy, and security in the dispatch of the mails, and without sparing any reasonable expenditures in that behalf.'"

Anderson's Machine Telegraph.

The witness submitted also the following:

DESCRIPTION OF ANDERSON'S MACHINE TELEGRAPH.

[From Senate Doc. 65, Fifty-sixth Congress.]

"The Anderson automatic has transmitted and recorded in perfectly legible characters 3,000 words per minute between New York and Washington, 351 miles, over a compound copper and steel wire of much smaller carrying capacity than the No. 4 copper wire, which would be used in constructing the new system according to the plans of the inventor. It has carried 800 words per minute over a similar compound 2-ohm wire 1,027 miles—from New York to Chicago; and it has carried from Jersey City to Philadelphia 1,500 words per minute, 90 miles, over a single small iron wire of a resistance of 25 ohms per mile, or more than 20 times the resistance of a No. 4 copper wire. Over an experimental line 8,000 words per minute have been recorded by this system. By the hand method the highest speed that an expert telegrapher can attain is about 45 words a minute, and ordinarily 15 to 25 words per minute is all that can be expected. With the quadruplex and four operators at each end of the line 60 to 80 words a minute may be sent over one wire, but the average is about 50 words per minute; so that the Anderson automatic makes one wire the equivalent of 40 to 100 of the ordinary Morse circuits in use by the Western Union, or 10 to 30 of its quadruplexed wires.

"Mr. W. E. Athearn, a very high authority, formerly chief electrician of the Baltimore and Ohio Telegraph Company, thoroughly tested the Anderson system, and says: "With a 1-ohm-per-mile resistance hard-drawn copper wire, strung upon well-set, substantial poles, the tests justify the belief that much more than 1,000 words per minute could be reliably telegraphed in all weathers."

In respect to cost of transmission with the Anderson automatic, Mr. Athearn says: "A careful approximate estimate of the cost of telegraphing, complete, 1,000 words from New York to Chicago, including perforating, transmitting, copying by typewriter at the receiving station, with liberal allowances for cost of labor, stationery, chemicals, etc., is about, but rather under, 50 cents. The present rates of the Western Union Telegraph Company for telegraphing a business message of 1,000 words from New York to Chicago are upward of \$30."

Mr. P. B. Delany, the great inventor of the multiplex, says: "At Philadelphia, on Monday, the 22d of February, 1892, I saw 1,500 words per minute received from Jersey City, in perfectly plain Morse characters, by the Anderson system of machine telegraphy. The line used was an iron wire with a resistance of about 25 ohms to the mile, or equivalent to double the length of an ordinary telegraph circuit. Judging from the character of the work, 2,000 words per minute might have been received if the transmitting machine at Jersey City had been geared up to that speed. There will be no difficulty whatever in working at a speed of 1,000 words a minute between New York and Chicago."

Mr. D. H. Bates, once of the Western Union management, and afterwards president and general manager of the Baltimore and Ohio Telegraph Company, examined the system in 1890 at the request of the Postmaster-General. He says: "The effect of the arrangement is to insure great speed, great accuracy, and legibility of the record at the receiving station, absence of all errors except those inherent in the line itself, and the presence of line faults may be instantly detected. Two large copper wires could accommodate, by means of the machine telegraph, all that 8 or 10 similar wires could handle by means of the quadruplex, the work being as well done and with a saving of one-third in the number of operators and clerks."

Mr. F. N. Gisborne, electrician and general superintendent of the government telegraph lines of the Dominion of Canada, told the Royal Society of Canada in May, 1891, that the Anderson system had accomplished, in a perfectly practical way, the astonishing feat of telegraphing 3,000 words a minute over a single wire 351 miles long, and 800 words a minute over a circuit of 1,027 miles in a heavy rain storm. Wherefore, 2 wires, operated by the Anderson system, were proved to have a capacity more than equal to 20 wires operated by the quadruplex system in general use by the American companies (the Western Union is supposed to have quadruplexed about 75,000 miles of its wire), which represent 80 ordinary Morse telegraph circuits, and require 160 skilled operators at the terminals and 20 workers to attend the repeaters at halfway stations between New York and Chicago. Mr. Gisborne also said it was clear that 100 words could be telegraphed

1,000 miles for 25 cents and yet allow a large profit to the telegraph companies. The decrease in the cost of line and its maintenance by the substitution of the Anderson system for present methods would be enormous, to say nothing of the far smaller number of operators and instruments required.

"The Montreal Gazette of June 13, 1891, commenting on Mr. Gisborne's address, said that he had shown how recent improvements in automatic telegraphy made it possible to compete successfully with the postal service for the carriage of letters, thus emphasizing the frequently expressed opinion that the time is ripe for the complete combination of the two services in the hands of the postal authorities.

"The method of operation is simple. The message is perforated on a strip of paper, which is put into the transmitter and passes under metal points. At each perforation these points pass through the paper and close the circuit for a length of time corresponding to the length of the perforation. At the receiving end the closing of the circuit makes a prussian-blue stain on a moving ribbon or sheet chemically prepared for the purpose.

"The perforating machine is as simple and efficient as an ordinary typewriter, and can be operated with the same ease and speed (1,800 to 2,000 words per hour).

"The page and line recorder prints the message on a letter sheet about ten words to the line, and is a great improvement over the paper ribbons for recording long messages, letters, or news reports. So says Mr. Athearn, and Mr. Bates says, "The page and line recorder marks a long step forward, and its use removes one of the chief obstacles heretofore barring the way to full success in autotelegraphic transmission."

"The business men's composing machine enables any person after a little practice to perforate a message for telegraphing as quickly as it could be written with a pen or typewriter (a perfect copy of the message for the office file being simultaneously printed in Roman characters). The use of this composer would considerably lessen the cost of telegraphing and would shorten the time required to get a message under way, the message being ready for the automatic transmitter the moment it is written and stamped, thus avoiding even an instant's delay. The reading of the message and counting of the words by the operator, taking the money, etc., uses up many instants with our system. Then the transmission is 50 to 100 times more rapid than that in general use to-day, and at the other end the attendant does not have to write out the message, but sends it at once as it is printed by the machine, if it is a quick delivery message, or talks it through the telephone directly to the addressee.

"Where the traffic is large the automatic effects a great saving in cost of construction as well as in cost of operation. A single line of hard-drawn copper wire No. 4 with the automatic is more than able to do the work of ten wires of the best quadruplex systems (300,000 words or 10,000 messages of 30 words in 8 hours), yet the cost of the single copper line is less than half the cost of a good 10-wire galvanized iron quadruplex outfit. The repairs and battery expenses of the automatic line are little if any more than a tenth of the corresponding maintenance expenses of the 10-wire quadruplex. The 10-wire quadruplex needs 80 first-class operators; and on a line like that from New York to Chicago, at least 5 repeaters would be required at Buffalo—85 operators; the equivalent automatic line would need 2 operators, 2 helpers, and 20 perforators (if the messages all came unprepared; so far as they were prepared in the offices of the senders the need for perforators at the telegraph office would cease); 4 to 22 workers against 85 workers with the quadruplex, to handle the same traffic in each case. With an 8-hour shift for the workers the cost of transmitting business under consideration would be about 6 cents per message of 30 words by quadruplex, and about 1 cent per message of 30 words by automatic, or one-half cent a message if the perforating were done by the sender.

"The number of letters passing daily between New York and Chicago is said to be about 40,000, and the telegrams 8,000. If letters were telegraphed at a low rate between these points, a vast number of missives from surrounding regions would cluster to them to save a day in transit, and the total might soon be nearer 100,000 than 40,000. Suppose, however, that in each 24 hours only 7,000 letters were to be telegraphed, averaging 100 words each, and 8,000 averaging 200 words each. A careful estimate based on considerable practical experience with the Anderson automatic shows that the cost of transmission of the 800,000,000 words of traffic per year would be about \$300,000, or less than 4 cents per 100 words, including labor, materials, repairs, and interest on the actual investment. Wherefore it appears that if a 5-cent telegraph stamp were added to a 100 word letter alongside of the ordinary 2-cent postage stamp, the 7 cents would more than pay for handling in the mails and for transmission by telegraph between

the two great centers nearest the origin and destination of the letter. As the 2-cent postage pays double the present cost of handling letters (Postmaster-General's Rept. 1893, p. 52), and the automatic transmission figures less than 4 cents, it is clear that 5 cents would cover the total actual cost, mail service and all, between New York and Chicago. It would not fully pay for transmission from New York to San Francisco; it would more than pay for such transmission between Boston and New York, Boston and Philadelphia, New York and Philadelphia, New York and Washington, New York and Chicago, Washington and Chicago, etc., making the average trunk-line transmission less than 5 cents for the entire country. If the messages were perforated by the sender and the automatic record sent to the addressee without copying into roman characters, the total cost of transmission per 100 words would be less than half of 5 cents. As the automatic was extended, and the postal telephone and multiplex netted the country more and more, messages would go to and from the automatic trunk terminals by these means instead of via the mail bag. The strategic point, however, is the automatic trunk line for telegraphing letters long distances instead of sending them by mail. That is the thing of all others that the post-office should aim to do at once.

"A business of 800 million words per annum could be transacted on two No. 4 wires running considerably below their capacity—estimating the capacity at the most moderate figure suggested by the experiments, viz, 800 to 1,000 words a minute. It may be interesting to state that it is estimated the transmission of the same traffic by the Western Union quadruplex would cost about 18 or 20 cents per 100 words—actual cost, I mean, including interest on the real investment. The special telegraph messenger service is not included in any of these estimates. The Western Union says that costs 2 cents a message. (Bingham Hearings, Green, p. 60.)

"A full account of the Anderson system with detailed data of cost of construction and operation will be found in a brochure entitled *Machine Telegraphy*, by W. L. Craig; M. B. Brown, printer, 49-57 Park place, New York, 1895. The data of pages 28 and 29 allow interest on the real investment, while those of page 27 are made up on the ordinary private corporation plan with large dividends on watered stock. Receiving copyists and rent are also included in pages 26 and 27, but not in the estimate of page 28. I have included copyists but not rent either in figuring the automatic or the Western Union cost. There would be substantially no addition for rent in a postal system, and even if allowed for at private rates it would amount to less than half a mill per 100 words automatic. The book figures on an 8-hour day for employees and allows \$50 to \$80 a month wages per employee. Its estimates of the cost of operating the quadruplex, and the cost of construction of the copper and the iron quadruplex lines, are all too high, according to other engineering authorities and the testimony before Congressional committees already cited. In the above statement I have given the corrected data in these respects. The letters and reports of Messrs. Athearn, Delany, D. H. Craig, and F. N. Gisborne may be found in the same book.

"Since writing the above I have received Senate Doc. 291, May 26, 1896, containing the testimony of P. B. Delany before the Butler Committee on Post-Offices and Post-Roads, Fifty-fourth Congress, first session, May 13 and 20, 1896. The great inventor, with charming modesty and open mindedness, says nothing about his own services to the science of telegraphy, but urges most powerfully the claims of the automatic, which is chiefly the work of others.

"He says in substance that with plenty of wires a single short message can be sent by hand about as quickly as by the machine system, but 'if the message is a long one, or if there are a thousand messages to transmit, it might take two days to get them off by hand, whereas if there are a sufficient number of perforators, the whole lot could be transmitted in a few minutes, the machine system affording the same capacity as 70 to 170 circuits worked by the present Morse system. * * * For the great bulk of telegraphic correspondence the hand method is inadequate, slow, and expensive. * * * The highest average of transmission over a single wire by the quadruplex was about 50 words a minute. Now it is practicable to telegraph 2,500 words a minute between Washington and New York and 1,000 words a minute between New York and Chicago, while the telephone carries speech 1,500 miles. * * * Last October (1895), over an actual line having but 130 pounds of copper to the mile (Philadelphia to Harrisburg and return), 216 miles, 940 words a minute were plainly recorded, the current used being 120 volts. The trial was made over the lines of the Pennsylvania Railroad Company, from the Broad street station, and was conducted in the presence of a board of well-known electrical experts. With this system 8,000 words a minute have been recorded over an experimental line, which shows the possibility of the latest development in machine telegraphy.'

"The inventor gave the committee an estimate on the construction and operation of an automatic line from New York to Chicago, as follows:

Construction per mile, 3-wire line.

35 poles, 30-foot, at \$4.	\$140.00
Setting poles, at \$1.50	52.50
Total for poles	192.50
Cross-arms, pins, and insulators, at 55 cents	19.25
2 copper wires, 850 pounds each per mile, at 15 cents per pound	255.00
1 iron wire, 600 pounds per mile	35.00
Stringing 3 wires, \$7 per mile	21.00
Incidentals	27.25
Per mile, 2 copper and 1 iron wire	550.00
1,000 miles	550,000.00
Complete equipment, apparatus, furnishing, etc.	50,000.00
Total	600,000.00

"The vast difference between this sort of construction and Western Union lines will be appreciated when you know that the Western Union uses little copper and that the iron wire it uses weighs about 130 pounds to the mile. The line described by Mr. Delany would be much more expensive than the lines considered in Part III, but not so much more costly, I believe, as the inventor's figures would indicate. Twelve men can set from 24 to 80 poles a day (Telegraph Construction, by J. C. Douglas, p. 362), according to soil and method and size of hole. Fifty cents each for setting should be a sufficient allowance for actual cost, and contractors are eager for the work at \$1 apiece. For the cost of poles themselves, the Western Union told the Census Bureau that its poles cost \$1 each. The Western Union has contracts with many railroads that relieve it of freight rates; but this was not the case with the construction described in Part III, note 13, where the figures show that the entire cost of poles could not have exceeded \$2 each, although they were hauled long distances. Two dollars per pole laid at the holes is what the telegraph builder figures in the Blair Hearings, volume 1, page 146, and he says his estimate is high. The estimate takes copper wire at 15 cents a pound, but it is quoted at that in ordinary purchases by retailers from wholesalers—28 cents retail selling price, 45 per cent off wholesale price to retail dealer in ordinary sized purchase of a few hundred pounds. Larger buyers get a 13-cent rate, and a purchase of 1,600,000 pounds ought to be made at 11 or 12 cents. A year ago even small purchases could be made at that rate. The iron is figured right, but the stringing is too high. Five dollars a mile of wire is ample. (See figures in Blair, I, p. 147, deducting the cost of setting poles.)

"Passing from the construction account with the impression that it is too high, we come to the cost of operation. Calculating at the minimum average of 800 words per minute, or 1,600 for the two wires, Mr. Delany's data place the cost per message of 70 words from New York to Chicago at 4½ cents, including interest on his construction account and every expense but postage, which ought not to be over 1 cent. If the sender does his own perforating, and the message is sent to the addressee in Morse characters, the cost of transmission would be a trifle over 1½ cents per message of 70 words, or 2½ cents a hundred, not including postage. This is not probably below the truth, for the tendency of the witness was to make his estimates of operation high as well as his estimates of construction—a tendency plainly manifest in his giving the perforators a speed of about 15 words a minute, which is far within their practical capacity.

"In the Electrical Engineer for September 4, 1895, there is an estimate of cost by Delany which runs a little lower than the one he gave the Butler committee in May, 1896, viz, 2.6 cents per message of 50 words from New York to Chicago, including interest and omitting postage. This agrees substantially with Mr. Athearn's data. The article last referred to says that between New York and Philadelphia a single wire with 300 pounds of copper to the mile will carry 3,000 words a minute, and the automatic will record them in dots and dashes as sharp as an engraving. To do this by hand would take 38 wires worked quadruplex, or 152 circuits at nearly 20 words a minute, which every telegrapher will admit is too high an average for quadruplex circuits. Over an iron wire 350 pounds to the mile, which gives 60 words a minute quadruplexed, the automatic will carry 2,000 words a minute between New York and Philadelphia."

WASHINGTON, D. C., April 17, 1901.

TESTIMONY OF MR. F. C. ROBERTS,*Member International Typographical Union Telegraph Committee.*

The commission being in session, at 4.20 p. m. Mr. F. C. Roberts was introduced as a witness, and, being first duly sworn, testified as follows:

Q. (By Mr. FARQUHAR.) Give your name and address and occupation to the stenographer.—A. F. C. Roberts, 509 New Jersey avenue, Washington; occupation, compositor.

Q. How long have you been a member of the legislative committee of the International Typographical Union?—A. I think about 5 years.

Q. Have you any remarks in printed or written form that you would like to present to the commission before any questions are asked?—A. I have a statement prepared I would like to submit.

Q. The commission would like to hear it now.

Mr. Roberts read as follows: I do not think it necessary to argue before or to urge upon the commission the right of the Government to own or to operate a system of telegraphy in our own country. It seems to me that our own Post-Office Department is the best argument and the best evidence that the Government has the right to construct, to own, and to operate that means of communication. Surely if the Government has the right to transmit your letters it can not be denied the right to handle your telegrams.

In 1866 the Western Union Telegraph Company practically conceded the right of the Government to either construct a new system or to purchase its system of telegraphic communication in the United States, and merely asked that Congress should permit that company to operate for at least the term of 5 years, in order that the large capital invested in its plant might not be ruthlessly destroyed without an adequate return to those who had placed their earnings and savings therein. So much has been said and written on this subject by many of the ablest writers of this age that it seems a waste of time and labor to lay before this commission any additional evidence to sustain us in our arguments. But, as a member of the committee appointed by the International Typographical Union, there is one particular feature about the present system of the Western Union Telegraph Company that our committee would like to call your attention to, because it works an injury to the members of our organization. Does anyone believe that if the Government had charge of the telegraph, as it has of the post-office, such a combine as the Associated Press would be in existence to-day? The Associated Press has the entire country in its grasp, and it is in a position to crush out, and has already crushed out, many a newspaper enterprise that dared to raise its voice against its iniquitous system. The effects of the news monopoly may be seen in any of our leading cities, and especially in the Southern cities. Take the cities of Savannah and Atlanta, in the State of Georgia, if you please, and you will find that there is only 1 morning paper in each of those cities, simply because they have the Associated Press monopoly to themselves, thereby shutting out all other newspaper enterprises, causing large numbers of our members and the affiliated trades to be out of employment, when, if the Government had control of the wires and every publisher was free to get the news at the same rate of cost to all, there would be 2, if not 3, newspapers where there is only 1 to-day. We can not have too many newspapers, for they are public educators. Nearly all the great dailies of to-day are in the Associated Press combine, and it is impossible to get them to oppose it, and few politicians care to struggle with a concern which has the power to misrepresent them 7 days in the week from one end of the country to the other, consequently it is permitted to do as it pleases.

Nearly every Postmaster-General since the war has, in his reports to Congress, advocated such a measure.

Representative C. A. Sumner, of California, said, before the House Committee on the Post-Office and Post-Roads, on March 25, 1884:

"I lay it down as a proposition that I want to have duly considered by this committee and the country that the Constitution of the United States, as interpreted by a century of unchallenged legislation, does imperatively require that the Congress of the United States shall establish a postal system. I lay it down as a fundamental proposition that the postal telegraph is a part of the postal system of the Government, the postal system of the United States having been established for the purpose of transmitting intelligence between the inhabitants of the land."

The Senate Committee on Post-Offices and Post-Roads of 1874, which numbered among its members such men as Hannibal Hamlin and Alexander Ramsey, said

in its report on the telegraph: "The Constitution devolves upon Congress the duty of transmitting all correspondence, including that by telegraph as well as that by mail."

And Justice H. B. Brown, who is recognized as one of the ablest members of the United States Supreme Court, in a leading article in a recent number of the Forum, says:

"If the Government may be safely intrusted with the transmission of our letters and papers, I see no reason why it may not also be intrusted with the transmission of our telegrams and parcels, as is almost universally the case in Europe."

In America more than 50 years of effort and appeal have failed to win the postal telegraph. Notwithstanding Vice-President Clark, of the Western Union, in his testimony before this body, referred to those who advocate governmental control of the telegraph as "his socialistic friends," such men as Henry Clay, Charles Sumner, Hannibal Hamlin, General Grant, Senators Edmunds, Platt of Connecticut, Dawes, Z. Chandler, and N. P. Hill, Gen. B. F. Butler, John Davis, Postmasters-General Johnson, Randall, Maynard, Howe, Creswell, and Wanamaker, Professor Morse (the inventor of the telegraph), Cyrus W. Field (the founder of the Atlantic cable and a director in the Western Union Company), James Gordon Bennett, Professor Ely, Lyman Abbott, B. O. Flower, Judge Clark, Henry D. Lloyd, Doctor Taylor, T. V. Powderly, Samuel Gompers, and a host of other eminent men in every walk of life and of every political shade have championed the cause of the people. Legislatures, city councils, boards of trade, chambers of commerce, and labor organizations, representing many millions of citizens, have joined in the effort to secure a national telegraph. The New York Herald, Boston Globe, Philadelphia Times, Chicago Tribune, Albany Express, Washington Post, Evening Star, and Times, Omaha Bee, Denver Republican, San Francisco Post, and a multitude of other papers, representing every phase of political opinion, have earnestly advocated the measure. More than 2,000,000 men by vote and petition have asked for it. If Congress does not pass a law to commence the good work, it will woefully fail in its duty to respond to popular sentiment. The great mass of people want the telegraph to be the poor man's mail as well as the rich.

Right here I would like permission to read an article clipped from the Washington Star, published in the book gotten up by Mr. Wanamaker of extracts from newspapers concerning the strike of 1893, to show you the position of the Washington Star, which is not considered a yellow journal:

"Talk of Government telegraphic service in connection with the Post-Office Department is again becoming quite common, based upon the prolonged operators' strike, and it is altogether likely that the proposition will gain considerable strength if the present interruption continues much longer. It is more than probable, too, that if its business is to be liable in future to further demoralization from the same cause, the managers of the telegraph interests will themselves seek a way out of their troubles by transferring their lines to Government ownership and control. They would doubtless be glad to do so now if Government or any other customer would take their property at the fictitious value they put upon it. This, however, ought never to be permitted, so far, at least, as Government is concerned; and it is not likely that private customers could be found who would be willing to pay so much for so little. Counting watered stock and all, the capital of the Western Union Company now stands at about \$80,000,000. Of this sum, however, not more than \$10,000,000, if so much, was actually paid in cash. The balance represents water, or issues of shares for which no equivalent in money or anything of value was ever rendered, and it is certain that a plant capable of performing as good service as the country now enjoys at the hands of the monopoly can be furnished for the sum last named. When, therefore, the time for negotiation between the company comes, if it ever does come, that amount ought to be adhered to as the maximum basis of purchase. If more than that sum is insisted upon, the Government should go ahead and build its own lines, leaving the present inflated concern to take care of itself."

The present private management of the telegraph is not only dangerous to a republican form of government, but it is clearly unconstitutional.

The telegraph monopoly is used and operated not for the public's good, but to make money for the few large stockholders, while our Post-Office Department is run for the benefit of all, declaring no dividends and making no millionaires.

Since 1866 committees of the Senate and House, having under discussion the various bills on postal telegraphy, have reported 16 of the bills favorably out of 18. Of the two adverse reports, one was in 1869 and was based on the ground that the 5 years allotted to the telegraph companies had not expired. The other was a short report, but the committee did not care to argue or to give any substantial reasons why the Government should not take control of the wires, while

the 16 reports favoring the measure are able and exhaustive arguments. Any fair-minded man after reading these reports will see the wisdom and necessity for the governmental control of the telegraph lines. And as to the constitutionality of the question, I beg leave to quote no less an authority than Henry Clay. As early as 1844 Clay was advocating Government ownership of the telegraph, and he wrote as follows:

"It is quite manifest it is destined to exert great influence on the business affairs of society. In the hands of private individuals they will be able to monopolize intelligence and to perform the greatest operations in commerce and other departments of business. I think that such an engine should be exclusively under the control of the Government."

And right in this connection I will also quote Hon. Cave Johnson, the Democratic Postmaster-General under James K. Polk, and that was a strict constructionist administration. This is what he said in reference to the telegraph question in 1846:

"It becomes a question of great importance how the Government will allow individuals to divide with the business of transmitting intelligence, an important duty committed to it by the Constitution. The use of an instrument so powerful for good or evil can not, with safety to the people, be left in the hands of private individuals."

The position taken by these two eminent men in public life was instrumental in causing Congress, when it passed the act of July 24, 1866, to protect itself by reserving the right to take charge of all telegraph lines thereafter built as a Government function at any time after 5 years, upon payment of the actual value of the poles, wires, etc.

And further, Judge Walter Clark, of North Carolina, one of the ablest lawyers and one of the most profound economic thinkers in the United States, said:

"Many who admit the great advantages, nay, the necessity of the telegraph being operated as a part of the postal system are deterred by the inquiry, 'Is it constitutional?' In truth, it is unconstitutional for this essential branch of the postal system to be operated by a private monopoly or in any other manner than by the Government. When the Constitution placed the post-offices in the hands of the Government it conferred its exclusive operation upon the Government, and with it all means of operating it to the best advantage. The bestowal of exclusive right and duty to operate the post-offices carried with it beyond question the exclusive right and duty to use all the agencies that would make the post-office most highly efficient as such agencies, from time to time, should be improved or invented. On this principle the first telegraph line was built by a Congressional appropriation under an Administration which, by that period in its history, had become a strict-construction Administration (Tyler's), and the telegraph belonged to and was operated by the Government from 1844 to 1846, in Polk's Administration."

The testimony of Postmaster-General Creswell, Postmaster-General Wanamaker, and of other Postmaster-Generals, in addition to the 16 reports of Congress to which I have already referred, shows conclusively that we have the poorest telegraph service in the world, not a country excepted, and that we pay a higher price for the poor service than any other country pays for a better service.

I could go on and quote for some time from most of the eminent men of the past and present bearing on the constitutionality of the question, but believe the quotations already given will be sufficient. I will therefore turn to the labor or trades union view of the question.

The International Typographical Union, numbering about 35,000 members, and considered by many the most conservative and influential labor organization in existence to-day, having among its members men in every walk of life, some of them having filled the most important positions in public life, from the Halls of Congress down to our State legislatures, has, after giving the subject careful thought and consideration, gone on record as favoring the governmental control of the telegraph, and at the forty-fifth annual convention, held in the city of Chicago in 1893, appointed a committee of five to look after all national legislation bearing on the subject of governmental control of the telegraph.

The very nature of the class of work that engages members of the craft which I have the honor to represent in part here to-day compels them to keep abreast of the times, so to speak, and when anything comes up that is likely to affect the craft in general they are very apt to take cognizance of it. So we have come to believe that the private monopoly of the telegraph is the principal foe the International Typographical Union has to meet. Nearly every member of our craft can remember when, only a few years ago, cities that supported 2 and 3 daily newspapers have only 1 at the present, the change, we believe, having been brought

about by the telegraph being in the hands of a private monopoly, which fostered and protected a monopoly in the furnishing of news to the various papers throughout the country.

Newspapers can not live without a first-class telegraphic service, and no newspaper can secure that service to-day that is not a member of the Associated Press combine. No one would attempt to doubt the statement that there are fewer newspapers throughout the South to-day than formerly. Then, why is it? Our school facilities are almost perfect, more people can read and write, and are taking a more active part in the live issues of the day, and yet a few papers have a close monopoly of the field. Only a few years ago in one of the large Southern cities, a city claiming a population of 75,000 inhabitants, a morning paper died before it was born, as it were, simply because those who had put their money into it would not (because they could not be made to see the justice of things) give those who had a monopoly of the distribution of news in the State a bonus of about \$35,000 to become a member of what they called the Press Association. That was a case that came under my personal observation, and it kept at least 40 men of my craft from securing work, to say nothing of others that would necessarily be employed in various capacities in and around a newspaper office. That is only one of hundreds of similar cases that could be cited. Therefore our organization believes that if the Government had control of the telegraph every newspaper in the country would be treated alike and receive the news at the least possible cost. We believe that a paper in California should be able to get from its special correspondent in Washington the telegraphic dispatches from this point as cheaply as a paper in New York, but as things now stand the telegraph monopoly has its powerful grip upon what should be given to all alike—the world at actual cost plus expense of operating the system.

Then as union men we do not nor can we indorse the way the Western Union Telegraph Company treats its employees. When asked how his company felt toward labor unions among its employees, the vice-president of the Western Union Telegraph Company, in his testimony before the commission only a few weeks ago, said: "The company has not changed its position since 1883." I believe I have quoted him correctly. We all remember the great strike of that year, and ever since then, nay, before then, the Western Union Company has been persistent in fighting and crushing out labor unions among its employees.

He also says that the company will treat with the men as individuals. Perhaps he does not consider the several thousand women employed by the company entitled to any consideration, for women, as a rule, are made to work for whatever their employer sees fit to give them; but a company that will not treat with a committee legally appointed to represent the wishes of the employees will not treat the individual fairly. To show more conclusively the Western Union's position on trade or labor organization, I quote from President Green's testimony before a Congressional investigation just after the great strike of the telegraphers in 1883. He said: "After the great strike of 1870 or 1871 the company took back some of the strikers on condition of their taking what was called the 'iron-clad oath'—an oath to renounce their union and never again connect themselves with any similar organization."

Evidence has been brought out during the various Congressional investigations that has proven conclusively that what President Green is quoted as saying is strictly true and correct, and that anything in the shape of getting up petitions for increase of pay or shorter hours has always resulted disastrously to the ring-leaders. They have either been dismissed from the service or discriminated against in many ways. Often their names are placed in the blacklist (and right here let me say that it has been stated many times by those in a position to know that the Western Union Telegraph Company was the first corporation or monopoly that established the blacklist after the first great strike in 1871 and again in 1883), and managers all over the country are so notified. Men have been known to give up positions to try new fields, only to find that the telegraph had preceded them; consequently they found themselves barred. So a company that is known to practice such iniquitous policies and denies the right of petition, and denies with still greater emphasis the right to organize, should not be left in control of such a powerful agency as the telegraph.

After the great strike of 1883 the Western Union refused to take the men back unless they signed an agreement similar to the one I have quoted above, but I have learned upon good authority that men have through sheer necessity been compelled to sign such an agreement, and shortly afterwards renewed their allegiance to their fellow-workers. You can not make a workman see that it is all wrong for 2 or more telegraph operators to combine to secure fair pay and reasonable hours and yet perfectly right and proper for 2 or more telegraph

companies to combine to squeeze and fleece the public. A monopoly that upon its sworn testimony claims that one-fourth of the earnings of the company was clear profit is squeezing and fleecing the public.

Let me quote the exact figures given by the vice-president of the Western Union Telegraph Company before the commission, so there will be no mistake. He said: "Our earnings for the last fiscal year were \$24,758,569.55. Our expenses, gross, were \$18,593,205.87. This left a balance of \$6,165,363.68, of which there was expended for dividends at the rate of 5 per cent, etc."

We claim that if the Government had control of the telegraph lines and kept up the present rate on messages, yet no one believes it would, the surplus of \$6,000,000 could be used in shortening the hours of the employees, increasing the pay of all employees except the few higher officials, and in making improvements and extending the lines to all parts of the country, for it is a well-known fact that the Western Union will not extend a line unless the management see where they are going to get a profit out of it. But as the wires are in the hands of a private monopoly the \$6,000,000 of profit went into the pockets of a few men already millionaires, for the vice-president of the Western Union also stated that the bulk of the Western Union stock was held by a comparatively few men. The vice-president of the Western Union also admitted that while wages have been increased during the past few years in all lines of industries, still the Western Union wages have remained about the same as they were just after the strike of 1883, and we also know that the low wages paid at that time were the principal cause of the strike. He also stated that there had been no material reduction in the telegraph rates.

The advocates of governmental control of the telegraph believe that if the Government had control of the wires the public would be given a better and cheaper service, the employees fairer treatment and better pay. In short, it would and could be conducted after the fashion of the Post-Office Department, where a postal clerk receives on an average \$84 a month, while the average pay of the telegraph operator is scarcely \$40.

Then, again, the president of the Western Union Telegraph Company said: "If the Government takes control of the telegraph lines, the only way it could make a success out of them would be to have a rigid civil-service law." But he seems to be afraid of the Government building up an army of office employees. He does not stop, it seems, to consider the great mass of citizens employed in the Post-Office Department—some 130,000, I believe. That number does not in any way endanger the public welfare. Then why should anyone have any fear on account of adding to the list of Government employees those connected with the telegraph companies?

On the question of franks, the vice-president of the Western Union testified before the commission that he did not see any harm in extending them. "It is only a courtesy on our part," he said. But he failed to state that the courtesy ended when the party using it returned to private life. Why is it that the courtesy is extended only to public officials, and especially the lawmaking branch? When asked if some favors were not expected in return for such courtesies, or, in other words, if a quid pro quo was not expected, he replied: "No; I do not know what the quid pro quo could be expected. I do not know what they could give us. When the company wants to make a fight before Congress we do not use franks, but arguments." Now, I would like permission to quote from what the president of the Western Union Telegraph Company said on the question of franks some time ago, and you can draw your own conclusion. He said:

"The franks issued to Government officials constitute nearly a third of the total complimentary business. The wires of the Western Union Company extend into 37 States and 9 Territories within the limits of the United States and into 4 of the British Provinces. In all of them our property is more or less subject to the action of the national, State, and municipal authorities, and the judicial use of complimentary franks among them has been the means of saving to the company many times the money value of the free service performed." (Western Union report of 1873. See also Wanamaker's argument, p. 164; Postmaster-General Creswell's report, 1873, p. 49.)

After the above honest and candid acknowledgment by the president of the company can anyone doubt the object the Western Union has in view when its officials issue franks to national and State government officials? Although the vice-president of the Western Union also stated before the commission that his company always tried to get hold of new inventions, he neglected to state that they have generally been successful, but that instead of using them for the benefit of the public they have been locked up in the office of the company in New York.

Another fact brought out in the testimony of the vice-president of the Western Union Telegraph Company before this commission is the acknowledgment that the company contributes liberally to the support of a school in Cooper Union that grinds out every year a large number of boys and girls as telegraphers—a regular kindergarten, as it were—using the graduates of the school to fill their offices with cheap labor. No wonder that timid and underpaid men and women are afraid to exercise their free American citizenship, which guarantees everyone the right to organize and petition, when the company is supporting a school that grinds out hundreds of telegraphers every year to take their places on the least provocation.

Look at the contrast. The telegraph companies have thousands of boys employed in carrying their messages, their ages ranging from 12 to 16 years, who work long hours and receive from \$3 to \$4 per week—boys that ought to be in school—while the fine-looking men employed by Uncle Sam as letter carriers work eight hours a day and receive from \$60 to \$100 a month.

Then, again, the officials of the Western Union Telegraph Company who have appeared before the various Congressional committees have invariably misrepresented the facts, taking advantage of every point to cloud and sometimes misrepresent facts. When they are confronted with the undeniable truth that their rates are nearly half as high again as the rates of foreign countries, they invariably meet you with this answer: "Our distances are farther, and the rates are a matter of distance," etc., and to sustain this position they have presented to committees of Congress tables of distances that have upon careful investigation proven to be false in every particular.

Prof. Frank Parsons, in Senate Doc. 205, Fifty-fourth Congress, first session, said, in speaking of the false statements made by the officials of the Western Union Telegraph Company:

"Unfortunately for the Western Union, the Washburn committee consulted geographies and telegraph maps and found that the length of telegraph routes between the cities of Europe was strangely minified in the Western Union statement, while the distances between American cities were mysteriously larger than those set down in maps and geographies. Here are some examples:

From London to—	Telegraph distances		From London to—	Telegraph distances.	
	Western Union statement.	Truth		Western Union statement.	Truth.
	Miles.	Miles.		Miles.	Miles.
Dover	50	82	Berlin.....	660	722
Plymouth	190	246	Prague.....	600	958
Paris	200	313	Madrid.....	750	1,225
Reims	250	400	Rome.....	850	1,349
Hamburg.....	340	556	Naples.....	950	1,510
Munich.....	540	800	St. Petersburg...	1,160	1,806

"Not one single distance is correctly stated. It is necessary in nearly every case to add at least one-third and often more than one-half of the stated distance to obtain the real distance. The sum of the stated distances was 15,724 miles, and the sum of the real distances was 23,578 miles, or almost one-half more than the Western Union's statement. To show the falsity of statements about American routes it was not even necessary to disturb the dust on the geography—the statement was its own refutation; for example, the distance from Memphis to New York was placed at 2,000 miles, while in other tables of the same Western Union testimony the distance was said to be 1,000 miles."

Not long ago the president of the Western Union Telegraph Company made this statement: "Not 1 man out of a hundred who uses the telegraph is in favor of governmental control of the wires." As I have called the attention of the commission in the beginning of my remarks to the fact that boards of trade, chambers of commerce, city councils, legislatures, etc., have petitioned Congress time and time again favoring Governmental control of the telegraph, I beg leave to quote the report of the executive committee of the National Board of Trade, November 15, 1882, and if the board has changed its position since then the public has not been made aware of the change:

"In 1858 the Western Union had a capital of \$385,700. Eight years later the stock had expanded to \$22,000,000, of which \$3,322,000 was issued in purchase of competing lines, while nearly \$18,000,000 were issued as stock dividends. This

was the first attempt to spread out an increased paper capital, which should hereafter afford a plausible pretext for imposing on the public an oppressive tariff of charges. The next step was the purchase of the United States Telegraph Company, for which purpose \$7,216,300 of stock was issued, an amount alleged to be 5 times the true value of the property. Next came the absorption of the American Telegraph Company. The stock of that company was almost as much inflated as that of the Western Union, and amounted, water and all, to \$3,833,100; yet \$11,833,100 of Western Union stock was issued to get possession of that line.

"Thus another illustration is furnished that in such enterprises competition always ends in combination, and the public is ultimately obliged to pay for the construction of duplicate lines which are not needed and are only constructed for the purpose of forcing a divide of the enormous sums charged the public for a public service which is a natural adjunct of the postal service."

These are not the words of such persons as Vice-President Clark, of the Western Union Telegraph, was pleased to call "socialists," etc., but of business men who are thoroughly familiar with the methods of corporations from inside knowledge. The report goes on:

"Later the American Union, whose actual value was about \$3,000,000 (franchise and all), was absorbed, together with the Atlantic and Pacific Company (also worth about \$3,000,000, franchise and all), and in the consolidation the American Union was put at \$15,000,000 and the Atlantic and Pacific at \$8,400,000, while in order to absorb in dividends the enormous earnings which they were levying on the public, a further increase of \$15,000,000 was made under the pretense of issuing stock to represent surplus earnings previously invested in the plant.

"Of course such evidence of what the public would stand in the way of telegraph charges was immediately followed by a new strike, in the form of a competing company, the Mutual Union. This company was started on a basis of \$600,000 capital, which almost immediately increased to \$10,000,000, without consideration, and, as appears from proceedings in court by a stockholder, the directors made a contract with a credit-mobilier construction firm in which they were interested, by which \$4,000,000 in bonds and about \$10,000,000 in stock were guaranteed for constructing lines and plant valued at \$3,000,000, and naturally, things being developed thus far, negotiations were opened with the controlling spirits in the Western Union for another consolidation and stock watering.

"Subsequently the consolidation was arranged and there was a further increase of stock amounting to \$15,000,000 on account of a plant the original cost of which did not exceed \$3,500,000 according to the sworn testimony of the officers of the Mutual Union."

"I have tried to present to you in as plain a manner as possible why the organization which I have the honor in part to represent desires the governmental control of the telegraph lines, and I hope and trust I have made myself understood, and I will close by saying that I believe it is as true to-day as it was in 1873, when Postmaster-General Creswell said there were but 2 parties to the question, "On one side are the people, and on the other is the Western Union Telegraph Monopoly."

Take the rural free delivery, for example. Only a few years ago, when the establishment of the rural free delivery was suggested, it appeared so preposterous that it excited only passing comment, if not derision. It was denounced by some as impracticable: it would put the Government to a great deal of expense; it was sneered at, as all reforms are more or less, as a political fad, a Utopian dream, as it were, to bring the letter to the farmer instead of compelling him to go, in some cases, several miles for it. But not one would suggest, now that they have it, that the Government should take the rural free delivery away from the public. Only a few years back there were only about 40 routes; to-day there are about 4,500, and nearly 200 clerks are required to keep up with the work in this comparatively new branch of the postal service.

Think of it. It has been over 50 years since telegraphy was first discovered; in other words, since lightning was harnessed to language and literature, and still the American people can not avail themselves of the full benefits of it at popular postal-telegraph rates, but have to depend upon a private monopoly that has never shown the least consideration for the public, a fact demonstrated beyond any question of a doubt when the company made the public pay the war-revenue tax. No one ever believed for a moment that Congress intended when the law was passed that the burden should fall upon an already over-taxed public, but the Western Union officials saw, as they claim, a technicality in the law and took advantage of it, and the public had to stand it.

I close this statement by quoting the language of Senator Edmunds, who appeared before the Senate Committee on Post-Offices and Post-Roads a few years ago: "The Government was constituted to promote the general welfare, to disseminate intelligence, to defend the country, etc., and the telegraph is essential as a military establishment, essential to education as to social welfare."

That closes my paper.

Q. (By Mr. FARQUHAR.) You mention a case there of a Southern paper which could not obtain a franchise in the Associated Press and had to go out of existence. What city was it in?—A. Savannah, Ga.

Q. Do you know of any other cases of like nature?—A. Not from my own personal knowledge. I have heard of others. Chairman Randall has spoken of one case in the city of Washington when the printers started the Washington Times, when I was on the committee to see the gentleman that had the franchise. I do not recall his name; he died a few years ago. He had the franchise and refused to sell it; would not allow the printers to use it and would not part with it.

We see to-day on the Washington Post building in large, black letters, "The only morning daily paper in town that receives the Associated Press report." There is a case where a gentleman had the franchise locked up and refused to part with it.

I will go back to the case in Savannah and how I came to have personal knowledge of it. A large German brewer in town came to me and asked the number of men it would require to get out a paper, and I told him the number it would require, etc. He knew nothing about the business, being in the beer business, and the proprietor of the only daily paper in town being a prohibitionist and the brewers opposed to him. I told him he would have no trouble in getting all the printers he wanted. He told me I could have a situation, but I said I was pretty well satisfied where I was, but he would have no trouble getting men. He said, "I want to see you later about this proposition." I saw him several weeks later and said to him, "When is this new paper going to be started?"

He said, "We have given it up."

I said, "Why, George, what is the matter?"

"Well," he replied, "we had a meeting of the board, elected our directors, etc., and found out we would have to give \$35,000 to get into the Associated Press combine; and when I explained that to my German friends, they threw up their hands in holy horror and said, 'We do not pay \$35,000 for nothing; and, besides, we would have to pay for the telegraphing every day or at the end of the week.' They could not see the justice of paying out \$35,000, which was about the amount of the capital stock subscribed."

That is the only case that has come under my personal observation. I have heard of others, like the one here in Washington. The Kentucky legislature passed a bill over the governor's veto taking the franchise away from the newspapers that do not furnish all alike. I think Senator Goebel was the member of the senate who introduced the bill, and I think Governor Taylor vetoed it, but it was passed over his veto. No; Governor Bradley was the man that vetoed it. They saw the discrimination there. Newspapers wanted to get into the field, but could not get the news at reasonable rates.

Q. Mr. Randall spoke in his testimony about 300,000 petitioners. Do you know, as a member of that committee, where those signatures came from? Were they from workmen, from business men, or from what class?—A. They came from men in every walk of life. As I have stated in my statement there, they were not only workmen, but business men and boards of trade. We could not get the members of Congress interested in it. The war with Spain seems to have taken precedence over everything in the way of local economic affairs. We could not get members of Congress interested in it as long as we were tangled up in a foreign war.

Q. Have you been quite close in your attendance on the meetings of the Post-Office committee?—A. Yes; I do not think I have missed a meeting.

Q. How far have you progressed in getting this matter out of committee? Have you been able to do that yet by bill or report?—A. No; it seemed we could never get it out of committee. They were always pigeonholing it. When the time came to report they would do one thing or another to block it.

Q. So with your petitions and these resolutions passed by these commercial and other bodies you have not been able so far to get it reported out of Committee on Post-Roads in the Senate or House?—A. No; and it is strange, because at all these hearings there are people there to represent Government ownership, while only the Western Union officials favor private ownership. It seems to be the people against the Western Union.

Mr. RANDALL. You might say that the nearest we came to getting a report from anybody was the circular that President Eckert of the Western Union issued in connection with this matter, trying to show members of Congress that we were putting them in a false light. As I stated a moment ago, it went to show that we must have moved them some, or he would not have issued that circular.

The WITNESS. Postmaster-General Wanamaker in his report frankly admitted that it was the people on one side and the Western Union Company on the other.

Q. (By Mr. FARQUHAR.) What sympathy do you receive from the publishers generally—those that have Associated Press dispatches?—A. None whatever. I could go back and quote what I said in the Washington Times some years ago as to the Washington Post's position on the strike of 1893. I wrote it up when ex-Congressman Conn was proprietor. When I read that it had passed under its present management (he did not have the paper at the time), I saw then I had made a mistake. I think Mr. Hutchins had it at the time; and the Post looks on it as a kind of socialistic idea, I think.

Q. Do you find any cooperation from newspapers generally in the country who are not in any press association—active cooperation in this plan of yours?—A. Well, yes; I did when we had the matter up before Congress several years ago, but not recently. Being the only member of the committee from the South, I made it my business to furnish some of the Southern papers with literature, and it was published by several afternoon papers; but I noticed the morning papers would not touch it at all.

Q. What bodies of organized labor have taken this matter up independent of the International Typographical Union?—A. I will answer that by saying the American Federation of Labor, and that represents all. I think at a recent convention they made it second in special legislation. The 8-hour law was to come first and after that the telegraph question; and President Gompers said recently that when they had the 8-hour law safe they would push on the telegraph with brotherhoods of the trades-union in the country, representing in the neighborhood of 1,000,000 people.

Q. Did any of the other organized bodies or trades union take action, through convention or otherwise, in helping you along with it?—A. I can not recollect that they did. We sent out, I presume, several thousand petitions asking labor unions to indorse the movement as local bodies, and upon indorsing the proposition to please notify their representatives in Congress, and I know members of the House were flooded with this petition.

Mr. RANDALL. I might say in that connection that when we organized our committee in Washington, in 1894 or the latter part of 1893, we started to organize the country. We had to do it by correspondence, and we proceeded to organize our own craft throughout the jurisdiction of the International Typographical Union, and got them to establish committees of 3, who were to report to the central committee at Washington. As soon as our committee got their report we had literature that we sent to them and put them in working order and immediately asked them to go to the sister organizations of the allied crafts and others and do likewise. Inside of 10 or 11 months we had every organization in the United States in communication with us. We have on file at our homes at the present time, also, letters from chambers of commerce, boards of trade, and business men generally calling for cheaper toll. As I stated in my testimony, we had a selfish interest in it, and the Farmers' Alliance and Industrial Union and everybody not connected with the Associated Press would like to see us secure all that, while the Western Union and large monopolies generally, as they look at it, felt that if the Western Union has to go down the line of Government ownership other monopolies would surely follow. Although as a committee we are not reformers to the extent of seeking Government ownership further than the operation of the telegraph. We did organize the country as it has never been organized before in that line, and we had a good organization. And here in Washington we adopted the means of using an auxiliary committee of members of our craft here from the different States of the Union to disseminate information. The members would communicate with people of influence, friends, and others, and also their representatives in Congress. And I do not believe that there has ever been inaugurated a movement as thorough as this movement.

The WITNESS. I mentioned the National Board of Trade, and you asked me whether there were any others besides labor organizations. Allow me to insert a list of the organizations in the National Board of Trade, which goes to show the number of trade organizations who indorsed this measure.

Q. Is there any other statement you desire to make?—A. No; if there are other questions I would be very glad to answer them, but I have no further remarks. (Testimony closed.)

WASHINGTON, D. C., April 17, 1901.

TESTIMONY OF MR. ALTON D. ADAMS,

Electrical Engineer.

The commission met at 10.55 a. m., Vice-Chairman Phillips presiding. At that time Mr. Alton D. Adams, of Boston, Mass., an electrical engineer, was introduced as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. FARQUHAR.) Give your name and address and profession to the stenographer.—A. Alton D. Adams; post-office address, box 1377, Boston. My business is that of the investigation of engineering and economic matters—independent investigation.

Q. How long have you been on this investigation, Mr. Adams?—A. You mean the matter of investigation broadly or this particular investigation?

Q. This particularly, and all others; how long has it been a study?—A. I have been devoting my entire time to it about 2 years.

Q. Are you a graduate of any scientific school of the United States?—A. I am a graduate of the scientific school of Harvard University.

Q. Have you taken up this investigation through the State or municipal authorities of Massachusetts, or of your own volition?—A. I have taken it up entirely of my own volition.

Q. Have you had perfect access to the public documents in the State in every instance?—A. So far as I know, I have. I have also had the benefit of some suggestions by letter from the Gas and Electric Light Commission of Massachusetts.

Q. Have you had any correspondence with the other municipalities in the United States?—A. I have not.

Q. Have you any prepared paper to present to the commission?—A. Nothing more than some sheets of figures that I have here; I have no written statement.

Q. We would be pleased to have them and have your own analysis of the figures, so as to present the question as far as that investigation has gone.—A. I would say at the start a word about the object of this investigation. In looking up the matter of municipal ownership and trying to look it up for several years back, I have been impressed with the seeming fact that there are no verified figures, or, if any, very few, to be had on the subject. Various statements are published in different places as to what certain towns and cities that operate municipal plants have done, but these statements are not sworn to. They are, some of them, on inspection evidently one sided, and, so far as I know, most of such statements carry very little weight with engineers and those that know something about the actual operation of electric-lighting plants. So it has seemed to me that in Massachusetts, where, as we all know, there is a commission who gather up these data and compile them accurately and where the law obliges not only municipal plants but all companies operating electric light and power plants to make a sworn statement of their investments and of their operations—their expenses and incomes—it has seemed to me that in Massachusetts there was an opportunity to determine something of what might be done in municipal ownership compared with ownership and operation by private corporations, something that would be definite; and that has been the object of this investigation—namely, to compare the returns on the investment in Massachusetts in electric-lighting plants operated and owned by private companies with the returns on the investment of those municipalities that have gone into the electric-lighting work.

In the year 1891 Massachusetts passed a law allowing towns and cities to buy existing electric-lighting plants or to build new plants of their own under certain conditions, and since that time 17 such plants have been constructed—17 plants for the supply of electric light and power by municipalities. One of these plants was started in the last year, 1900, but that plant is not included in my report of this investigation, because it has taken some time to make this investigation and the data were not available for it. Of the 17 other municipal plants, 3 operate gas plants, and it has not been possible to satisfactorily separate the returns of those gas plants and the operation of the gas plants from the electric plants; and so, as the object was to arrive at some definite result as to electric plants pure and simple, the returns and results of these 3 cities and towns that have gas plants have been left entirely out of consideration, and this statement of my investigation is based on the 14 cities and towns that operate electric plants only. I would say as to the cities and towns operating gas plants, of which there are 3, that 2 of

these gas plants have been in operation but a short time (1 was purchased in 1899), so that, there being only 3, and 2 of them quite recent, results would not be very conclusive in any event.

Q. (By Mr. LITCHMAN.) Let me interrupt just a moment. You propose giving the names of these places?—A. Yes; that is my intention. That, I think, might well be the next point. The names of the places in Massachusetts operating municipal plants, taken in alphabetical order, are—

Mr. PHILLIPS (interrupting). State the number of inhabitants in those as you go on.—A. The places are:

TOWNS.	Popu- lation.	TOWNS.	Popu- lation.
Belmont.....	2,843	Marblehead.....	7,671
Braintree.....	5,311	Needham.....	3,511
Chicopee.....	16,420	North Attleboro.....	6,576
Danvers.....	8,181	Peabody.....	10,567
Hingham.....	4,819	Reading.....	4,717
Hudson.....	5,368	Taunton.....	27,115
Hull.....	1,044	Wellesley.....	4,229

If agreeable, I think it might be well to state also the year in which those plants were started, if the information would be desirable.

Beginning with Belmont, the dates are as follows:

Belmont.....	1898	Marblehead.....	1895
Braintree.....	1892	Needham.....	1893
Chicopee.....	1896	North Attleboro.....	1894
Danvers.....	1889	Peabody.....	1892
Hingham.....	1895	Reading.....	1895
Hudson.....	1887	Taunton.....	1897
Hull.....	1894	Wellesley.....	1892

Q. (By Mr. LITCHMAN.) You have stated that the law was passed in 1891, and you referred to Danvers as starting its plant in 1889; you had better straighten up that discrepancy.—A. The legal basis for the plant at Danvers before the law of 1891 was passed, was the common law right to light streets.

Q. (By Mr. PHILLIPS.) Does not the law prescribe that existing plants shall be purchased?—A. Yes.

Q. (By Mr. LITCHMAN.) Does not the law now provide that if a plant exists in a city or town, the municipal plant may not be established except by purchase of the existing plant?—A. My understanding of the law is that the town must purchase.

Q. And if they can not agree it is referred to commissioners to decide?—A. That is my understanding. The total amount of investment in municipal electric plants in these 14 towns and cities is \$891,591. The largest of them is but 27,000 population and the figures range from that number down to 1,000.

Q. (By Mr. LITCHMAN.) That is the total for all the towns?—A. That is the total investment in all these 14 municipal electric plants. Now, in order to compare the results attained in these municipal plants with results attained in plants operated by private corporations, it seemed necessary to reduce all the earnings of the municipal plants to a money basis. That is not done in the report of the commission, and I should state here perhaps that most of these municipal plants do two sorts of business.

In the first place they do all the public lighting in the towns and cities where they exist; and, in the second place, most of them sell energy to private consumers who may want it. Of course, the returns for energy sold to private consumers come in as a money return, but the public lighting does not come in as money; it does not stand as money in the first instance. The next step, therefore, in the investigation was to reduce this public lighting in these several towns and cities to a money basis and get the value of it. Unfortunately the prices paid for electric lighting, not only in Massachusetts but all over the country, vary through very wide limits, and after some consideration of this subject it seemed to be impossible to assume any particular figure as the value for electric lighting that would be admitted all around to be a fair figure; that is, the value of an arc lamp or the value of an incandescent lamp, because there are such wide variations in the prices paid by cities that buy their light. It did seem to be fair, however, to take a number of Massachusetts towns and cities, all as nearly as possible of the same population as those having municipal plants, and find the average price in all of those towns and cities—that is, of the number taken—paid for such service. This was accordingly done.

Seventeen towns and cities were taken, and the prices paid for arc lamps and for incandescent lamps in each were found. This price has been reduced to a price per hour. The price for public lighting is usually given by the year or by the month, by the lamp or by the lamp month; but it was found in going over the matter that the number of hours of operation and the allowance for moon-light nights and some other factors in the different towns and cities that buy their light are very variable, so that rates about the same per year turned out to be quite different when reduced to the actual hours of lighting. It was therefore decided in getting this average rate to base the rate on the actual hours of service. I have a table here of the prices paid for electric and incandescent lighting per lamp hour in 17 towns and cities corresponding as nearly as possible in population to the 17 towns and cities where municipal plants exist in Massachusetts. I hardly know how much of these data the commission would like to hear. I have a table here giving the names and populations of the several towns and cities that were selected in order to arrive at this average price—the average value per arc lamp and incandescent lamp.

Mr. KENNEDY. Give the information just as you have it.

The WITNESS. Perhaps it might be well to explain, with reference to the candle-powers of lamps mentioned in the table, that the candlepowers of arc lamps are entirely nominal; they mean substantially nothing—that is, there is no definite relation between the nominal and the actual illuminating power of electric lamps. But the lamps are spoken of in that way, and so I will use the term. The table is as follows [reading]:

Prices per hour paid for street lamps.

	Population	Prices, 1,200 candle- power arc lamps.	Prices, 16 to 25 candle- power in- candescent lamps.
		<i>Cents.</i>	<i>Cents.</i>
Pittsfield	23,671	3.6	1.02
Marlboro	14,977	3.8	.74
Amesbury	9,380	1.7	1.80
Leominster	9,211	3.2	.71
Gardner	9,182	1.8	.96
Abington	9,130	4.3	.99
Millis	8,969	4.6	1.04
Athol	7,351	5.5	1.10
Greenfield	6,229	4.1	1.40
Andover	6,145	5.1	1.07
Framingham	5,770	4.6	1.10
Whitman	5,744	5.9	.92
Orange	5,361	4.6	1.40
Westboro	5,225	4.5	1.50
Union	5,186	5.8	2.10
Winchendon	4,490	5.4	1.09
Amherst	4,785	6.9	1.50
Average cost per hour		1.7	1.2

From this table the average cost per lamp used for arc lamps is for these places 4.7 cents, and for incandescent lamps 1.3 cents per lamp hour.

I have here now the items showing the value of arc and incandescent lighting furnished for public service each of the 14 municipal plants here considered, on the basis of these average prices in private plants. I think to read these figures for the separate plants will perhaps be uninteresting, and so I will simply read the total of the figures, if permitted, and the table will be left so that the entire amounts can be published. (See Exhibit B.) The value to these 14 municipalities has been found, of course, in each case for the arc lighting and for the incandescent lighting which the municipal plant has furnished to the town, and the value of these 2 kinds of lighting in each case is added together and the total is the value for the municipality. The aggregate for the 14 municipal towns is \$173,429.40. Now, the same 14 plants in the 14 towns and cities previously named have derived an income during the year ending June 30, 1899, of \$83,948.38 from the sale of electric light and power. I should say here that the value of the arc and incandescent lighting supplied by these municipal plants to their several towns and cities, as here computed, is for the year ending June 30, 1899. (See Exhibit "C.")

Q. (By Mr. PHILLIPS.) That includes the total receipts from the city as well as from the private individuals?—A. Yes.

Q. Eighty-three thousand dollars?—A. No; that is the amount paid by private

individuals to the town for lighting and power. The value of the public lighting that the towns have had from their plants is \$173,429.40. Of course no money payment was made for that lighting.

Q. What is the sum added together?—A. The total earnings of these 14 municipal plants on the basis here stated is \$257,377.78.

Q. Have you in that connection the cost of producing that?

A. The total operating expenses of these municipal plants for the year ending June 30, 1899, was \$148,493.63, which, subtracted from the total earnings, leaves the net earnings \$108,884.15.

Q. (By Mr. PHILLIPS.) And the total cost is something over \$800,000?—A. The total investment, as previously pointed out, in all these plants is \$891,501. So that the ratio of net earnings to the total sums of money that have been put into these plants is 12.3 per cent for the year ending June 30, 1899.

That completes the first step in the inquiry. It reduces the earnings of the municipal plants to a definite per cent on the investment after all the costs of operation have been deducted.

Now I stated at the start that the object of this investigation was to show how the results in these municipal plants would compare with the results in private plants in Massachusetts. So we now pass to the private plants to see what they did during the year ending June 30, 1899.

I would again call attention to the fact that the largest of these municipal plants is in the city of Taunton, where the population is only 27,115. That is according to the census of 1895 in Massachusetts. The population at present would be slightly larger. These places having municipal plants run down in population from 27,115 at Taunton to only 1,044 at Hull. So that they are in the main in small places.

Now, it is a well-known fact in the supply of electric light and power, small towns and cities do not afford so profitable a field for that sort of work as do the larger places, so it would be obviously unfair, I think, to make a comparison or to draw conclusions from the comparison between the results obtained in these municipal plants and the results obtained in Massachusetts as a whole in the plants owned by private corporations, because Massachusetts of course has a number of large cities—one very large city—Boston, and a number of other large cities like Springfield, Worcester, Lowell, Cambridge, etc., running up between 50,000 and 100,000, that afford a large field for the supply of light and power, a much better field than the small places.

But at the start a comparison has been made with the total results from private corporations operating electric plants only in Massachusetts. This comparison does not include corporations that operate both electric and gas plants combined, because of the difficulty previously pointed out in connection with the municipal plants, namely, that the figures available are not sufficiently segregated as to the results attained in each case, in the gas and in the electric departments; so that in quite a number of cases in Massachusetts where the gas plants and the electric plants are operated by the same corporation, the results of the operation are not included in this statement. I would say, however, that none of those cases include the largest cities. In none of the largest cities, namely, those I have mentioned—Boston, Springfield, Worcester, Cambridge, etc.—in none of these cases is the electric lighting and the gas plant controlled and operated by the same corporation. In some of the smaller places such is the case, but these places are left entirely out of the comparison, and there are only a few of them.

Now, taking the private corporations that operate electric light and power plants in Massachusetts as a whole, Boston included with the other large cities, the investment in these plants has been computed on a basis of the capital stock, bonds, and the notes payable. These items are: Capital stock, \$10,926,030.40; bonds, \$3,771,200; notes payable, \$1,933,215.46; a total investment of \$16,630,445.86.

A word of explanation might be made with reference these three items as representing the actual investment in the plants. Of course, as we all know, capital stock and bonds of corporations in Massachusetts, or corporations operating public plants, can only be issued for money or its equivalent actually paid in. So that these stocks and bonds represent actual money paid into the plant to their face amount. Under the Massachusetts law they must do that.

Now, as to these notes payable. I believe from what I have noted from various sources that they represent substantially additional investments in the electric plants beyond the amount of the capital stock and the bonds. I wrote the commission in regard to that point and they wrote me that the notes payable of these several corporations in most cases did represent investment, but that in some cases they would represent losses. Well, to my mind it looks to me as though the money has gone into the plants and as the item in all is only \$1,933,215.46, and if most of that represents investment, according to the commission, and another small but undetermined part represents losses, which seem to me to be

also investment, I concluded to let the items stand as I have given it—as investment in the plant. It looked to me as if that much money had been into the plant.

Mr. PHILLIPS. Or a debt of the plant, which was the same thing.

The WITNESS. To revert for a moment. Remember I am trying to compare the private and the municipal plants all the time. In the case of the municipal plants the investment included everything—every dollar put into the municipal plant, and I want to get as near to that as possible for these electric plants owned by corporations. In the latter case the investment of \$16,630,445.86 earned during the year ending June 30, 1899, above expenses, \$1,699,365.96. This represents a ratio of net earnings to investment of 10.2 per cent, in contrast with the 12.3 per cent made in the case of the municipal plant. It should be borne in mind in this connection that this comparison takes in all the large cities of Massachusetts except 2 or 3 good-sized towns, where the electric and gas plants are owned by a single corporation, and consequently takes in fields that are much better and that are supposed to be much more profitable for the sale of electric light and power than the small cities where the municipal plants exist. So that the figure of 10.2 per cent, whatever unfavorable bearing it may have on the results of the municipal plants, if it has any unfavorable bearing—for it is less by some 2 per cent than the figure reached in the municipal operating—it should not be given much weight.

The next basis of comparison was to take all the electric plants operated by private corporations in cities and towns of Massachusetts, each having less than 30,000 population. It seems that in this way we could come to a fair basis of comparison. The largest place operating a municipal plant has 27,000 population, and the cities and towns run from that down to 1,000; but there are 43 cities and towns in the State of Massachusetts having populations of not over 30,000, in each of which the electric-lighting business is conducted by a private corporation. The capital stock in all of these 43 cities and towns that we are now considering amounts to a total of \$1,823,000, the bonds amount to a total of \$1,201,700, and the notes payable to \$773,262.56, making a total investment of the electric light corporations in these 43 cities and towns of less than 30,000 population of \$3,797,962.56. The total earnings or incomes of these 43 plants during the year ending June 30, 1899, was \$814,768.54; operating expenses, \$568,700.87, leaving net earnings \$246,067.67. The ratio of net earnings to total investment above given was 6.4 per cent, as compared with 12.3 per cent, which was shown to be the earnings of the municipal plants in the 14 instances cited. That concludes in outline what I have to offer on this subject.

Q. (By Mr. PHILLIPS.) Would you please state again the net earnings of those 40 towns?—A. The net earnings of the 43 cities and towns just mentioned was \$246,067.67.

Q. And then the profit on those; what per cent did they pay?—A. They paid 6.4 per cent on the investment.

Q. (By Mr. LITCHMAN.) You made your calculation entirely on the 1,200-candle power for arc lights?—A. I did.

Q. Did you reduce the 2,000-candlepower lamps to the 1,200 basis?—A. I did not. I will explain what I did do. All municipal plants except 1 or 2 have the nominal 1,200-candlepower arc lamps. All of the plants operated by private corporations in the 17 cities and towns taken to reach the average value of arc lighting, had 1,200-candlepower arc lamps. One or two municipalities had 2,000 power lamps, but had such a small number that I did not think it worth while to make that additional allowance for them. The small error, such as it is, counts against the municipal plants and not in their favor.

Q. Some of the plants furnish light only, and do not furnish light and power. Are they of sufficient importance to distinguish between the two?—A. I can not see any important point there. There are only 2 or 3 of the plants, as I remember, that furnish power at the present time.

Q. The point would be, if they did furnish power, the cost of operation while they were furnishing power ought not to be charged against the cost of lighting, ought it?—A. The plants exist there; they do all the business that comes in, and they have attained these results. The plants existing in the other cities and towns, operated by private corporations, take all the business that comes in and they attain these other results.

Q. That is a fair comparison. That is right.—A. I suppose the reason that so few of the municipal plants furnish power is that there is very little call for electric power in those small places.

Q. Is not the real reason the fact that it has been permitted by law only about 2 years?—A. I am not sure as to the legal point, but I still think the other reason applies, because I think if there had been a demand for it before the last 2 years there would have been an effort to have the law changed, if it is a fact that the law did not permit it. I know it is a fact, from knowledge of the electric business, that there is little demand for power in the smaller towns. One of the cases

where power is furnished is in the city of Taunton, where we have a fair-sized place; but in the small places there is very little demand for power. I think if there had been much, if any, demand we would have seen the municipal plants going after that privilege long before.

Q. Would the extent of territory over which the lines run affect the cost?—A. Yes; because in the smaller places you have a greater length of wire, and presumably a greater investment in lines of wire in comparison with the amount of power you can sell.

Q. It is difficult to consider that problem in the statement you have made, is it not?—A. Yes; I could not well bring that in, as it would require data that I have not by me. But it is a settled fact that the larger places are more favorable to good earnings in the electric light and power business.

Q. It is claimed that there is a larger expense in the larger cities by reason of the regulations compelling the establishment of conduits. Have you taken that into consideration?—A. No, I have not taken that claim into consideration; but I would point out that, in the first place, any fair comparison between these municipal plants and private plants must be in the nature of the second comparison to which I have called attention, that with towns and cities of a similar size, and in that case there are no regulations of that sort. Now, for curiosity, I did put in a comparison with all the towns and cities in Massachusetts, and that was more favorable to the municipality. My opinion would be that in spite of such regulations as do exist in the large cities they still offer a better field for electric lighting; but it is not necessary to consider them at all to get the force of this comparison here made, because there really a different problem comes in. It is not fair to compare little places of 1,000 population with the city of Boston.

Q. And it is only in the larger places that the regulations for burying the wires exist?—A. Yes.

Q. And the comparison made with the 43 towns is where the conditions are practically the same?—A. Yes; under 30,000 population.

Q. Did it combine also the urban and rural districts in about the same proportion?—A. Presumably; at least there was no distinction purposely made. It took in all the places in Massachusetts where private corporations operate lighting plants and do not operate gas plants. It took in every one of them, so that there was no picking out of cases that would be favorable to a certain conclusion sought to be reached.

Q. In Massachusetts a city can not be established with less than 12,000 inhabitants.—A. Is it 12,000 or 10,000? If my memory serves me, I was thinking it was 10,000.

Q. Either 10,000 or 12,000. So all the places you have mentioned of less than 10,000 inhabitants are necessarily towns?—A. Exactly.

Q. And necessarily distinct from the urban?—A. Yes. There is no reason to suspect that the municipal plants are in places that are closely huddled together and the private plants in places that are scattered, as we have taken all the instances of each kind; and it is fair to suppose they average up about the same conditions. We have taken all the plants in cities and towns under 30,000 population operated by private companies.

Q. Do not the reports of the gas commissioners give the comparisons by the cost per lamp and not the cost per lamp hour as you give it?—A. They do give the cost per lamp, but they also give the number of hours operated per day, and the number of days operated per month in all these plants, and it is possible by arithmetic to reach some definite conclusion.

Q. You think the comparison made by you per lamp hour is fairer to both sides than the cost per lamp?—A. I think it is a definite basis, and the other, until you reduce it, is indefinite. A price per lamp year does not mean much until you know what is included under the lamp year.

Q. And how long the individual lamps are run in that year?—A. Yes; that is the point I mean.

Q. (By Mr. PHILLIPS.) How do you find the people to be satisfied, as a rule, in your visiting these towns and making your examination?—A. I think that the people are very well satisfied with municipal ownership; no town has relinquished its municipal plant. Last year there was a very nice little municipal plant built in Concord, one of the best.

Q. Have no municipal plants been bought out by private corporations?—A. No.

Q. Have the municipal authorities bought out some of the private corporations?—A. Yes; in several cases.

Q. Is it not true that the regulations of the State which compel the purchase of private plants has deterred many localities in establishing municipal lighting plants?—A. It is unmistakably my understanding that that is the case. There are cases in which failure to agree on price, when some municipalities are willing to buy, has left the matter in such condition that the transaction has not been

gone ahead with, where it would have been gone ahead with if the field had been clear.

Q. (By Mr. FARQUHAR.) Are we to understand from your testimony that the municipal plants, the 14 you mentioned particularly, cleaned up 12.3 per cent, and private plants in the same kind of cities cleaned up 10.2 per cent, and the whole 43 cities below 30,000 population cleaned up only 6.4 per cent? These statements having been made by you, can you make an explanation of the divergence between the 43 cities, 6.4, and your municipal ownership towns at 12.3? Do you know if there are any figures of depreciation at all in your plants? Do you know whether there are any funds set aside for depreciation? Do you know whether the cities—the municipalities—whether the city bookkeeping, municipal bookkeeping, and the private bookkeeping differ in the matter of depreciation as to the item in your plants?—A. The municipal plants must charge a depreciation of not less than 5 per cent per year by law. So far as I am aware there is no fixed per cent of depreciation fixed for the plants owned by private companies, and without being able to state the exact figure at which such depreciation charges are made, my impression from looking over the returns of the plants owned by private corporations is that they do not average anything like a 5 per cent charge for depreciation; that they did not make anything like so large a charge—a much smaller charge.

As to the explanation why the municipal plants show 12.3 on the actual investments, while the 43 cities and towns of similar size show only 6.4 per cent on the investment, it is my opinion that the difference results mainly from the more efficient and careful management in the municipal plants. Of course the people in these small places, where these municipal plants are operated, are very jealous of any unnecessary expenses or anything of that sort. And the Gas and Electric Light Commission is also watching the matter, and it is not possible for these municipal plants to run into excessive outlays or to operate at a loss. They are not to sell at a price that will produce a loss; they must stop selling to private parties rather than to sell at a price that will produce a loss.

The cost of street lighting from municipal plants is found for each case in the following way: All expenses of operation and management for the municipal plant during the year are first found. From these expenses is then deducted the income from commercial lighting. To the remainder are added interest on the entire investment in the municipal plant, at the rate paid on municipal bonds or notes, and also depreciation at 5 per cent on the cost of the plant. The sum of these three items is the cost of municipal lighting for the year. The total time in hours of operation for each lamp is known, and the cost per hour is computed by dividing the total cost of street lighting for each town among the several lamps in proportion to the energy that each lamp consumes.

Another way to ascertain the economy of public electric plants is to compare the actual cost to the municipalities of operating their plants with the prices charged by private companies. The following table has been prepared from official returns.

Cost per hour of operation of electric lamps from municipal plants, including interest and depreciation, year ending June 30, 1899.

[Cents per hour.]

	Incandescent lamps, 25 to 32 candle- power	Arc lamps, 1,200 to 2,000 can- dlepower.
Belmont	2.05	8.19
Braintree .....	.98	3.92
Chicopee		3.65
Danvers	1.07	3.21
Hingham	4.34	
Hull .....	.59	2.29
Marblehead .....	.83	
Needham .....	.88	
North Attleboro .....	.75	2.02
Peabody		5.85
Reading		3.41
Taunton .....	.56	
Wellesley	1.38	7.88
Hudson	2.01	6.88
Middleboro		6.10
Wakefield .....	.56	3.06
Westfield		

It will be noted that in the majority of cases the cost per hour of lamps operated by municipal plants is lower than the average price paid for similar lamps when operated by private corporations. In a number of instances the municipal costs are only one-half of the contract prices.

True it is that some of the contract rates are lower than some of the municipal costs, but it should be held in mind that any town may have a low cost for street lighting from a municipal plant at will by good management and the use of efficient equipment.

On the other hand, towns that now pay a high contract price for street lamps seem to have no remedy, unless they put in municipal plants.

If I may add a word to my testimony previously given, I would like to say with reference, further, to this comparison, that while I have made out no table showing the comparative charges made for electric energy of municipal plants and private corporations, still I would state that on the whole the municipal plants sell their energy quite as low to private consumers, if not lower, than do the other corporations. There is not a great difference, but the result, as reported in the reports of the Gas and Electric Light Commission, is, if anything, a little lower for the municipal corporations than for the private plants, so that their better showing on the investment can not be due to the fact that they charge the townspeople a higher price for energy, because they have not charged any more than, if as much as, have the private companies.

Q. (By Mr. FARQUHAR.) You said that in the 14 cities there was no gas competition; that you took out 3 cities that you claim had both gas and electric plants, the other 14 cities having only electricity. Is there gas competition there with electric lighting? Can you name any one that has private competition against the municipal control? I am asking the condition where the municipality is the competitor with the private gas company. That is the point I want to get at.

The WITNESS. There are in some of these places gas plants where the electric light is owned by the town or city, but I would like to refresh my memory for a moment as to the places. If I may answer the question partially now, I would call attention to the city of Taunton, which has a gaslight company with a capital stock of \$80,000. That is the largest place having a municipal electric plant, and there is a gas company of very good proportions for a place of 27,000 population (\$80,000), and my general recollection is that there are a number of places where municipal plants have also gas plants. There are private gas works in eight of the towns having municipal electric plants.

Q. (By Mr. LITCHMAN.) In the case of the gas plant, does not the field covered very materially affect the cost of the investment per light?—A. It affects it to a considerable degree. The extent of distribution of gas is quite a large per cent of the total cost. I won't state the per cent, or attempt to do so, but that is lower than electric-light energy.

Q. I will vary my question. What I really meant to ask was, is not the cost of the small plant relatively a little more than the cost of the large one?—A. Of which variety?

Q. Both; each.—A. Yes, undoubtedly.

Q. Then, in a town having a small gas plant, the price of the gas—the price at which gas was furnished—may be higher in a large town with a large plant, and yet the return on the investment not be any more, if as much?—A. Quite so. As a matter of fact, I believe the plants in the smaller towns are almost always higher than in the larger towns of Massachusetts.

Q. (By Mr. PHILLIPS.) But are there any cities or towns which own the gas plants?—A. There are three which I purposely left out, because the accounts of the gas and electric light were mixed up.

Q. Are there many cities that own their own waterworks in Massachusetts?—A. Oh, yes; it is a very general practice with a large part of them.

Q. Has there been any comparison made there between city ownership and individuals in regard to the cost of furnishing water?—A. I have never seen any; that is one of the things that I have in mind, but I have not gone into the matter.

Q. You do not know where the commission could get statistics of that kind now, to show the difference of cost?—A. Oh, yes, I know the documents from which that information could be gotten in Massachusetts. It would involve a lot of analysis, just the same as we have gone into here. Most of these figures were taken out of a book, but they came out of the book as a matter of analysis.

Q. Are there any cities and towns that own their own street-railway systems? There are none in Massachusetts that own street railways?—A. I think not.

Q. (By Mr. FARQUHAR.) What is your observation in respect to electric lighting in municipalities supplanting gas?—A. The observation that I would state in

reference to your question is that the electric light supplants gas, not on a question of price, but on a question of quality, where it supplants it at all. That is, so far as public rates and public lighting is concerned. It is possible to put in what is termed an insulated electric plant; that is, if one has a large amount of lighting at any factory plant, or for his office building, it is much cheaper under certain conditions. Under conditions that pertain to the heating of a building, etc., so that an engineer has to be employed, it is much cheaper to put in a small electric plant and light with electric plants, than it is to light a building by gas. That is a growing practice in all large cities of the country, and rightfully so; but so far as lighting derived from the public supply is concerned, electricity can not, I believe, in a great majority of instances, if at all, compete with gas strictly on a price basis, and it is selected by the great majority of users, not because it costs less, but because they like it better.

Q. (By Mr. LITCHMAN.) Is that condition intensified to appliances consuming gas, like the Welsbach burner?—A. The improved burners that you speak of, which materially increase the candlepower per foot of gas consumed per hour do tend to cut down slightly the field of application of the electric light; that is, they give the gas an advantage that it would not otherwise have, in that they give gas lighting a quality that some consumers will accept instead of buying the electric light. This still leaves the gas the cheaper form of illumination, but they cheapen the illumination of our gas very decidedly, and also improve, in the opinion of some consumers, the quality of that illumination.

Q. (By Mr. FARQUHAR.) You gave the figures from 1892 to the installation of these electric plants; do you know of the installation of any gas plants in that time?—A. The 3 gas plants, as I endeavored to state.

Q. Just 3 and no more?—A. Just 3.

Q. Then it seems to be the policy of the towns of Massachusetts to adopt electricity instead of gas where they pass out of the reign of coal oil?—A. Judging by experience, yes.

Q. Where you mentioned the fact of the net results of 6.4 per cent here in the 43 cities, and the 12.3 per cent in your 14 cities of municipal control, would it not seem that really the private individuals are making less money now than the municipally owned properties?—A. It is a fact, shown by these figures, that the capital invested by towns and cities in electric-light plants is more economically invested for the community, and is earning a better return than is capital invested through the medium of private corporations operating such plants.

Q. So, you would say that the owners in 43 cities, that clean up each year 6.4 per cent, are not monopolists nor robbers of the public?—A. I should say, on the contrary, that they are not getting a fair return on their investment. The question that I have particularly referred to in this matter is that as to whether municipal plants can be expected to be, or are being, managed as well or better than private plants.

Q. (By Mr. LITCHMAN.) When you say that 6 per cent and a fraction is not a fair return on the capital invested, you think in Massachusetts, at least, there is not an overcapitalization, either by stock, bonds, or notes?—A. No; there is no overcapitalization there, as I see. There may be injudicious investment, of course, if that is what you mean. I should not care to stand with the proposition that all those private corporations have been operated only, for instance, as an engineer in that line of business would advise to operate them; but I say the money has been invested there, well advised or ill advised.

Q. (By Mr. FARQUHAR.) Are the men who officer your municipal plants in Massachusetts taken from a civil-service list, or how are they employed?—A. As far as I am aware there is no formal civil-service list in connection with them. The officers are simply employed on their reputation as men competent in that line of work.

Q. Just as any business enterprise or corporation would employ?—A. Yes. Or just as a town or city operating a waterworks plant would employ an engineer for that plant. I do not think there is any civil-service examination.

Q. Have you ever heard in Massachusetts that politicians have interfered to put men in these plants?—A. I have never heard of such complaints. I have heard of complaints about politicians interfering in some other lines of work in Massachusetts, but as to this particular thing I never did.

Q. (By Mr. LITCHMAN.) Is it not a fact that the managers of all these municipal plants are elected by cities and towns as a rule? Of course in the cities they may be appointed by the mayor and confirmed by the council, but in general are they not elected at town meetings?—A. I so understand it.

Q. In that case, then, they have to run according to public sentiment?—A. I suppose if a plant is not well managed that the tenure of that office—

Q. (Interrupting.) Would stop. Is there anything further you might add?—A. I think of nothing to add.

(Testimony closed.)

EXHIBIT A.—To accompany Mr. Adams' testimony.

Municipal electric plants in Massachusetts.

	Popula- tion.	Year started.	Invest- ment.
Belmont.....	2,843	1898	\$16,000
Braintree.....	5,311	1892	67,067
Chicopee.....	16,120	1896	98,950
Danvers.....	8,181	1889	45,174
Hingham.....	4,819	1895	24,413
Hudson.....	5,308	1897	45,273
Hull.....	1,044	1894	119,367
Marblehead.....	7,671	1895	85,518
Needham.....	3,511	1893	15,697
North Attleboro.....	6,576	1894	58,421
Peabody.....	10,507	1892	79,010
Reading.....	4,717	1895	74,400
Taunton.....	27,115	1897	145,301
Wellesley.....	4,229	1892	17,000
Total investment in 14 plants.....			891,591

EXHIBIT B.—Value of lighting by municipal plants.

	1,200 can- dle-power arcs, hours per year.	25 to 32 can- dle-power incandes- cent lamps, hours per year.	16 candle- power in- candes- cent, hours per year.	Value, arc lighting.	Value, in- candescent lighting
Belmont.....	17,741	215,846	.....	\$833.82	\$2,590.15
Braintree.....	215,403	254,359	.....	10,123.93	3,052.30
Chicopee.....	429,961	.....	.....	20,208.16	.....
Danvers.....	214,227	.....	.....	10,068.65	.....
Hingham.....	.....	591,240	.....	.....	7,094.88
Hudson.....	40,728	172,687	.....	1,914.21	2,072.24
Hull.....	.....	296,912	.....	.....	3,562.94
Marblehead.....	460,891	46,727	29,928	21,661.88	2,119.86
North Attleboro.....	.....	734,247	.....	.....	8,810.96
Peabody.....	662,331	111,628	.....	31,129.55	1,339.54
Reading.....	195,193	.....	.....	9,174.08	.....
Taunton.....	441,771	.....	.....	29,763.24	.....
Wellesley.....	.....	818,550	84,050	.....	10,831.20
Needham.....	.....	506,479	.....	.....	6,077.75
Value of each kind of lighting.....	.....	.....	.....	125,877.55	47,551.85
Value of both kinds of lighting.....	.....	.....	.....	173,429.40	.....

EXHIBIT C.—Earnings and expenses of 14 municipal electric plants for the year ending June 30, 1899.

Incomes from commercial lighting.....	\$83,948.38
Value of public lighting.....	173,429.40
Total earnings.....	257,377.78
Operating expenses.....	148,493.63
Net earnings.....	108,884.15
Total investment.....	891,591.00
Ratio of net earnings to the investment.....per cent..	12.3

EXHIBIT E.—Total investments by electric companies only on June 30, 1899.

Capital stock	\$10,926,080.40
Bonds	3,771,200.00
Notes payable	1,983,215.46
Total investment	16,680,445.86
Net earnings of electric companies only for the year ending June 30, 1899	1,699,365.96
Ratio of net earnings to investments	per cent. 10.2

Investment for electric plants in 43 cities and towns of less than 30,000 population each on June 30, 1899.

Capital stock	\$1,823,900.00
Bonds	1,201,700.00
Notes payable	772,262.56
Total investment	3,797,862.56

Results of operation for electric plants in 43 cities and towns of less than 30,000 population each for year ending June 30, 1899.

Total earnings	\$814,768.54
Total operating expenses	568,700.87
Net earnings	246,067.67
Ratio of net earnings to total investment	per cent. 6.4

WASHINGTON, D. C., January 7, 1901.

TESTIMONY OF PROF. WILLIAM Z. RIPLEY,

Professor of Economics at the Massachusetts Institute of Technology.

The commission met at 10.53 a. m., Vice-Chairman Phillips presiding. At that time Prof. William Z. Ripley, professor of economics at the Massachusetts Institute of Technology, Boston, Mass., appeared as a witness, and being duly sworn, testified as follows:

Q. (By Mr. PHILLIPS.) Will you please give your name?—A. William Z. Ripley.

Q. Residence?—A. Boston, Mass.; my occupation is professor of economics at the Massachusetts Institute of Technology.

Q. How long have you been teaching in that institute?—A. I graduated there as a civil engineer, then studied 3 years, and went back there in 1893, and have been teaching since 1893.

Q. Have you any other information you desire to give about yourself personally before proceeding to the questioning?—A. Nothing further than this: I should like to have it appear to the commissioners that a good deal of the information that I shall have to present has come from contact with railroad men and with shippers. Our graduates at the institute are represented in almost all of the manufacturing industries of the country, and a great many of them are on the railroads. Our policy has been always to keep in close touch with them as to the details of their business so far as they can be of interest to us; and I should like to free myself from the prejudice of appearing as an academic specialist, and should like to speak to you, if I may, from the standpoint of one who has talked with the representatives of these business interests. After receiving your invitation to come down here, I have spent a good deal of time in seeing a number of railroad, cotton mill, and other manufacturing men in Massachusetts, in an endeavor to get at something as to the present situation in New England, because I believe the present situation in New England will illustrate distinctly the evils and the advantages of the present state of the law. In other words, in

this small territory we have a picture presented of the conditions which I have been led to believe exist all over the country. I offer that merely as an explanation of the concerns from which most of my information which will interest you has been derived.

Q. From practical concerns?—A. I have tried as far as possible to check up all the results which we obtain from books by a conference with our graduates in business.

Q. Then you can proceed in your own way to make a statement, and we will take the liberty of interrupting you as necessary.—A. The first point which I may speak upon, perhaps, is as to the existence—the very widespread existence—of rate cutting under the present interstate-commerce law. Rates are being cut in New England to-day, to the best of my information, anywhere from 30 per cent to 40 per cent on west-bound traffic. I was informed by a representative of one of the large roads, a man with whom I have personal acquaintance, that, in his judgment, there had scarcely ever been a time when there was more rate cutting on west-bound business than there is in Massachusetts, and has been for the last 2 months. The reason for that, as near as I can discover, is that the large amount of exports and the large amount of traffic going East has thrown a great many empty cars upon the seaboard, and that there is great competition among the roads for filling those cars to the West. All of our manufacturers derive a very considerable benefit in competition with other parts of the country by reason of the differential Canadian lines—the Canadian Pacific and the Grand Trunk—those roads not being subject to the interstate-commerce act, which gives them a definite advantage ranging anywhere from 10 cents up per hundred pounds on freight to Chicago. The manufacturer of Massachusetts, as I know in one or two instances, can put freight into Chicago in normal times for from about, we will say, 10 cents on first-class freight less than a shipper from New York can do, although the distance is 150 or more miles farther. The situation, then, at present is this: Those differentials exist and have been approved by the other roads in this country. They have been approved, of course, as a matter of force. They have at the present time offered so much of an obstacle to the trunk lines wholly within the United States territory that those trunk lines have now begun to cut under the differential, and traffic which for a great many years has been going over the Canadian lines is now being diverted over some of the main trunk lines. One of the large interests in Massachusetts, which has, I am informed, for nearly 20 years shipped a large proportion of its freight over the differential lines, is now shipping over the trunk lines. I give that merely as an illustration of what is taking place in almost all the industries. These shipments, however, are not due to the desire of the eastern trunk lines to cut rates. It is forced upon them by the situation. The far-western connections of these lines, apparently, are desirous of securing business which shall be diverted to their lines by the eastern trunk lines; and they notify their eastern connections that any business diverted to them will be taken at a considerable cut, leaving to the eastern trunk lines, which have, I believe, honestly tried to maintain rates, the policy of either taking business and transferring it to their western connections at a reduction, or of letting it go over some other competing trunk line. The situation has been forced upon the eastern railroads against their will. A number of the men whom I know have told me that they would be only too glad to follow the law and keep up rates, and that they would welcome any amendment of the interstate-commerce law which would enable them to maintain rates, but that under the present conditions it is beyond their power so to do.

Q. (By Mr. PHILLIPS.) Then you have absolute knowledge that there are discriminations in the freights?—A. I have absolute knowledge.

Q. Would you specify the roads?—A. I will specify them so far as I have done, that they are the main trunk lines within American territory that make discriminations of this nature. I will give you another example, if you will permit. The freight rate from Boston to Seattle, which is the same rate from all points east of the Mississippi River, is at the present time on first-class freight, I believe, \$1.25 per hundred pounds. One of the large shippers told me that he was shipping now without asking the different roads for competitive rates, without any friction whatever, at 95 cents.

Q. From Boston to Seattle?—A. From Boston to Seattle; although the established rate is \$1.25, I believe. I have not verified this rate in the tariffs, but it could be done very quickly.

Q. (By Mr. CLARKE.) Had there not better be a distinction made at this point between rate cutting and discriminations; discriminations may be in favor of individuals, while rate cutting may be equal to all?—A. I am very glad to have the correction. I believe that both of those conditions exist; that certain shippers

are obtaining rates which are, we will say, 35 to 40 per cent less than the published rates, whereas those—of course this applies to those who ship less than car-load lots—those who are shipping without the large volume, which always lends inducement to cut rates, are paying nearer the established tariff. That is what you mean by discrimination?

Q. Yes.

Q. (By Mr. FARQUHAR.) I would like also to have this distinction brought out in the rates that you are speaking of now: were they all rail or were they rail and water?—A. Some of the differential rates are part rail and part water; for instance, those that go over the Rutland Railroad and then up the St. Lawrence. I have no knowledge as to the difference in discrimination between all rail and part rail and part water rates. I have sought from various lines to verify this fact that the trunk lines are forced by western connections to cut rates, and that much more business is going over the trunk lines that formerly went over the Canadian roads, and further, that whenever there is rate cutting it follows almost invariably that that leads to personal discrimination; that the competition which rate cutting presupposes leads to a deeper cut for the large shipper, or for the person who is shipping from a competitive point; whereas a rate remains more nearly at the established figure where the shipment is made from a local station, or is made by a person who is shipping small amounts. It will also vary, of course, very largely according to the regularity of the shipment. One man told me that November 1, an agreement between the roads that they would maintain rates was made by some official or by general instructions privately sent out. The day following that 1st of November this man found that serious cutting was being made by a competitor. He asked the reason why, and he was told that it was a continuous contract; in this case, for apples, running over a period of 4 months. I asked him as to the way in which rate cutting proceeds. He informed me that he was forced by the conditions of business to make a similar cut, and he informed his competitors that he also was working under a long-time contract, or as they call it in the railroad business, a "hold over." The result is that by this subterfuge the rate cutting continues, and the agreement made the 1st of November, and the attempts made to recognize the same seriously, on the 1st of December came to nothing. I almost universally have found from conversation with men who are in the railroad business, that they would be glad to maintain rates on our Eastern lines—I know nothing of Western lines—they would be glad to maintain rates if they could do so, but the very conditions of business, the competition especially in our part of the country between lines subject to the interstate-commerce law and lines not so subject, forces them to the kind of business which I have described. The feeling which was forced in upon me by that experience is very strong that the maintenance of rates at an established figure is fully as important a matter for the business men as is the fixing of reasonable rates by such a body as the Interstate Commerce Commission. To fix reasonable rates is entirely a distinct matter from securing the maintenance of such established rates as are already published by the railroads. They are not able at the present time to accomplish the second of these two ends. One railroad man, a shipping agent, told me that his road had never instructed him to cut rates, but that they sought to prevent it; and he felt that those higher in authority than himself would welcome anything which would protect the roads against rate cutting and the consequent discrimination as between persons.

Q. (By Mr. PHILLIPS.) You think that the rate cutting leads to discrimination between persons? It is pretty difficult to separate the two, is it not?—A. One necessarily leads to the other; in times of general rate cutting personal discriminations are bound to arise.

Q. They will cut rates to one and probably not to another?—A. They will cut deeper to the one than to the other. The Interstate Commerce Commission at the present time has not the power to prescribe freight rates in advance. They do not have this power because of the decision of the courts; but if the roads are to be allowed, under an amendment of the law, to pool and to prevent this rate cutting, there certainly must be some protection for the public, through securing for the Interstate Commerce Commission the right to adjudicate as to what rates shall be reasonable.

Q. For the future?—A. For the future; or to pass upon them. I feel very strongly that there are rights upon both sides which must be very jealously and carefully guarded. A railroad has the life and death of the manufacturer in its hands. I remember—it must have been 5 or 6 years ago—talking with a banker in Boston; some of the details escape me; I remember hearing this gentleman tell of an attempt to establish a paper-pulp factory at Denver. I do not know whether it has subsequently been established or not. They desired to utilize

the raw material which was in the West, and to manufacture paper of the sort used by the newspapers, and to save the expenses of transshipment from pulp mills in distant parts of the country. They were notified by one of the roads that if they established a pulp mill at Denver, which would prevent large shipments of freight which had formerly come from Wisconsin, that the road would kill that business at any cost. The promoters were very much discouraged. Whether they actually carried it through or not, I have no personal knowledge.

Q. The object of the road, then, was to get the freight on long haul instead of a short one?—A. Instead of a short one.

Q. You state that they can make or break the manufacturer. Is that not equally true of the miner of coal and ore, and other producers of commodities?—A. I believe so.

Q. And have you knowledge that they have crippled such industries in any case?—A. I can not state of my own personal knowledge. I merely know that Government reports and official documents make statements to that effect. There is a large mass of official information which bears upon that point, but of my own personal knowledge I can not speak.

There is another point which I think deserves careful consideration here, namely, that the roads in many respects are distinctly at the mercy of the shippers. This is the other side of the same question. I am now seeking to express my own conviction that it is an interrelation; that the railroads have rights, and that the public has rights. A shipment of dry goods is made from New England, boxed and marked, we will say—cotton goods of a certain grade. Those goods, as cotton goods, go, we will say, at second or third class rates. The shipping agent—the man who secures the contract—can never be sure from his personal knowledge whether that case is filled with cotton goods which should be rated second or third class goods, or whether they are really half cotton goods with a large proportion of first-class goods which ought to go first class. In one other example—which I give as coming from New England from an agent of one of the roads—a certain firm had been shipping for a long time a certain grade of cotton goods. Gradually the proportion of shipments of goods of a very considerably lower class became common. The freight agent had reason to suspect that those boxes were containing freight which ought to have gone in a higher class than that which was specified. I asked the agent why he did not attempt to determine for himself. He replied, "My dear sir, that is entirely beyond our power. If I should question that firm the freight would never go over our line again. We have got to accept it at the class at which they specify." The result of such underclassification prescribed in that case by the shipper is, of course, to give very considerably lower rates than otherwise would be charged. The complexity of this situation forces itself upon me every day—the thousand and one ways in which the object of, we will say, personal discrimination, or rate cutting, may be obtained. It may be by a direct cut in money. A Western road, for instance, depositing, we will say, \$25,000 in a Boston bank to the credit of a certain New England freight agent. He is authorized to draw upon that for cash which he pays out in rebates, the shippers of course paying by check for the full amount of the established rate, that being a matter of record. It can not be traced, or it is almost impossible to trace the amount of that cash when a few dollars or a hundred dollars has been returned to a certain firm during the month as rebate. That same discrimination may take place by the acceptance of freight which is classified at a lower rate than the rate at which it is supposed to go, although, as I have said, in that particular respect the roads are very largely at the mercy of the shippers. They must rely upon the good faith of those who make the shipment. Or again, of course, discrimination may take place by the process of underbilling, the shipment being made at a rate for a long through haul. The freight is then taken off at an intermediate point, to which the local rate would be considerably higher than its proportion of a through rate. But, however it be done by any of these devices, the existence of rate cutting and of personal discrimination is very widespread, and I am constrained to believe that it is no less to-day than it has been during a good many years past. Conditions vary. The local situation in New England may for a short time lead to widespread rate cutting. As, for example, the condition which I have described, namely, the existence of a large number of empty cars going West at a particular season when the industries of that section of the country may be sending out goods. I would say also here that the existence of discriminations in rates as between, we will say, 2 or 3 different shoe manufacturers, is of far more importance to each one than the absolute level at which those rates stand for all alike. It is of far more importance to the shoe manufacturer to know that he is paying 75 cents for a given service when his competitor is getting it for 50 than it is for him to know that both are not paying 75 and 50, but 40 and

25. It is not the general level of rates, but it is the fact that at a given time one set of rates is very much higher than another. That is what determines the success or destruction of a given business.

Q. (By Mr. CLARKE.) That is to say, they would rather pay a higher rate and have it uniform than to get a low rate when a competitor possibly gets a still lower one?—A. That is precisely my point. A manufacturer said to me the other day that it did not make so much difference to him absolutely how much freight rate he had to pay. The question was, how much was his competitor paying. That phase of freight rates enters very largely into the competition at present arising between the cotton mills in Massachusetts and New England and the cotton mills in the Southern States. The existence in a very large part of the Southern States of what is practically a pool makes the freight rates into and out of those Southern States considerably higher than in those parts of New England where competition still prevails. There are only two parts of New England where there is railroad competition to-day—along the line of junction of the Boston and Maine Railroad and Fitchburg territory, and of the New York Central, that is, of the Boston and Albany; and secondly, at the line of contact of the latter and the New York Central, and the New York, New Haven and Hartford on the south. I am informed that there is a good deal of feeling among the people in southern New Hampshire, southern Vermont, and northern Massachusetts, along the line of territory in which formerly competition between the Boston and Maine and the Fitchburg railroads existed. Those two roads have now become amalgamated, and the result is that a number of places like Peterboro, N. H., for instance, which formerly had the benefit of low competitive rates, now find that rates are appreciably higher. Nevertheless—and this I believe is worthy of emphasis—the rates, while somewhat higher, are certainly steadier. There are complaints that the rates are indeed higher, but manufacturers have told me that they would much rather have higher rates which can be depended upon. This brings us back to the point which was touched upon a little while ago; they would much rather have a higher rate, and know that rate was going to prevail this week and next week, and that every man in that territory with whom they were competing in manufacture was going to pay the same rate. I think it may be predicted that the effect of consolidation or pooling, if you are pleased to call it such, is likely to be a maintenance of higher rates, perhaps a lesser reduction to some degree than might take place otherwise. But the effect of the combination or of the pool would be to make a steady rate, and a fixed rate, which the manufacturer or which the public can rely upon, and which they can feel is paid by everybody. The effect of that will be a welcome one to the people concerned. The authorization of pooling, however—and I have thought a good deal about that particular question—giving the railroads absolute control over rates, would be, if it had such an effect, to place the public still more in the power of the roads than they are to-day. Any proposition to legalize pooling, it seems to me, should have inextricably bound up with it some increase of regulative power of the Interstate Commerce Commission. For instance, at Peterboro, N. H., which now is a noncompetitive point—the Fitchburg road and the Boston and Maine being amalgamated—rates are fixed by different considerations than those which formerly prevailed. Peterboro should feel that it has somebody at Washington that will give protection, with power to pass upon the reasonableness of the new rates. To show you how this works I will give you one other illustration which came to me directly from the field. A certain gentleman controls some 10 country stores all through the towns of northern Massachusetts and southern New Hampshire. His control amounts to the management of their affairs indirectly from Boston, where he acts as a purchasing agent. The town of Jaffrey, N. H., is 6 miles from Peterboro. Jaffrey was formerly served by one road, and still is. Peterboro was a competitive point at the junction of territory between the Boston and Maine and the Fitchburg railroads. So much lower were the Peterboro rates formerly on shipments that all the goods for the country store in Jaffrey were hauled a number of miles by horse in order to take advantage of the competitive rates of Peterboro. Since that territory has ceased to be competitive freight is no longer hauled by horse, because the Peterboro rate and the Jaffrey rates are just the same. The effect of that upon the distribution of business is very considerable.

Q. (By Mr. PHILLIPS.) Did they bring the rate up to Jaffrey or down to Peterboro?—A. The rate, as I understand it, is brought up to the Jaffrey rate. But let me return once more to the statement formerly made, that it is not so much whether the rate is slightly higher or slightly lower, but that it is the same for everybody. In other words, there is no incentive for roads to cut rates and make personal discrimination. Therefore a business man and shipper can calculate what his cost is going to be, and especially the conditions under which he is competing with the neighboring town.

Q. (By Mr. A. L. HARRIS.) I would like to have one point cleared a little. Taking New England as a center, and the Pacific slope as the point of destination for through freight, how would you eliminate the Canadian roads from competition with the American roads?—A. I can not see any way at present. I recall the section of the Dingley Act of 1897, about which so much has been said in the newspapers, which provided for a discriminating tariff against all goods carried in bond. That section, it was said at the time, was imposed through the influence of lines within the American Trunk Line territory. At all events the effect of it would be to impose a discriminating duty upon all goods which went over those lines, with the result of prostrating practically every industry in New England. Our people are very far from raw materials. We have nothing but our climate and our people to rely upon; the distance from the great centers of population and wealth are such that it would be one of the greatest disasters for New England which could happen that it should be deprived of that little advantage which they have of shipment over these Canadian lines. As it will appear from the map, these lines are not very much more devions to Chicago than are the shipments through the United States. Our manufacturers all feel very strongly on that point; whether rightly or not, it must rest with each man's judgment to determine.

Q. Now, another question in connection with that of pooling. Suppose Congress should place in the hands of the Interstate Commerce Commission the right to approve rates of the different lines of railroads, and protect that rate after it was approved until changed. Would not that substantially bring the redress that you ask for by pooling?—A. You mean that that should be done without the authorization of pooling?

Q. Without pooling, yes.—A. I should say not. The only way to stop rate-cutting is to do away with competition. The railroad is a monopoly for this reason, that the more business it does the cheaper it can do it. Nobody else can come into the field when the road has an established line—two or four track line—and begin business at a tenth of the tonnage which that old road is carrying, and in any way compete profitably with it in rates. A four-track road can charge a great deal less per ton-mile than any smaller road can do. The trend of affairs is to force business into the hands of those who can do a large business at decreasing cost.

Q. Would it not be worth trying, at least, to give the Interstate Commerce Commission the power to approve rates, and then see that the roads sustain them?—A. I believe that that would be a distinct advantage to the country.

Q. (By Mr. LITCHMAN.) Would that reach the evil of shipping high-class goods as low-class goods?—A. Not unless it gave the right of inspection. I have felt at various times that that was a point which has not been tried out in many cases; that many shippers, even of moderate volume, have it in their power to trick the railroads if they choose to do so, and the larger they get to be the more they can force the continuation of that same policy. A railroad may, if a man is only shipping one small box of dry goods, put on an inspector and actually have the matter determined, but if it is a large shipment which they can not afford to let go to some other road, they must wink at it and let it go.

Q. (By Mr. PHILLIPS.) Without some pooling process could the Interstate Commerce Commission take up each single road and fix a schedule for it? Could it physically do it without a much larger body than what there is now?—A. I should say it would very greatly multiply the duties of that body; but do I understand you to mean to ask whether the commission should make the rates itself, or simply pass upon the reasonableness of the rates made by the railroads before put in force?

Q. (By Mr. A. L. HARRIS.) Not to make the rate, but pass upon it?—A. That is a different matter than suggested by the chairman. I believe that should be done. I think it is an important element in any amendment of the interstate-commerce act; but I question very much whether this practice which is so widespread of rate cutting and of personal discrimination—which can not be stopped by the railroads, though many of them would be glad to do so—could be stopped by an administrative body at Washington.

Q. If that legislation is upon the statute book, would not the roads desiring to comply with the law have a very great influence in causing the other roads to comply also through the Interstate Commerce Commission?—A. I think it would have a good effect; yes. Whether it would be enough to meet the almost inevitable condition of business, which is that of either cut-throat competition or pooling, is another question. It would certainly contribute to that end.

Q. It would hardly be expected, of course, that it would be eliminated entirely, but would it not go a very great ways?—A. It might.

Q. (By Mr. CLARKE.) On the other hand, would not that law bind the conscience of the honest railroad managers who desire to avoid rate cutting, and be as much disregarded by the other class as the present law is?—A. I feel strongly convinced, as a matter of personal judgment, that the soundest roads in this country would be glad to do away with the rate cutting and personal discrimination which is loaded upon them by a great many of the trusts. At the present time they are carrying these trusts upon their shoulders. They can not help it. They have grown so large that they can dictate rates of freight, and the roads have no choice. They must either take the goods or see them go to some competitor. If any means could be devised by which this could be stopped, and at the same time some protection for the people set up in an enlargement of the powers of the Interstate Commerce Commission, it would seem to me to be a fair give and take. The railroads would receive what they undoubtedly wish—the power to pool; the people would receive a considerable enlargement of the powers of the Interstate Commerce Commission, enabling them to pass upon rates in advance of the time they are put in force. I believe that the desire of the people and of the roads for these two things would bring them together to some degree.

Q. (By Mr. PHILLIPS.) Do you think that the railroads at the present time care a very great deal about pooling? Have they not consolidated in such a manner as to make their own rates?—A. That is a point to which I was coming.

Q. Do you know anything about this new combination amongst the railroads which has been formed in the last year by an interchange of stock, etc.?—A. I have followed some of this with a little care, and took the liberty of bringing some diagrams illustrating the character of certain railroad securities. The railroads, prohibited from pooling, are planning by financial consolidation to reach the same result. This makes it still more imperative, as you suggest, that the enlargement of the powers of the Interstate Commerce Commission to prescribe reasonable rates should follow.

Q. Have you followed the consolidation of the Baltimore and Ohio and the Pennsylvania system that has occurred in the last year?—A. In 1893, at the period of depression, at which time so many roads were in the hands of receivers—something like one-quarter of the mileage of the United States (I believe it was mileage)—I began to collect material upon the reorganizations and receiverships of those roads, and followed that as far as spare time would permit, together with the growth of the systems, and the effect of the leases, working arrangements, consolidations, or purchases which have taken place. The reorganizations principally which should be taken as typical would be the Reading, the Baltimore, the Southern Railroad, the Central of Vermont, and one or two others. The effect of those reorganizations upon the amount of capital stock and bonds out has been very great; and the number of virtual reorganizations, the most striking of which is the reorganization of the Chicago and Alton, have forced the conviction upon me that most of these reorganizations which were intended to cut down capitalization have had exactly the reverse effect. The road comes out of the reorganization with a lessening of its fixed charges, to be sure. That is, the financiers have been enabled to issue new classes of bonds at lower rates of interest, but the aggregate par value of stock and bonds is almost always greater than it was. Take the case of the Atchison and Topeka, which has been reorganized three times since 1889. It began in 1889 with a capitalization—that is, stock and bonds—of about \$205,000,000. It was reorganized in 1890, and the stock and bonds were increased to upward of \$300,000,000. In 1894 it was again reorganized, and the stock and bonds were swollen in amount to \$329,000,000. Whether the public ought to be called upon to pay a normal rate of interest upon that enormous aggregation of capital, some of which represents increase in the value of property, some of which represents promoters' profits, and some of which represents pure water, is a question which should be very carefully thrashed out. I have been looking over, during the last 2 or 3 days, the case of Danville and Lynchburg in Virginia, which has been before the Interstate Commerce Commission. A large factor in their determination of the case turns upon the existence of the enormous capitalization of the Southern Railroad—a capitalization which has been put upon that railroad through its recent reorganization. The question of reasonableness or unreasonableness of rates rests upon the amount of actual investment that there is in that road. The railroad declares itself to have a capitalization of \$120,000,000. They are entitled, as they contend, to earn a living interest and dividend upon that basis. The Interstate Commerce Commission answers, Not so; a large part of that capital is fictitious, and we deny that you have a right so to earn. The Interstate Commerce Commission does not know; the people do not know; nobody knows but the people who own that road, and possibly also they have no data as to how much actual money has been put into that property. It seems to me that the determina-

tion of some of these questions, the relation between the reorganization, refunding, and consolidation of the roads and the amount of actual property that is in them, should lie at the basis of the determination of what rates are reasonable or what are not. In other words, we must cut loose, if we are going to determine how much each road is entitled to earn, from consideration of this superficial figure of stock and bonds. In some roads it is greatly swollen, and in some roads it does not represent more than the actual investment. I take the liberty, Mr. Chairman, of referring to an article in the *Quarterly Journal of Economics* for November, 1900, upon the working of our corporation laws in Massachusetts in the matter of capitalization, in which I endeavored to point out the serious attempt we have made in Massachusetts to keep capitalization down to the actual investment. There is not a Commonwealth in the country which has succeeded to a greater degree than Massachusetts, by antistock-watering laws, in holding down capitalization to the actual investment made. And may I say here that this at once points to a suggestion for control which I have not as yet expressed, namely, that the increase of the powers of the Interstate Commerce Commission, by enabling them to pass upon all financial operations of the interstate roads, with power to regulate issue of stock and bonds, to approve of the terms of leases—to do, in other words, all those things which the Massachusetts railroad commissioners are empowered to do by law—would give the Interstate Commerce Commission just that hold over the roads which they apparently need at the present time. For instance, the Massachusetts railroad commissioners have no power to prescribe reasonable rates. That is, perhaps, the fundamental difference between our Massachusetts railroad commission and that of many Western States. The people have never empowered that body to determine what rates are reasonable and what are not, but the corporation laws of Massachusetts are made so strict that no railroad in Massachusetts can issue a dollar's worth of stock or bonds, can lease another road, can build another spur or side track, can do anything of that kind, without getting the prior approval of the railroad commission. What is the result? The roads feel that unless they accede to recommendations of the railroad commissioners in matters of rates, unless they voluntarily acquiesce in recommendations of that nature, that some day next week or next month, when they wish to carry through some financial operation, that that body will have power to withhold its consent. Do I make it clear? That is the sole weapon which our Massachusetts railroad commissioners exercise over the roads, and in our history has accomplished many of the results that seem desirable.

Q. (By Mr. CLARKE.) Are you aware that some years ago, when the Housatonic Railroad refused or neglected to comply with a recommendation of the commission for the reduction of rates at certain points, the commission reported the facts to the general court, which was then in session, and that the general court immediately authorized the railroad commissioners to fix rates on that road?—A. Of course that is an additional weapon. I did not know of that case; I am very glad to have it for my own information. But that, of course, should be taken into consideration, namely, that there is a genuine conviction on the part of the roads that the legislature will stand by the commission, ready to empower them if necessary. But under ordinary conditions, those of everyday life, I am told that its power to pass upon all financial operations, to approve all leases, reorganizations, issues of securities, etc., is sufficient for regulation and to make the railroads acquiesce in such suggestions as are made by the railroad commissioners.

Q. (By Mr. A. L. HARRIS.) Has your law been oppressive to corporations in its execution?—A. It has, to the degree that several of our large corporations have migrated from Massachusetts. If anything, our law has been a trifle too strict.

Q. (By Mr. CLARKE.) You refer now not to the railroad law, but the antistock-watering laws?—A. The antistock-watering laws. The law says specifically that no corporation shall issue stock except to the amount of actual investment in tangible, physical plant. A lawyer told me the other day that he was called upon to organize a small business corporation which was manufacturing electric fans. The patent for those fans was the foundation of the entire business. They went to the corporation commissioner and asked for authority to capitalize the value of their factory and of their assets, plus \$3,000, which they entered on their balance sheet as "patents," and the commissioner of corporations said, "No; a patent is not tangible, visible property, and we can not allow you to capitalize it, but you may borrow money to the amount of \$3,000, purchase that patent from some member of your own corporation, who will act in an individual capacity; then you can show upon your books that you have paid out \$3,000, so that that purchase of a patent for \$3,000 may be capitalized." I give this merely as an illustration, to show that in some details the Massachusetts law leans a little bit over backward.

Q. (By Mr. LITCHMAN.) Does not that also show that you can whip the devil around the stump if you want to?—A. It does; but it shows that if you compare the capitalization of our Massachusetts companies with those in other States you will find that the devil has been whipped less times around the stump than in other States.

Q. (By Mr. PHILLIPS.) Is the Massachusetts law too strict, or are the laws of the other States too lax?—A. I should say at once that the laws in the other States are too lax. If the United States could regulate corporations in the way the State of Massachusetts has regulated them, at great cost to itself—I mean at the cost of emigration to other States where they can do what they wish—I believe that the abuses could be mitigated to a considerable extent.

Q. Then you would be in favor of a uniform law in the States in regard to capitalization of corporations and public utilities?—A. I believe there is nothing that would make matters easier for Massachusetts. Our labor laws in Massachusetts are so strict that our people would welcome, more than anything else, laws which would level up the regulation of such business to the Massachusetts standpoint. There is no denying that in many cases, in two-thirds of the grants to municipal-service corporations in Massachusetts, they have gotten around the laws by reason of special exemptions; but taking the State as a whole the corporations are very much less overcapitalized, so that you may predicate pretty closely the value of the property by the figure of the capitalization. For instance, in Massachusetts the average capitalization of our street railways, exclusive of Boston, is about \$37,000 to \$40,000 per mile. The average capitalization of the street railways in Pennsylvania, of Philadelphia at least, is something like \$120,000 a mile; and in New York State it is in the neighborhood of \$100,000 a mile. I will cite directly from an article in the Quarterly Journal of Economics for November, 1900, to prove that fact in detail. For Massachusetts street railways the capitalization per stock and funded debt in 1899, according to the Massachusetts railroad commissioners, was \$46,600 per mile; of the New York street railways it was \$177,000; that is, more than four times. Pennsylvania was \$128,000 per mile. Whereas the capitalization of the steam railroads in the United States, with all their expenses of right of way, of grading, of stations, etc.—the capitalization, according to the last report of the Interstate Commerce Commission, was \$80,000 per mile.

Q. (By Mr. LITCHMAN.) In that connection, do you take into consideration that in some of the cities in some of the States the street railway has to pave the entire width of the road, while in some other cases they only pave between tracks?—A. In Philadelphia they do that, paving the entire width of the road, I believe.

Q. That would make a difference in the cost per mile?—A. Of course, the actual use, the actual service to which this capitalization in the different States was put, I did not intend to raise at this point. It was merely to show that our Massachusetts corporations do not incorporate for anywhere near the aggregate amount of par value of stock and bonds per mile which is customary in other parts of the country.

Q. If the other roads are compelled by the conditions surrounding them to pay a larger cost on establishing plant, is not the larger capitalization per mile justified?—A. It is. I should like to qualify what I have said. Low capitalization does not necessarily mean the removal of evil and abuses. It depends entirely upon circumstances. A road which represents a small investment of capital, which is conducting business at a very narrow margin, may be capitalized at \$28,000 a mile, and that may be excessive—that may be twice too much. Another road which may be capitalized for \$80,000, or \$80,000, or \$100,000 per mile—represented in the property and in the earnings of that capitalization—would not be overcapitalized. It should depend entirely upon the nature of the business.

Q. You suggested that there might be a remedy for this discrimination and cutting of rates by pooling among the different roads, approved by the managers of those roads. The question arises there, Would there be any safeguard for the general public if the managers of the pools were engaged in enterprises that benefited by the discrimination in rates?—A. I should say no.

Q. Would not the very fact of the pooling of rates for the general public give to the special favorites of the pool a still larger advantage than they enjoy at the present time?—A. That presupposes entirely that the pool is able to control the railroad—that the pool and the trust, if I may use that phrase, are in the same hands. They are. The railroads and pools are undoubtedly tied up together. There is hardly a large trust to-day which does not own enough track so that it can make shipments on a joint rate. For instance, the large steel and wire company at Cleveland, I believe, has some 37 miles of track. Why do they keep that? Solely because, operating as a railroad corporation, they are enabled to make joint

rates, and their shipments are made over this 37 miles of track, then going over the track of a larger railroad. The celebrated Counselman case, which determined the powers of the Interstate Commerce Commission, was raised by the Illinois Steel Company, which, owning several tracks around Chicago, was enabled to use those tracks to secure low joint through rates, which would not have been quite so low if the shipment had originated and terminated under the same corporation.

Q. Have you thought along the line of Government ownership and control of trunk lines?—A. I have thought about it; and if the service could be maintained as our post-office service is, if it could be maintained as the Government service in Germany is, and all be in the control of the United States as an entirety, certain of the abuses at the present time might be eliminated. Whether others would arise it is not my purpose to question here; but this point I should emphasize, that when it is done it has all got to be done at once. In Belgium they tried Government ownership alongside of private ownership, and the result was that the Government had to come down to the level of cut rates and personal discrimination and everything else in order to live. They had to be just as low in their tariffs as the private roads. When Government ownership comes, if it ever does, it is my own personal judgment that it must be effected in such a way that competition between the Government roads and private roads shall not arise and force the Government road to the level of the other road. The higher rate does not pull the cut rate up to its level; it is the lower one that forces the higher one down, as a rule.

Q. (By Mr. PHILLIPS.) Are you going on the principle that the Government can not transport as cheaply, that it must come down to the lower level? The theory is that it would be cheaper, and it would not therefore be cut by the private roads.—A. Practically, the whole problem is so complex, as I see it to-day, that I should hesitate very much to predict what might happen in such a case. It undoubtedly would cure many of the abuses of the present time. Whether it would give rise to others more serious I should hesitate to say. But I can say this, in my judgment, that when it was done it would have to be done as an experiment for the whole country at once; and the amount of capital involved at the present time is so great that that removes it as a possibility for some years. Ultimately it may come. In Germany the service, as I know it—I have traveled a good deal on the foreign roads—the service is good, but it is not at the level of our American efficiency by any means, and that is by reason of the absence of competition. The question of facilities offered to travelers is just as much subject to variation as is the rate charged. This is the greatest difficulty in our Massachusetts and New England territory, which is practically pooled. You may observe the practical effect of pooling if you will go anywhere north of the Fitchburg road up to the boundary of Canada, the entire territory being subject to the Boston and Maine. The result is seen definitely in the facilities offered. There is not that competition which keeps the service up to the high level of efficiency. People are obliged to be content with slow trains, with fewer trains, and with many other inconveniences. For instance, how long would the Chicago and Rock Island Railroad and those other roads in competition with it, which give you a reclining chair for the ordinary fare, be able to operate if in a run of 150 miles its trains were sidetracked three times in order to let cattle cars pass and the train on that run were two hours and a half late? That is the experience of a friend of mine in our territory recently. On the Rock Island, or the C., B. and Q., or any of those roads, they know perfectly well that if they do not give quick trains and good service—and here we are leaving out of view rates—the traffic will go by the other lines. And if you have consolidation so that people have got to go one way or not at all, that is to say, if there is no competition, all the roads keep on the same level. It is therefore more difficult to improve the facilities offered unless there is a body somewhere which has the power to prescribe what they ought to be.

Q. (By Mr. CLARKE.) Was not that preference given to cattle trains due to the necessity of landing that freight at the port for connecting with a certain vessel?—A. Entirely; either that or else that the freight was perishable.

Q. Would not that occur under Government control or under a pooling arrangement in the same way?—A. I think it might, except that a road which was under competitive conditions, like many of the Western lines, would simply have to put in double track or much more double track in order to meet that condition. I do not mean to say by any means that that is typical of the whole situation, but I mention it as a possible effect of the absence of competition in service.

Q. Is it not a fact that since the Boston and Maine acquired control of the Eastern Road, which was a close competitor, it has largely increased the train service to almost all competing points?—A. It is; and the comfort of the public is vastly greater than it was many years ago.

Q. Is it not a fact that that company has begun the use of coke as a fuel in locomotives largely for the purpose of reducing or overcoming the nuisance of smoke and cinders in trains, even at a possible greater cost than the burning of soft coal?—A. I can not say as to that on the Boston and Maine. I know that on our local service, on the Boston and Albany, they have used coke, and it is a most intolerable nuisance in producing gas instead of smoke. We have gas now in the cars to a very objectionable degree. I would say also that recently the Boston and Albany has discontinued the use of coke on its through trains, owing to its serious defects as a fuel. It is used only in suburban service, I understand. But I would not be understood as saying that the instance I gave was typical of the whole service of the Boston and Maine. The combining together of all those lines, the Boston and Maine taking the management of the whole, with larger trains, has vastly increased the convenience of the public. What I wished to illustrate was this: That where there is not competition there is a tendency to hold back; there is not that incentive which becomes a matter of self-preservation to add the very latest and very best improvements which must prevail where competitive conditions exist.

Q. Now, does not that depend largely upon the enlightenment and breadth of view of the railroad management and also upon the competition that exists, which may be even remote, at which would tend to draw business from that section?—A. Yes; the railroads of Massachusetts appreciate—as I believe all the better railroads of the country do—that their prosperity is inextricably bound up with the prosperity, nay, with the very existence, of manufactures and a growing population in the districts which they serve. The only question is this: Whether a given tonnage shall come from twenty sources or whether it shall come from a thousand sources. That is, whether a railroad operating purely as a financial concern may not make as large earnings from a small number of consolidated concerns, thus minimizing the cost to the railroad by making shipments in bulk and in a definite way, as they could otherwise from the existence of a number of manufactures scattered through many small towns. I recall a place in Rhode Island where there is a large 4-story stone factory, constructed in the substantial style of the old mills in the New England States, which has been idle a great many years. The machinery has been taken out, the windows are boarded up, and it is a very depressing object in the landscape. I asked the reason why that factory was abandoned, and was told that it was not because it was more expensive to manufacture at that particular place than formerly, but that it had become very much cheaper to manufacture in some other place and that it was the better railroad facilities in other towns which had affected that district. I do not mean that that industry has moved out of Rhode Island or out of the territory of that particular road concerned, but it has gone into Providence; the capital has gone into Providence, or it has gone into Pawtucket, or it has gone into some one of the larger towns. I believe the direct effect of the prevention by some means or other of this local and personal discrimination in the matter of rates would lead to a much more widespread distribution of industries in the small towns of the country, with less of this aggregation of industries in particular centers where they get the benefit of competitive rates. No manufacturer to-day will locate his plant where he is not going to get the benefit of through rates and of competitive rates, if possible, although a definite department in our railroad businesses—and the Western roads are particularly enterprising in this respect—has to do with the stimulation and encouragement of industries within their territory. The sole question here is as to whether there shall be a few large industries or a great number of small ones.

EXPLANATION OF DIAGRAM.

I should like to illustrate a point which we have not considered, namely, the effect of the long and the short haul clause in the interstate-commerce act [producing Diagram I]. I think Diagram I may bring out certain points of interest in regard to local discriminations. It represents the local freight rates on the Illinois Central Railroad on its main line from Chicago to New Orleans. This was made by one of my students. We plotted along the base line, mileage, showing the different stations, with the number of miles in proportion to the distance from Chicago at one end or to New Orleans at the other. The height ~~and off~~ at any given point thus fixed indicates the published rate to that station ~~as we took~~ it from the tariff of that railroad. In other words, at the station of Mattoon, Ill., the railroad rate from Chicago to that particular town is about 45 cents per hundred pounds, we will say, on first-class freight; it is about 30 cents per hundred pounds on third-class freight, and it is about 15 cents per hundred pounds on fifth-class freight. The general direction of the lines connecting the various

points for each way station fixed in this way will indicate whether over a long distance rates tend to increase in proportion to that distance or whether they tend to remain almost constant. You will observe this very common phenomenon under the operation of the long and short haul clause; That often over a stretch on some of the Western railroads of two or three hundred miles the freight rate will not vary at all. The line drawn as I have described will run perfectly horizontal. Where the line descends, as at a point like Cairo, Ill., you have got competition. The reason why our curve varies or turns so little—that is to say, why the freight rate over 100 miles is almost as much as it is to Cairo, Ill.—is because the long and short haul clause prohibits these local rates from being any higher than at that competitive point. That competitive point is fixed as to freight rates by the conditions of business. Then the railroads have to work back from these points and get as much as they can out of the intervening territory; that is, they endeavor to hold the rates up on all these local stations just as near that level as they can, avoiding infraction of the law. That is the theory. See how it works in practice. Cairo, Ill., like Boston, Mass., or Worcester or Fitchburg, or any place which is at a competitive point, comes in apparently at this published rate; but, in fact, it often secures a secret rate which carries it away down. All these local stations are then paying the full rate which is published in the tariff, but this particular competitive point is getting a great advantage. What is the result? Population goes there, industries go in there, and that place, like all the large towns in Massachusetts, practically absorbs the whole increase of population for that district. I have found 11 towns in 1 bunch in the Berkshire Hills where the population is practically the same that it was 75 years ago, and yet the population of Massachusetts and its wealth go on increasing. Instead, however, of its being distributed all over the country, it is bunched in these places where you have this discrimination and all these facilities. This means the difference between success and destruction to a business man; and the little industries which are at way stations have either got to move into the large town or be destroyed.

Q. You recognize, however, that that is only one factor in the determination of the gravitation of people to central places?—A. Perfectly, with the social factor and a great many others; but I think that this is a patent one, which should be considered. The fact, as I view it, would be that while on the published tariff it looks all right, as if everything were entirely in accordance with the provisions of the interstate-commerce act, yet in fact at every one of these competitive points there is liable to be a big drop in rates, which is giving an advantage to that town, to that section of people, or to that industry, or perhaps to a particular industry, which is a big one, in that particular place. That is to say, you have got several advantages piled one on top of the other, and it is at such favored places that you find the plants of the great industrial organizations located. They have the option in many different parts of the country of simply closing up one establishment here, closing up another there, and simply putting all their force at work at 1 station. Then they can put in 2 shifts of men and can increase their machinery, so that at a given point, such as this competitive one, they can turn out as much product as 3 mills at other places could do. Those mills at the other places remain closed down at least during periods of depression, and are merely held as reserve agencies to meet the very greatly increased demand which appears in times of prosperity.

Q. (By Mr. FARQUHAR.) Suppose you continue your description of the diagram beyond Cairo, southward.—A. At once they put on all they could to the next few stations, and again having raised it as much as the traffic will bear, the line again goes on more horizontally to the next competitive point. As you go down, finally to New Orleans, of course you see that the traffic is bearing all that it possibly can at that level until you get a sudden drop to the margin of water competition. Of course, with the railroad at water competitive points, you can not have your rate any higher to New Orleans than it would be by some other road or rail and water route combined.

Q. The Illinois Central has strong water competition at Cairo, stronger than any other point on that whole road?—A. Yes; except for local freight rates which are not on that river. The section off from the river is not held down to the low level of the river rates.

Q. I mean on through freights.—A. On through freights. This measures the rates from any one of those stations down to New Orleans.

Q. Your diagram would show, then, that measurably the water transportation from Cairo down to New Orleans does not seem to be able to keep the rates down on the Illinois Central, an almost parallel route to the river?—A. Not on this branch of the road.

Q. That is the main line?—A. We are dealing with local stations, and the local rate from such stations over to the river to obtain water transportation rates would be prohibitive.

Q. But, granting that from Cairo to New Orleans the locals on the Illinois Central are very high, traffic is very light?—A. I suppose it is.

Q. And you say the great through carriage is the one that has to be considered, and yet you find on your diagram that the cheap water rates seemingly have no way of bringing down this rate, which just increases until it reaches the Gulf?—A. The local rates, yes. The through rates would be absolutely different, and the through rates are fixed by the competition even of the trunk lines to Newport News. The through rate from Chicago to New Orleans can not be more than they can ship goods for to Newport News and around by steamer. This simply applies here to all those local stations which can not get down to New Orleans by water or by local shipment over the river.

Q. (By Mr. A. L. HARRIS.) The through rates would be represented by the line from Cairo to New Orleans?—A. Yes; that is, the through rate from Chicago to New Orleans, and you see how much lower than the local rate it is. We have plotted a great number of these diagrams for the different roads of the country within the last year, and on some of the long distance Pacific roads you get a very striking phenomenon. The rates will rise suddenly and then they will run for 200 or 300 miles perfectly even. In other words, as you go through their freight tariffs the rate will be absolutely the same—it may vary a fraction of a cent—for 300 or 400 miles; it will be held down until you reach some competitive point, and then it will take another jump and thereafter run along on a level. But the point I wish to make is, that at each of those competitive points there really is at any time a cut very much below the published tariff by reason of the rate cutting, which always arises when conditions are ripe for it.

An interesting and valuable investigation would be an inquiry into the financial effect of some of the recent reorganizations. For instance, after the reorganization of the Reading Railroad, on the main line from Philadelphia to Mount Carbon, they have no less than 8 different classes of securities; and then they have on each of the branch lines which run out another different class of securities, issued at a different rate of interest for a different term of years, under long terms of lease, which may be more or less advantageous to the branch line or to the parent company. The reorganization is generally intended to wipe out that very great complexity of interests and to substitute, as in the case of the Union Pacific reorganization, perhaps 2 or a single class of securities applying over the whole line. It very greatly simplifies the problem of determining how much capitalization there is and what the relation of the capitalization to earnings in any particular case is. The financial organization of some of these roads and the history of them should be worked out in some way in order to establish landmarks in railroad history for future reference. In the Hepburn investigation in the legislature of New York, we have a clear picture of the state of railroad finance and misfinance up to that time, and in the Cullom committee of 1884 we have a statement as to that period. I hope—and this is the opinion of the professional class to which I belong, and also I believe of the public—that your commission will through some means put in definite form, while the evidence is still available, the history and the inside history, so far as it can be determined, of all the great reorganizations and consolidations which have taken place since 1893. There are 6 or 7 prominent reorganizations which should be considered, and the growth of present systems, especially such combinations as have taken place in the last 3 or 4 days or are seemingly projected for the future, such as the combination of the Milwaukee and St. Paul, of the Northern Pacific and the Great Northern, and possibly of the Erie. Such consolidations mean a great deal to the public in the amount of securities which are issued by the terms of the lease or purchase, and the public have a right to know what those terms are. Fortunately you can always get information on those points because invariably in any such dealings there is a class of dissident bondholders or stockholders who only crave the opportunity to reveal what they know or what they think they know respecting the transaction; and very much interesting and highly valuable information, from the public point of view, may be forthcoming by choosing a few of such men who have an interest in the road, and whose interest it is to talk about it afterwards.

Q. (By Mr. PHILLIPS.) When this consolidation occurs on these lines of which you speak, the reorganization usually pays on its own capitalization, and also for the leased road's interest on the stock and interest on the bonds?—A. That depends entirely on the terms of the lease.

Q. In a great many cases that is the case?—A. Yes.

Q. And then on the same system of roads they are paying 3 or 4 different kinds of interest?—A. Yes.

Q. And in that way they can have more fixed charges, can they not, and not issue any new bonds?—A. I understand that that was their result formerly. I have not had time to go into it fully enough to work over some of the most recent reorganizations, but I understand from working over others, preliminarily, that they have first of all greatly simplified the number of issues. Instead of there being 8 or 10 different liens on different lines of track they have reduced those to 1 or 2. They have very considerably cut down in most cases their fixed charges; that is, the amount of interest charge is less because the rate of interest is lower. They can refund practically for 3½ per cent or even 8½ per cent where formerly they had to pay on those fixed charges 6 or even 7 per cent. But they have not decreased the amount of stock. The amount of stock in many cases has gone on increasing, as in the instance of the Atchison, which I mentioned. The reason for that is in part, as far as I can discover, that persons who are represented by all of those 8 or 10 different securities resting on a given line are not willing to accept in place of their own securities others of a lesser par value than those which they formerly possessed. The result is that many people are satisfied to get a large amount of stock in par value which does not sell for much on the exchange, to have their own old securities rather than get a few shares of something which perhaps will sell higher. There is always a possibility, when you get a large amount of stock that is perhaps worth \$2 or \$3 or \$5 a share, that it may run up toward par; and, of course, the profit will be correspondingly increased. But all of those 8 or 10 classes of security holders, as in the complex case of the Reading, wish to be remembered in the reorganization by a certain amount of stock, which they hope will go up toward par later. All of them being remembered, and being remembered by a large amount in par value, the result is that through the reorganization you have got more stock and bonds than you had before you went into it; whereas the real cause of the receivership and of disaster was that they had too many stocks and bonds in the first place. It is an anomalous condition which is very difficult to meet by legislation, but which I believe can be met in part by enlarging the powers and putting the control over such financial operations into the hands of the Interstate Commerce Commission.

Q. (By Mr. CLARKE.) I would like to ask a question concerning a statement which you made to the effect that the Canadian trunk lines are not subject to the interstate-commerce law. I assume that you are aware of what was reported the Interstate Commerce Commission, on page 63 of its annual report for 1892, to the effect that it was admitted before the commission by the attorneys for the Canadian Pacific and Grand Trunk railways in a hearing at Chicago on the 14th of July, 1892, that those roads are subject to the law to regulate commerce applied to them and their transportation, interstate and international, not only to points in Canada but to all points through Canada in which they are engaged in traffic in every particular. I would like to inquire if you have knowledge of any change in the situation from 1892 to the present time?—A. I believe that your statement is correct. I should, perhaps, modify the statement that I made and place it upon this basis, that the Canadian roads are allowed by the American roads a differential in order, so far as I can discover, not to bring that question to an issue; that is, rather than fight it out they have allowed and do allow in practice the Canadian roads to charge less for a similar haul than the roads allow themselves in United States territory. The impression which I have very strongly is that these roads and their status are different from the situation which is described in 1892. For no other reason can I explain the undoubted desire of the trunk lines to secure some additional tariff which should be imposed, as by the act of 1897 upon traffic which went outside of the United States. I had always supposed that there must be some such information upon it, but it would require a definite examination of the law to determine that point.

Q. Are you aware that the trunk lines in the United States, or at least some of them, made an effort before the Joint High Commission between Great Britain, Canada, and the United States, 2 years ago to get an article in the treaty which it was supposed they would enter into, authorizing the President of the United States to suspend the transit-in-bond privilege in case he became satisfied that the Canadian roads were violating the interstate-commerce law?—A. I was not aware of that fact.

Q. (By Mr. FARQUHAR.) I think there was a statement made here with respect to New England people that there was a discrimination in their cotton and fabric shipments in favor of the South.—A. That is not so; the opposite seems rather to be true. May I give one illustration there? A cotton manufacturer gave me this the other day. It shows in a way one of the burdens which rests upon these

cotton mills in the South in the matter of railroad rates, the southern territory being more nearly pooled than are other parts of the country. The rate on starch, per 100 pounds, from Peoria, Ill., to mills at Chicopee and other New England points was 15 cents. The rate on starch from Peoria, Ill., to cotton mills owned by the same corporation within the southern territory for the same service was 51 cents. He quoted this to me from a bill which had just come in for freight on his starch. In other words, for a distance very considerably greater—I should judge, by the map—15 cents was paid, whereas to the southern territory the rate was 51 cents. That illustration of the rates into the southern territory is indicative, I believe, of the rates which apply out of the southern territory. A certain burden is thus imposed upon the southern manufacturer in that territory for that reason.

Q. (By Mr. CLARKE.) To recur now to the transit-in-bond question, would not the suspension of that privilege be a great damage to the shippers over those roads located in New England and the West and South?—A. Yes.

Q. And would they not be punished even worse than the railroad companies themselves would be?—A. I think so; yes. The continuance of shipment under some just conditions is of very vital importance to the industries of that section of the country.

Q. Therefore inasmuch as the Canadian roads have admitted that they are subject to the interstate-commerce act, and inasmuch as it is certain that the American ends of those through lines are subject to the interstate-commerce act, is it not better that the interstate-commerce act should be enforced, than that there should be any suspension of the privilege of transit in bond?—A. I should say so. I am not familiar with much of the law that would bear upon that point.

Q. (By Mr. A. L. HARRIS.) Is it true or not that the through export rate from this country, say to China, are lower over the Canadian Pacific road than they are over any of our roads?—A. They are not to-day. As I understand it, they should be according to agreement. The Canadian Pacific is allowed by agreement of the American roads to charge a lesser rate than is charged by the other transcontinental lines, but in practice to-day shipments are going to Seattle and San Francisco within the territory of the United States at less than the rate that was to be allowed the Canadian Pacific, by reason of this rate war that has been on in Massachusetts during the last few months.

Q. Taking the inland rate and the ocean rate as a unit, and the point of export being China or any other Pacific point, is there any advantage in shipping over the Canadian Pacific road?—A. I think not. I think a through bill of lading is given in each case. So far as rates are concerned, I think not. In addition to the official, the Southern, the Western, and the special Illinois and Iowa classifications, there is a classification and a special freight tariff published by the transcontinental lines. The rates from one point to another, of course, are determined primarily by competition with water carriage, and the rate is entirely the same, as I have said before, from any point east of the Mississippi River to the Pacific coast. The rate from Chicago to San Francisco is to-day precisely the same—I mean on paper—as the rate from Boston to San Francisco or from any other point east of the Mississippi River.

That is suggestive to my mind as showing how little geography counts in the matter of railroad rates at the present time. The same rate applies over vast expanses of territory with the exception of the Southern States. North of the Ohio and east of the Mississippi you can ship from any city to the Pacific for the same figure. That puts Boston and the other Eastern manufacturing towns that are shipping products to the Orient, of course, on a par with manufactures that are springing up in other parts of the country. The whole subject of import and export rates is a highly important one.

(After a recess the testimony of Mr. Ripley was resumed, as follows:)

THE WITNESS. The whole matter of export and import rates is in an inchoate condition at the present time. The Interstate Commerce Commission has particularly attempted to prevent discrimination on shipments from interior points to foreign countries on the ground that they place our own manufacturers at a disadvantage in competition with foreigners; in other words, that it was not in accord with public policy that the freight rate from Chicago to Liverpool should be less for the entire haul—rail and water—than the rate from Chicago to the local consumer at Boston or some intermediate point. The Interstate Commerce Commission has so adjudged, as I understand it, but the Supreme Court of the United States has, on the other hand, supported the contention of the railroads, especially in the case of the Texas and Pacific Railroad, in which the right of that road to make a rate from New Orleans to San Francisco on goods which had come to New Orleans from Liverpool by water—to make that rate from New Orleans

to San Francisco not more than one-third of the rate which a New Orleans manufacturer would have to pay for the same transportation; in one particular case, for instance, the Texas and Pacific Railway discriminates against the shipper from New Orleans to San Francisco and in favor of the shipper in Liverpool who ships to San Francisco, via New Orleans, by water. The discrimination was from 50 to 200 per cent, as appeared in the testimony in that case. The Supreme Court decided that a railroad was justified in thus discriminating against an American producer, in favor of the one in Liverpool attempting to put down the goods in San Francisco in competition with him, and they did so on this ground, that the rate from New Orleans to San Francisco by land must meet the competitive rate by water, and also that the combined rate from Liverpool to San Francisco—by water to New Orleans, thence by rail on to San Francisco—that that mixed rate must meet the straight water rate from Liverpool to San Francisco; that the minimum figure in either case was determined by the conditions of competition, so that if the Texas and Pacific did not take these goods for one-third of what it charged the domestic producer in New Orleans, that these same goods would not go via New Orleans at all, but would go entirely by water. They said this was not a discrimination against New Orleans. The conditions of competition exist, and it is an advantage to New Orleans that this business goes through that city, which otherwise would go entirely by water. The situation, then, is this: While the Interstate Commerce Commission has attempted to rule out such import and export rates the Supreme Court has upheld them, and the status of the question under the law is consequently mixed. In another case, on books, buttons, carpets, hosiery, etc., the domestic rate from New Orleans to San Francisco was \$2.88 per hundredweight, while the total rate on imported goods from Liverpool was \$1.07, and the Texas and Pacific got only its proportional amount of that \$1.07; the result being that while the New Orleans producer was paying \$2.88 for his transportation, the Liverpool producer was getting the same number of miles haul for a fraction of \$1.07.

That is a question which should, it seems to me, be investigated quite thoroughly respecting the various phases of it as they occur in this country. One I have already suggested; the haul across country from New Orleans is very important; another is the transport of cotton goods from New England manufacturers to the Orient, they then being carried by water from Vancouver, Seattle, or San Francisco. The existence of these low export rates to the Pacific is absolutely essential to the manufacturers in order to keep them on a par with manufacturers who can send the entire way by water. Unless the Pacific lines, therefore, are to carry these cotton goods for a figure which will be less than they would charge for carrying the same cotton goods for consumption in California or Colorado, the goods will not go that way. They will either go entirely by water, or the market of the New England manufacturer will be restricted. That is another phase of the same question.

Turning it the other way round, we have to consider the export rates and southern California fruits which are destined for Europe. Whether the consumer in the eastern part of the United States shall pay more for the haul entirely on land within the United States—far more than shall be charged for goods which are to be consumed in Europe and which are to be hauled three or four times the distance—is the question. The existence of a great many industries depends on their continuance under certain regulations. As I say, the law is very mixed at present. The continuance of that system is a problem not peculiar to the United States. They have the same thing in England. Here is an extreme case which was brought out in part of the testimony before the Interstate Commerce Commission: Tin plate was carried from Swansea to Liverpool, thence to New York and to Chicago, via Pittsburg, at a total charge less than the published rate from Pittsburg to Chicago; that is to say, the producer of tin plate in Pittsburg, attempting to sell his product in Chicago, was paying more for that haul of a few hundred miles than did the producers of tin plate abroad. I believe that here is a serious question involving the rights of the consumer in this country and of the producer, upon which testimony might be collected which would have a very definite value.

Q. (By Mr. CLARKE.) Have you studied that problem in connection with the same business, in the application of the principles of a protective tariff to it also?—
A. I have not. I can see that in many cases the existence of these import rates may nullify or render of far less value certain protective duties which may be in force. It would wear them out altogether. But it is a highly complicated question which I think should be investigated from the point of view of facts collected in the field.

Q. (By Mr. PHILLIPS.) Have you any facts in regard to farm products being

shipped from the West through to Liverpool?—A. I have not any further than this, that I think it can be established that these products will not go through to Liverpool without a special concession in rates; or rather that the trunk lines can not live if they give to all their traffic as low a rate of freight as they have to be contented with on traffic going abroad. The distinction between import and export rates is clear. The import rate concerns the producer in this country; the export rate bears a little differently, because it concerns the railroad; that is to say, the railroad can not live on the few cents per bushel or per hundredweight on all its traffic with which it must be contented on its export traffic alone. The road could not live if it got no more than that on its traffic. It is one of the most complicated questions in the whole domain of rates, and I think a comparison of the conditions in our field with those that have had to be met under the laws of England and other countries would be highly suggestive.

The question of import and export rates also becomes important as bearing upon the matter of personal discrimination. The Eastern Trunk Line Association in April of this year was obliged to make a ruling (and there was a great deal of opposition to it) respecting the character of goods which were coming for export. We will say a shipper from Chicago or Milwaukee, or some other Western point of shipment, sent a package of goods on an export through bill, and consequently at a low rate, but included in that package a number of goods destined for local delivery in New York. Then when they went through the hands of the shipping agents in New York they removed from the package that part intended for local delivery, thereby getting the advantage of the low export rates on goods intended for local traffic, making a very considerable profit in that way. The ruling of the Trunk Line Association, if I remember rightly, was that whenever the package contained goods destined for abroad and charged consequently a low export through rate, that package should be charged less than carload rates; that if it contained any goods destined for local shipment, that should vitiate the contract and that higher local rates should be paid on the entire package.

Q. (By Mr. FARQUHAR.) How could you emasculate the through bill of lading by subtracting a part of the goods in New York?—A. I think they were content to pay the entire through rate on the whole package of goods; it was cheaper to pay on the whole package of goods through to Liverpool than to pay the local freight rates on a portion to New York.

Q. Would they have to rewrite the through bill of lading?—A. I have from the New York Journal of Commerce a statement about that, which may perhaps cover that particular point. The exact rule adopted by the Trunk Line Association freight committee provides that when any local goods are shipped in the car with export freight, less than carload rates must be charged.

There is another phase of investigation, of which I know very little, but which I think has an important bearing on the distribution of industries, and that is the effect of the basing-point system in the Southern States. I have tried to get information about that from several sources, but find it difficult. It is essentially different from the condition that prevails in the traffic north of the Ohio. I understand the influence of it is still more strongly felt than in the North, to concentrate industrial activity at particular places. I refer to the way in which they build up all the rates from certain basing points.

Q. (By Mr. CLARKE.) Do you understand the matter of basing points is peculiar to the Southern States?—A. I suppose it is developed further there than elsewhere. I can illustrate that to you by a diagram which is published by the chief inspector of the joint rate and inspection bureau of the Trunk Line Association at Chicago. This map is published by the railroads for the use of their agents and shows the distribution of the percentage rates on the Chicago and New York basis, which is the nearest approach in the North to the Southern basing-point system: that is to say, the distance from Chicago to New York is always taken as 100. [Here the witness used the map as he proceeded with his testimony.] In parts of this territory shipments from any point within it are 96 per cent of the Chicago-New York rate, whatever that may be. The rate may be modified by agreement between the railroads. It may be 75 cents on a certain class, or fall to 60 cents, or go up to 80 cents, but whatever it is, it is 96 per cent of that rate in this section of the territory. Within other parts of the territory it is 95 per cent of that Chicago-New York rate—65 or 80 or 110 per cent, or whatever it might be.

Q. How long has that system been in vogue?—A. I think for a great many years; I can not state directly, but it is the basis of the entire east-bound shipment at the present time. This is within Central Traffic Association territory; further to the east the rates are regulated by the Eastern Trunk Line Association. It shows more clearly than anything else, I think, the way in which competition upsets geography. Rates do not conform to distances at all; while roughly corresponding to them, they do not follow directly a distance basis.

The Canadian territory, you will see, is divided in the same way, with the various shipping rates. To my mind that would come out very much more clearly if 60 per cent, for instance, were white on the map and it gradually came down in shade until you ran up to 123 per cent, as you see in the northwest sections of this country, in which the absence of competitive conditions bears heavily on industrial development.

Q. (By Mr. TOMPKINS.) I have heard the statement made that English ships are giving lower rates to New York and to Shanghai than from Liverpool to Shanghai. Do you know anything about that?—A. I know nothing about it. I should be glad to know. The question of ocean freights is one upon which it is exceedingly difficult to get evidence; lying entirely without the territorial jurisdiction of the several countries, material is far more difficult to obtain than it is in the matter of railroads; but of course it is and should be an essential part of any investigation of import and export rates.

The next topic which I had marked in your topical plan was that of classification of freight. The Interstate Commerce Commission and the various conventions of the State railroad commissioners from all over the country have attempted and are still seeking to devise a uniform classification of freight for the entire United States. At present there are in the neighborhood of five such classifications, the principal one of which, known as the Official Classification, covers the territory east of the Mississippi—that of the Eastern Trunk Line Association; another covers the far Western States and is known as the Western Classification; another covers the territory south of the Ohio and is known as the Southern Classification; and then several of the States, Illinois and Iowa, I believe, prescribe by law what the classification of freight on their railroads shall be.

I have already spoken of and tried to emphasize the fact that classification means high or low rates. That is to say, you may have a reduction of rates on a railroad, but if boots and shoes, which formerly went second class, are by the new classification moved up into first class, the reduction of the general schedule may be offset or more than met by that device; and a great many classifications have been changed since the enactment of the Interstate Commerce Law—probably 21; the twenty-first of these classifications in the eastern territory has just been published within a week.

Absence of uniform classification occasions very great difficulty when a man wishes to ship a certain class of goods from New York over into Nebraska, owing to the fact that his commodity may be first class under the official classification of the lines east of the Mississippi, and from that point on those same goods in the other classification of the Western States may be rated second class. It occasions difficulty in the assessment of charges, and it makes it exceedingly difficult to compare the movement of rates to-day with those that prevailed a year or 2 years or 10 years ago. It is almost impossible to trace the movement of rates which extend across lines of division between different classification territories.

The result of all this is, as I said in the beginning, that the Interstate Commerce Commission and the annual conventions of State railroad commissioners have sought to prevail upon the railroads to devise themselves a universal classification which shall apply all over the country, so that oranges shall be first-class freight in New England and first-class freight in California; so that cotton goods shall be first class from one end of the country to the other; so that all those articles which do not go at commodity rates shall be similarly classified within the entire territory of the United States.

The difficulty in the way of so doing is very considerable, although the advantage would undoubtedly be great; and the difficulty, as I understand it, is that a commodity in one part of the country is the ordinary product of the soil, while it becomes at a distant point from production perhaps a luxury, and that consequently the railroads, in charging as they do at the present time what the traffic will bear, must charge at a low classification in the country of production, but when you get into the country where it becomes a luxury they might otherwise charge more without killing the business. In other words, to illustrate, oranges in California are the product of the soil—the common product of a local industry—and to put oranges first class in California is to levy an excessive burden upon that community. Oranges are worth comparatively little by the box in that place, but transport those oranges to the northeastern corner of the United States and they become worth so much a dozen. This increase in value makes it possible to move them up in the scale of classification and to charge correspondingly more. Suppose they were to apply a uniform classification and make oranges first class throughout the entire United States, the result would be that the first-class rates on the California roads, which are very high, would be such as to simply smother the industry. Suppose, on the other hand, that they sought to put oranges in the

fourth class; the result would be that oranges, which are expensive to handle and which require quick shipment through the New England territory, would be yielding a great deal less to the railroads than other traffic of a similarly valuable kind.

An illustration has come to me equally suggestive as bearing on manufactures, as follows: Through the Indiana, Ohio, and Illinois industrial territory agricultural implements are manufactured and shipped west in considerable numbers. Wood enters as an important element into the cost of production of these goods. They are the product (as were the oranges in California) of local industry, and it is to the interest of the railroad and absolutely essential to the prosperity of that section that those commodities should go at as low a rate as will yield a small profit to the railroad. But transport those same agricultural implements to California, where they have no wood and where the implements are needed for the development of the country, and charging what the traffic will bear will make it possible to classify these same implements not in third class, but perhaps first class. If the roads in California refuse to agree with those in Indiana, Illinois, and Ohio in accepting first-class rates on oranges, they would cut off the kind of traffic from which the Eastern roads make a great deal of profit; but, on the other hand, for the roads in Indiana, Illinois, and Ohio to refuse to accept a low classification on agricultural implements would similarly cut off from the Western roads a kind of traffic which is most profitable to them.

There should be, it seems to me, a sort of reciprocal interest here. Freight is going from the East to the West which is a product of the country in the East and which becomes a luxury in the West. Many products in the West are very cheap there, but when they come to the East they are so valuable they will bear higher classification rates. The whole question of uniform classification involves an agreement between all these railroads and a recognition of the fact that what one road loses on certain kinds of traffic it will gain on others at either end of the line. Whether there will be such a gain on the one hand as to offset loss on the other will depend on the character of the product. The attempt so far to bring the roads together has been unavailing, although great progress has been made. One of the greatest services of the interstate-commerce act has been that it has been influential to some degree in removing the great number of arbitrary classifications which were formerly in force. In 1883 on the Wabash road they had 9 different classifications in force on the line of that road. They had the classification of the Middle and Eastern States, which divided freight into 6 classes; they had the classification of the Southern Railway and Steamship Association, with 18 classes; they had the classification of the Mississippi Valley, with 5 classes, and so on. The result was that if you wanted to know how much a certain kind of service was going to cost, it took an interminable calculation, not at all unlike the calculations when they had the old State-bank notes and you had to carry a list in your pockets to show what each of the particular banks was good for. It was impossible to figure out what the rates would be in advance, and the shipper was at the mercy of the railroad. They charged what they pleased and gave him a statement that his shipment went through certain classification territories and that the rate was so and so much. Those highly complex conditions have been replaced by the comparatively simple situation to-day of 5 or 6 principal classifications, and it seems not unlikely that the ultimate result may be the acceptance by all the roads of a uniform schedule.

The next topic marked was "Consideration of advisability of prohibiting by law the increase of stock by interstate railways without a governmental permit therefor." I have already spoken of this this morning. I believe that it would be a modification of the law which would be of very great advantage in that it would give the commission a certain control over the roads, they having something which the roads wanted and which the commission alone could give. Whether such an amendment is possible under present conditions remains to be seen; but if it could be done as it is in Massachusetts it might go far to supply the present inability of the commission to prescribe what rates are reasonable and what are not. It would strengthen their hands very largely and would eradicate some of the unstable practices of stockjobbing at the present time. Although some phases of stock watering are not altogether bad and certain phases of it seem to be essential to the legitimate development of the property, what is legitimate and what is not depends upon the value of the property, the cost of duplicating it, and its earnings, in relation to the par value of the issues already out.

A very highly complicated question, and one in which I would suggest that your commission might gather material which should have value, would be a study of the movement of capitalization in, we will say, the last 10 years; the determination of the amount of such capitalization, which consisted of stocks as distinct from fixed charges, such as bonds.

A great many of our roads in this country are reducing their bond issues and substituting stock, for the reason that an issue of stock is a burden which may be laid down in time of depression; that is, dividends are not necessarily paid on stock. On the other hand bond charges must be met regularly or else there is bankruptcy or receivership. The difficulty in such substitution is that it is only an exceedingly strong road that can issue stock. The Eastern trunk lines can issue stock at a very considerable figure above par if they choose to do so. Of course, ordinarily, in any State outside of Massachusetts, such stock is issued to the stockholders at a bonus and the profit to the owners consists in the difference between the market value of the stock and the par values at which it is issued.

Another point in the investigation of capitalization worth consideration is the degree to which many of our large railroads are owned in this country or abroad. That is a matter of great public interest. An investigation has recently been made and published in the Yale Review. The information in the main has been gathered from foreign bankers to determine what railroads in this country are predominately owned in Europe and what are not. The financing of a railroad in Europe is almost always different from the financing of a railroad in this country. The English investors will buy bonds when they will not buy stock. The English traditions make the ownership of bonds seem more secure than stock; and in the roads like the Erie and Pennsylvania, in which foreign ownership is comparatively high—the Erie particularly, the influence of foreign traditions in the way of financing make themselves clearly apparent.

The degree to which the railroads are putting earnings back into the property or paying them out in dividends could also, I believe, be determined by a careful investigation. Some of the roads at the present time—for instance the New York Central—are paying a low rate of dividends because they are turning a large amount of surplus earnings back into the property in straightening curves, putting in new stations, and especially in developing terminals. Many of the other roads pay out money as fast as earned and those dividends show exactly what burden is resting on the public.

Q. (By Mr. FARQUHAR.) Do you think you could find out what the American railroads realized from bonds that were sold in Europe?—A. You mean at what discount or premium?

Q. Yes; is there any means of finding that out?—A. There is one means always open to an investigation of this question, and that is the testimony to be had of the dissenting stockholders or bondholders in any proposition. Whenever any financial operation is carried on there is nearly always some stock or bond holder who is willing to report—who would, perhaps, for instance, be willing to testify before your body.

Q. In any investigation you might make of this so-called stock watering would it not be a very good thing to find out whether bonds were sold for 60 and 62 and 65, and whether those bonds have paid interest since that time, and whether it has been a permanent debt on the road and bonds have to be issued by that road in the future to cover the difference between par and the selling price in Europe?—A. Precisely.

Q. Is not that fair? You would not call that stock watering?—A. That would not be technically stock watering, but it has the same effect; it increases the amount of securities outstanding.

Q. But legitimate as a matter of accounting?—A. I should say so. To cite another instance, take the Chicago and Alton road which, as I mentioned this morning, in the opinion of many men whose judgment is worth having, has been as flagrantly watered in the last two years as any road in our country. Its volume of securities has increased from about \$42,000,000, I believe, to something like \$120,000,000, an appreciable part of that increase going as profits to the persons who carried through the deal. A large part of these bonds were sold, as I have been told, as low as 65, and they were then resold in Europe as high as 95, the difference of 30 going to the persons who carried through the deal.

I think a most suggestive line of inquiry would be to describe a half dozen of these recent examples of manipulation which have borne very hard on the investor, and which can not but have a profound result upon the public, if those roads are to earn any return on that capital. A detailed investigation of certain of these, with such information as could be obtained from the railroad and financial journals of established standing, and, in addition, from such testimony as might be obtained from witnesses—such a detailed investigation would have definite value in pointing a way to the reform of our laws along the Massachusetts line.

One more topic I have to speak upon, that of taxation, and here I can only refer you to the attempt in Michigan under the present law to tax the franchises of all its public-service corporations—one of the most interesting and suggestive experi-

ments that has come to my notice for a long time. I spent a day, about 2 weeks ago, in the tax commissioner's office, and went over rather carefully the means which they have adopted there for taxing the franchises of those public-service corporations. The law makes an attempt to distinguish between the tangible physical property in rails, in graded right of way, in bridges, in stations, and the non-physical property of that corporation, which consists in its right to be and to do business. They have attempted—and it seems to me that it is being done in a most thorough fashion—to determine how much it would cost this year to reproduce every kind of a public-service corporation now in the State of Michigan—the railroads and the street railroads, the gas and water companies, the plank roads, the dams and locks, and electric-lighting corporations, and others of that sort. In other words, they consider for the moment the State of Michigan covered with virgin forests, and they ask how much it would cost to-day to put all these properties into place and into operation as they stand. A large number of engineers are traversing the State from end to end, literally counting the rivets in the bridges, etc. For one of the railroads, showing you into what detail they go, they report as to the number of rails, the kind of track fasteners and frogs, switches and crossings, the kind of tools, the cost of loading transportation and unloading the fixtures, etc. In other words, How much is that entire railroad worth to-day solely as tangible physical property? Then they ask—and this concerns the nonphysical element—How much is that road earning to-day; how much has it earned on an average for the last 10 years, and what is a fair capitalization of those earnings? After which they endeavor to determine the difference between the tangible physical property, which is taxed under the general property laws in Michigan, and this vastly larger sum which is the capitalization of the earnings which that road is making. The difference between those two is what they call the franchise, which, under the law, is subject to special taxation.

A doubly interesting problem is presented; first, the arithmetical means by which they attempt to determine the franchise value, and second, that as an indirect result of this they are going to know just how much all that property is worth. It is, in fact, a census of the public-service property in the State of Michigan. If it were under our Massachusetts laws, and they were strictly construed, the capitalization of all those public-service corporations would exactly equal the value of the tangible physical plant. We have no such a thing in Boston in the theory of the law as a franchise value. It does not apply to the corporations in Boston, and but to a few of those which are so large as to be exempt by law, but in the case of all the others the actual property is supposed to equal the capitalization.

Q. (By Mr. CLARKE.) When was this Michigan law enacted under which this inquiry and appraisal is being made?—A. I believe it was in 1890, although it may have been the latter part of 1898.

Q. A new law?—A. It has this objection, and I think a proper one, that it is unfair to expect every railroad in Michigan to bring down its capitalization to what it would cost to build that railroad to-day. When those railroads were built all the expenses of construction were greater, all the conditions, risk, and everything else under which those roads were built were such that probably it cost them half as much again as it would to-day. The mere fall of prices since 1873 will illustrate that point.

Q. This ascertainment of value is for the purpose of taxation only, is it not?—A. It is for the purpose of taxation.

Q. Then, of course, if it shows a lower valuation to-day than the cost was when the property was constructed, the railroads will hardly be the parties to find fault with that?—A. I have anticipated that most interesting results in that connection between the original cost—original investment—and present duplication value will come out. I think that a discussion of that question—the rights of the original investor as against the right of the present corporation which holds the property—should form a definite element in any discussion of the proper basis of capitalization to-day.

Q. Have you studied the increase in value with reference to the Illinois Central road system in particular?—A. No; not in particular.

Q. I have heard that that affords one of the best illustrations of that subject that there is in the country, and I think when you do give special consideration to the question you had better look into that road.—A. I would suggest, if any analysis were made in this way, that instead of attempting to deal with the whole United States the situation be carefully looked over and enough roads of each type be picked out, so that it would not look like a strike at a particular corporation. Having chosen enough roads of each particular class, these should be analyzed in detail. A detailed analysis of financial matters is always necessary; you can not generalize without being exceedingly careful that your basis is cor-

rect. Such a study of the relation of prime cost to present cost of duplication, and then again the value of the property after it has depreciated, should all be included in any study of capitalization. May I illustrate what I mean there? They compute the cost of duplication of each railroad in Michigan and work it out in detail; then they ask, How much is that railroad worth for scrap? And they distinguish each particular class of property thus segregated. One set of engineers estimates the cost of that number of miles of steel rails, how much are those rails worth as scrap, and how long is their normal life. If the rail's life is normal, and if it is good for 25 years, the assumption is made that one twenty-fifth of the difference between the cost of new rails and scrap disappears in each year. Then, if the road has been built 3 years, three twenty-fifths of this difference in value should rightly be deducted in order to determine how much that road is worth for use at the present time. In other words, the distinction is made for one of the first times in the law of our States between maintenance and depreciation.

Q. (By Mr. LITCHMAN.) Is there any elimination of stock?—A. This particular investigation is not directed to the question of stock issues, but that may come as a possible result afterwards.

Q. Is it not true that the capitalization covers not only the first cost, but all improvements in some roads?—A. It does in some roads. In others it varies, as in the instance of roads which, like the old Chicago and Alton, had been so conservatively financed that the capitalization represented only 60 per cent of the value of the property. A responsible financial journal states that 2 years ago the amount of stock and bonds issued by this road represented only about 60 per cent of the tangible physical value of that road. That is under-capitalization.

Q. The capital stock remains a permanent burden upon the public, does it not, assuming that there is a dividend on the stock?—A. It does.

Q. Then a continual addition of stock for expenses that ought to be charged to construction tends to increase that burden?—A. It does.

Q. Tends to make the amount to be earned to pay dividends on the stock larger, and consequently the burden on the public larger?—A. It does.

Q. What do you think of the advisability of some plan whereby a system of sinking fund should be compelled to eliminate that cost, and eventually reduce the burden on the public by reducing the amount of the capital stock?—A. That is already done by conservatively financed roads, except that they do it by other means than sinking funds. They do it by putting a larger and increasing proportion of their earnings back into the property instead of paying it out as dividends.

Q. In other words, they charge it to operating and do not issue new stock?—A. Yes; they charge it to operating expenses. A study of the policy of the conservative roads—by conservative I mean in this respect solely as compared with the roads which have been unwisely financed—would be of great value in determining what the proper policy of any laws should be in control.

Q. (By Mr. PHILLIPS.) What would be your view in regard to requiring the roads to set aside a sinking fund to liquidate their bonds?—A. The only difficulty that suggests itself to my mind would be that the status of those sinking funds would be highly complicated if the roads went into the hands of a receiver before the final burden of securities were paid off. For instance, suppose we have 10 years from now another period of depression, and railroad earnings decrease so that a good many of the roads which are now heavily charged with bonded and stock securities go into the hands of receivers. If those roads were carrying a very considerable sinking fund, the legal position of that property, so vested in a sinking fund, might lead to legal complications. I am not enough of a lawyer to state exactly what would be the case; but before any proposition for the regulation of capitalization can ever be wisely made, it seems to me that the relation between these several elements of prime cost, cost of duplication or depreciation, etc., should be investigated in the fullest manner and properly correlated.

(Testimony closed.)

WASHINGTON, D. C., January 14, 1901.

TESTIMONY OF MR. HENRY C. BARTER,

Secretary-Treasurer International Longshoremen's Association.

The commission met at 10.49 a. m., Mr. Phillips presiding. At that time Mr. Henry C. Barter, secretary-treasurer International Longshoremen's Association, Detroit, Mich., was introduced as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. FARQUHAR.) You will please give your name and address and official position in your organization.—A. Henry C. Barter, secretary-treasurer of the International Longshoremen's Association; office address, 530 East Atwater street, Detroit, Mich.

Q. How long has your organization, as an international organization been in existence?—A. It was organized in the year 1892, in the city of Detroit, Mich. That was the starting of the organization. It was then not known as "international;" it was known as the national, but that is practically the same organization. In 1893 it was changed to an international organization.

Q. At that time was it made up from locals?—A. At the beginning, in 1892, it was made up of locals of lumber handlers only; but in 1893 it changed the name of the organization to International Longshoremen's Association and included every dock worker on the chain of lakes, Atlantic and Pacific coasts and rivers, and the ports of Canada. I mean all ports of the United States and Canada—coast, lake, and river.

Q. About what is your membership now?—A. Well, a conservative estimate would be 40,000; that means the lakes, Atlantic, Pacific, the Gulf, Canada, and Costa Rica. There may be more than that, but I am giving a conservative estimate.

Q. How frequently do you have your international convention?—A. Yearly, in July.

Q. Are these delegate conventions from your locals?—A. Yes. Each local organization is entitled to 2 delegates, and they vote according to the membership.

Q. What are your annual dues?—A. Our annual dues—the tax, as we call it—from locals to international, you mean?

Q. Yes.—A. Five cents per month.

Q. Your local dues, then, are different in different sections of the country, are they?—A. Yes; they regulate themselves. Generally about 50 cents per month is what the members pay to local organizations for their local funds. The tax of 5 cents per member is paid to the international.

Q. Is that 50 cents per month collected during the 12 months of the year?—A. No. On most of the ports of the lakes 10 months, some 8 months, some 9 and some 10, and a few 12 months, where they have sick and death benefits.

Q. How many of your locals have sick and death benefits proportionately to the whole?—A. About 20 per cent.

Q. Could you at the present time give any idea of these benefits and what they amount to?—A. Yes. I will take one particular organization—that of Ashland, Wis. They pay \$5 a week sick benefit, and at death \$100, and they hire a band, and the members turn out in a body. They also have a large burial lot in both cemeteries, Catholic and Protestant, where members are buried; that is, if the family chooses. If a man has been disabled, and \$5 a week is not enough, they invariably give him more, generally to meet conditions—where it is necessary, possibly, to be in a hospital, if he has not a family, and it is necessary, probably, to give him a little more to keep him decently.

Q. Have you any insurance features in your organization?—A. No; the international has no beneficial features; that is, in regard to sick benefit or accident insurance.

Q. The 5 cents is for what—the expense of the international organization?—A. Meeting expenses in the international organization, paying salaries, and paying expenses of attending conferences and conventions. We probably attend more conventions than any other organization in the country. We meet several times a year with our employers.

Q. Have you any arrangement for a defense or strike fund?—A. No.

Q. (By Mr. LITCHMAN.) Are your beneficial features there established by rules of the international organization or left with each local to make their own arrangement?—A. Left to each local organization. Each local organization affiliated with our international is guaranteed its own local autonomy.

Q. How do you do in the case of strikes? Do you make assessments on a local, or do you make assessments of the others to help the local out?—A. We have not made any assessments since the organization was formed. One thing we are blessed with—we don't have many strikes, and our strikes are not of long duration. In one case only has an organization been compelled to be assisted financially during a strike; only one case since 1892.

Q. What case was that?—A. That was the Buffalo freight handlers.

Q. Did you have more than one organization in Buffalo at that time?—A. Yes; we had several. That was last spring when we were appealed to. In the strike of 1899 no appeal was made for funds.

Q. Did you immediately handle that strike of 1899—your organization?—A.

No; I can't say that we immediately handled it. We went there after the strike had reached a position where it was necessary to bring about a conciliation. Mr. Keefe was our representative in that trouble, and it was settled satisfactorily through the efforts of Mr. Keefe and also some other good citizens in Buffalo.

Q. Was Mr. Keefe a member of that as well as the local and Lake Carriers' Association?—A. Yes.

Q. Have you had any trouble in Buffalo since?—A. We had trouble there last spring.

Q. What did that arise from?—A. That was from the package freight handlers. They were desirous of wiping out the contract system under Messrs. Conners and Kennedy's dictation.

Q. Could you state the reasons of the strike in Buffalo in 1899?—A. The strike in 1899 was for this reason: Prior to the spring of 1899 the contract for handling the grain at the port of Buffalo was handled by Mr. Kennedy. In the winter, or in the month of January, 1899, Mr. Conners secured the contract. Mr. Conners attempted to introduce a new system. Prior to the spring of 1899 Mr. Kennedy, the old contractor, gave the men an equal division of a certain sum—a certain sum was paid the men—and that was supposed to be equally divided among the men who worked upon these boats. When Mr. Conners secured the contract, in 1899, he attempted to introduce a new system; that was to pay the men by the hour instead of by the thousand, and he offered to pay the men 25 and 30 cents per hour. The men then struck and demanded the abolishment of the contract system entirely. The men were opposed to the contract system for many reasons. It was universal over the lakes prior to that time, and that was the reason of the formation of our organization. Most of the stevedores—that is what we call the contractors on the lakes—most of the stevedores controlled or operated saloons. The men were supposed to patronize the saloons owned and controlled by the stevedores, and the men who patronized them best were retained and given permanent employment; but as our organization took hold it aimed to bring about the abolishment of this obnoxious condition, and this was one of the evils that the men had to contend with at the port of Buffalo. I had to visit Buffalo on many occasions, and visited there in the spring of 1899, and the men complained of this obnoxious saloon system. They claimed that unless they patronized the saloons they were not given work, and that they were expected to spend a good deal of their money there. They fought for the abolishment of the system entirely, and put up a very good, fair fight, with no attempt at violence. There was some violence committed, but not by the members of our organization. If I remember rightly, there was not one of our men arrested for any attempt at violence. The clergy there and priests took hold of the matter, and ex-Congressman Roland B. Mahany, and under their direction, and that of Mr. Keefe—Mr. Keefe was of valuable assistance there—they advised the men to keep away from the docks, keep sober, and obey the police, and several conferences were held between the representatives of the Lake Carriers' Association and the representatives of our organization, and also Father Cronin and Bishop Quigley, for the purpose of trying to bring about a settlement. The lake carriers, through their executive committee and their counsel, Mr. Harvey Goulder, made propositions to our representatives that the lake carriers would be parties to the contract, guaranteeing the men an equal division of the amount paid to them. They even agreed to pay 5 cents more than the men had received the season previous, if I remember rightly. In other words, the lake carriers would practically become a party to the agreement between the men and Mr. Conners; that is, they would see that it was carried out to the very letter. The men hung out longer, demanding the abolishment of the contract system, and demanding that the contract be let to them.

Q. Immediately to the local through the officers?—A. Immediately to the locals and their officers; but the carriers objected, and finally an agreement was entered into whereby the organization practically got the contract. The men got nearly all they contended for, with the single exception of getting the contract direct from the carriers.

Q. Was your trouble the fact that the Lake Carriers' Association could not break the contract?—A. No; they could not break the contract, but the men practically had the contract, and Mr. Conners had to treat as a factor. All he received was 5 cents on a thousand for his work, when prior to that Mr. Kennedy had received 5 cents for the running of the contract, and the paying of the men, clerical hire, office rent, etc. But the agitation was kept up, and last winter our organization, through our international, was successful in gaining the contract.

Q. At or about the time of the strike of 1899 in Buffalo, did Mr. Conners and others have contracts in other lake ports?—A. Yes; I was given to understand that Mr. Conners had contracts in Milwaukee, Chicago, and Gladstone, Mich.

Q. Did his contracts continue after that time, or did your locals get them after the settlement of the Buffalo strike?—A. Well, after the Buffalo strike our organization in Gladstone handled the contract.

Q. How is it in Milwaukee and Chicago?—A. In Milwaukee and Chicago Mr. Conners still operates to a certain extent. He has not all the docks. There is competition in the stevedore system in Milwaukee and Chicago to-day.

Q. Does Conners recognize your local unions in those cities?—A. We have not asked him to do so.

Q. Is there much difference in the scale that he pays and what the locals receive?—A. In Chicago and Milwaukee?

Q. Yes.—A. We have no organization of freight handlers in Chicago. We have an organization in Milwaukee, and I am given to understand that he pays the same wages as demanded by the organization in Milwaukee.

Q. Do you know how long the Conners contracts continue; are they annual, or longer?—A. I understand they are let annually.

Q. Has the Lake Carriers' Association anything to do with the letting of these contracts?—A. No.

Q. Wherein does the Lake Carriers' Association have any right or interference in respect to the making of the contracts on the lakes; what points?—A. Well, the lake carriers' organization is organized mainly for legislative purposes. They have never taken up any particular contract, or taken up the question of issuing any particular contract, with the single exception of the Buffalo contract; that is, prior to the spring of 1898; but since that time we do business with members of the Lake Carriers' Union as dock managers, which is practically the lake carriers. But the organization of lake carriers, as a body, does not make any contracts for the letting or handling of boats, with the single exception of the Buffalo strike.

Q. That is, the lake carriers' organization—it is not part of their constitution to interfere with these contracts, and be a party to the making of the contracts?—A. That is right; that is purely a legislative body.

Q. In the Buffalo matter was the saloon system the main point of difference?—A. Yes; the saloon system was the main question.

Q. Has that been abolished entirely?—A. That is abolished entirely.

Q. Is your local the party for the arrangements in Buffalo, for making the scale?—A. No; the international is the main factor. The local is a party to the contract. The international organization is looked upon as the main factor, but of course the organization at Buffalo is certainly a factor too. Our international organization—that is its business to secure these contracts, and they always sign as the international, as representatives of the international organization; and the locals, too, are parties to the contract.

Q. The president of your local union is one party to see that this is carried out; who is the other party?—A. The officers of the international organization.

Q. And who is the other contracting party?—A. Whoever we do business with—sometimes the local carriers, sometimes the dock managers. Sometimes we do business with different roads in regard to package freight—that is, the superintendent of the freight docks.

Q. What classes of handling are comprised in your international organization?—A. Lumber loaders and unloaders. Those are the men that load boats and unload them; also the coal shovelers and trimmers, unloaders, and loaders. Then there are the ore shovelers, and trimmers, loaders, and unloaders in general, and package-freight handlers, unloaders, and loaders; warehouse package-freight handlers; loaders and unloaders of salt, grain; trimmers and scoopers, dock hoisters, and engineers, millmen, and all men employed in lumber yards; dock firemen and marine firemen, and all other men that are engaged in working along and around docks on the Great Lakes, the coast, and rivers.

Q. You have now a system of agreements, have you, in these various ports that the international enters into with the owners of floating property?—A. Yes.

Q. Would you say that in all of the ports of the lakes you have agreements with these parties as to loading and unloading?—A. No; I would not say we have agreements in all ports. We have practically, however, an understanding with our different interests for the loading and unloading of the boats in nearly every port on the Great Lakes.

Q. Under the old system of individuals, like Conners, making contracts, the profits all went to the contracting parties?—A. Yes.

Q. How do you manage now in making your contracts; does your local union make the rates and the union itself gain the advantage of profits?—A. The international has been the first party to the securing of agreements, and the locals are the parties, of course, interested and involved, and in taking these contracts every

member secures an equal division of the profits. Now, in some ports we work in gangs; in fact, we all work in gangs in all ports, but in certain ports we work in gangs, and each gang takes its turn. Now, we will say, to illustrate it, that one port has two gangs. On the arrival of the first boat in the spring of the year No. 1 gang goes to work, and when that boat is unloaded in some instances they get paid directly the boat is unloaded. The foreman and two of the gang collect the money. They see the bills of lading, and they figure it out and know what is coming to them. They then go to their hall or office, whichever they have, and that money is equally divided among the men employed on that boat. When the second boat comes in, No. 2 gang goes to work, and so they work continuously all summer. The men, however, do the work and receive all the profits.

Q. In your working season, about what average weekly wage will the scooper make?—A. That would be pretty hard to arrive at.

Q. Have you any table that would show the average of wages on the different classes of work?—A. No. I can tell you what they have done. If I had some time, 2 or 3 months, I could give what they have made for the season—what they have averaged. The average wage for grain scoopers is 60 cents per hour when employed.

Q. You could not average the period of employment, could you?—A. Not over 6 months. We have different systems, too; the grain scooper and the grain trimmer. The grain trimmer is a little different from the scooper. The scooper unloads the boat; the trimmer is the one that attends to the loading. The trimmers make a little more than the scoopers. The scooper will make 60 cents per hour. They work all hours in a day. The men in Buffalo are distributed among the different elevators. From a certain hour on Saturday night until a certain hour on Sunday night, the men receive time and a half; that is, they make 90 cents per hour week days, and they make 90 cents per hour on Saturday night and Sunday. The grain trimmer has a little more dusty work than the scooper. Of course you know the men do not stand this work long; they do not live to be old men. Scooping or trimming, especially in barley, kills a man off pretty lively. The trimmer may average a little more than 60 cents while around the boat. Of course in the scooping and trimming, directly the leg of the elevator is put in the boat the men don't start to work, but I am taking the average from the time that the leg is put in the boat until they are finished. Now in scooping the leg is there and the elevator is there. They don't get in the boat until it has gone down, possibly half of it; and the same way in trimming, they don't get into the boat until the boat is about half unloaded, but the average there is for the time the leg goes in until the leg is taken off.

Q. Since your organization has had a foothold on these ports of the lakes have wages of this class advanced or are they stationary?—A. Oh, yes; advanced materially, especially during the last 3 years. In the old days men did not know what they were getting—under the old stevedore system. Ten years ago or 15 years ago it was worse yet. A good many of the men were hired for their being pretty good, stout, husky fellows, so that in case of necessity they could fight for the stevedore. In those old days competition was in vogue, and the stevedore backed by a good strapping band of fighters could necessarily drive the stevedore with the weaker ones away, and so that continued until that stevedore had practically a monopoly of the work, and then when he was successful, he would charge all kinds of fancy prices for loading and unloading. But while the competition existed, the stevedores would cut prices with one another, and sometimes would do the work quite reasonably, but the men were made to suffer for it. In the old days there were bunks in the saloon, or in a barn or shed which was adjacent to the saloon, and the men lived there in the summer season, stayed there, and most of their pay was bad whisky. Since our organization has taken hold, a better class of men work at the business, more sober men. In fact, drunkenness is not permitted. The organizations take that matter up themselves, and in many ports when a man becomes drunk he is fined \$5 and is not permitted to work until that fine is paid. In a good many of the ports the men prohibit liquor from going aboard a vessel.

Q. During working hours?—A. During working hours. In that way we have gained favors from the lake carriers, and they have become our friends instead of fighting us as an organization. Our wages have increased 100 per cent since the abolishment of the contract system.

Q. What nationality prevails among your membership and workers?—A. Well, that changes. The Irish-American did prevail, but they have gone away gradually. Sometimes during these troubles in the lake ports they became disgusted, and got away and looked for other occupations, and in many cases many of the old Irish-Americans died away, and the younger element is creeping in. The young

American is becoming now quite a factor, but we have a good many different nationalities in ore receiving points, such as Italians, Finns, Huns, Slavonians, Poles, and Germans. But it would be hard to say which element is in control of the organization. I should judge, though, that the young American is quite a factor to-day, since conditions have improved. But very few young Americans worked on the lakes under the old system.

Q. Could you give the commission anything like a review of the scale of wages that is paid to these different classes on the lake?—A. Yes. I have a table of them, and the figures show you what we have done as an organization. I have the figures in the Buffalo grain contract, the figures that were paid for our contract. It amounted to \$13,627.23.

Q. (By Mr. LITCHMAN.) That is for the last season?—A. For this last season. Q. How long a time did your season cover?—A. That was from the opening of navigation, which opened last year, I think, in Buffalo in April, and which closed in December just before the holidays. There were 900 men interested in that contract. I have here a scale of what our men averaged during the working hours for the summer season. Of course, this is taken from those agreements. Later on I will relate to you these different agreements. The average wage per hour for ore shoveling in the handling ports was 60 cents per hour for a 12-hour work day. The average wage per hour for coal trimming—that is, in the loading ports—is 60 cents per hour for a 12-hour work day. The average wage per hour for fueling is 40 cents per hour, 24 hours. They have to work all hours.

Q. How many shifts?—A. Two shifts. Hoisters and engineers, from May 1 to December 15, \$80 per month for hoisters and \$85 per month for engineers. The average wage for coal handlers, 60 cents per hour; that is, in the unloading ports. The average wage for lumber loaders per hour is 50 cents. In some ports it is 40 cents, some 45, some 50, some 60; but I have struck an average there of 50 cents; that is, for a 10-hour work day. There are cases, absolute cases, where men work over 10 hours. Average wage per hour for lumber handlers—that is, at the unloading ports—is 50 cents per hour. Some places do not pay as much as that; some pay a little more. That is the general average. Now, the average wage for marine firemen during the navigation season per month is \$45. The average wage of the grain scoopers per hour is 60 cents. The average wage per hour for grain trimmers is 60 cents and upward. There are a few cases where they do make more. The average wage per hour for marine package freight handlers is 30 cents per hour. They work 10 and 12 hours, and as high as 24 hours at a stretch; no shifts. Ore trimmers, 60 cents per hour, and they work all hours. At some ports they regulate their gangs and take their turns about, but they work pretty much all the time; they have no certain hours. That completes the table.

Q. Would you say that those wages were 33 per cent greater than they have been heretofore, before your organization had jurisdiction of the ports?—A. Yes; I should say 50 per cent higher than before our organization. We were granted a 33½ per cent increase last year in the ore-handling ports over the season previous to that. That was a voluntary increase conceded by the dock handlers to our organization as a whole; so I would be pretty conservative in saying 50 per cent.

Q. In the contract is the whole of your force under the control of officers of your local?—A. Practically under the control of the local, and let out to members of our organization as a whole.

Q. Are the men divided into gangs by the organization?—A. Yes; and the officers instructed by the organization as a whole.

Q. So that your organization practically covers the labor of those ports?—A. Yes.

Q. Do you find any friction with many of your members in your locals on establishing what you may call temperance rules?—A. No; we do not. The majority of our men are determined that the temperance rules shall be prevalent in every port. We have isolated cases where our men break the rules, but they are punished by the organization. There is a happy change on the lakes in regard to the drinking question since the organization took hold, which is readily acknowledged by members of the Lake Carriers and Lumber Carriers' Association.

Q. Now, how do you account for that? Is it that the men are saving and not spending their money in saloons, or is it on account of the danger that is attached to a few drunken men coming in contact with machinery, or is it the sentiment?—A. No; it is not a sentimental idea. It is business. The men work in gangs. I will try to give you an illustration. I used to shovel iron ore myself, and I used to shovel coal in the hold, and I have worked at the lumber business unloading lumber. We worked in gangs in handling iron ore. In the port that I worked in we worked 2 men together, partners in the hatch. There were 8 men employed,

2 men to the bucket; 2 men on the starboard side of the boat worked forward, and 2 men on the port side worked forward. I am speaking now of the forward hatch. Two men worked amidship on the starboard side, and 2 men worked amidship on the port side. Those men were expected to keep the hook going. There is a hook that is lowered which the men hook on a bucket. Those 8 men are supposed to keep that hook going, and if they do not, it is readily to be seen that somebody is shirking. Suppose I am working alongside of a man and he shirks. I will readily know it. If he happens to be unwell, I will try to work a little harder and keep that going. It would be impossible to do that for any length of time. If he was drinking, I would complain. I would say, "Tom," "Dick," or whatever his name might be, "you are shirking—you are not doing your duty;" and if he was drinking and shoveling iron ore, the only way he could stand that work would be to keep on drinking. That is the only way he can stand that work. If he drinks very much, he is of no use to me, and he practically kills me and kills himself, and I complain to the foreman of the gang and that man is immediately called out of the hold and punished. He is called out of the hold and another man is put to work from another gang, and he takes his place, and this man then is displaced. It is not altogether sentiment. Of course, when our organization was first started, it was done to get rid of that drunken element and bring more sober men into the business. There is to-day a different class of men that work on the docks from what there was 10 years ago.

Q. Higher class?—A. Higher class—more healthy class of men. They own their own homes on the lakes. Very few men owned their homes 15 years ago on the lakes. I think I would be safe in saying that 50 per cent of our men on the lakes own their own homes.

Q. Since when?—A. Well, during the last 4 years. Years ago the conditions changed materially and each year as our organization has grown and there has been more traffic our men have enjoyed better wages and have been in condition to purchase and own their own homes.

Q. (By Mr. FARQUHAR.) Have you a general agreement with the owners of lake vessels as to your wages and time of work and rules of labor and jurisdiction?—A. We have a general agreement with the Dock Managers' Association. The dock managers represent the ports of Sandusky, Ohio; Lorain, Ohio; Huron, Ohio; Cleveland, Ohio; Fairport, Ohio; Conneaut, Ohio; Ashtabula, Ohio; Erie, Pa., and Buffalo, N. Y. I believe I omitted Toledo, Ohio. They represent the different men interested in unloading iron ore. The dock managers as a rule own and control certain lines of boats. They bring the ore to those ports, which is unloaded and put into cars, some of it. When there are not enough cars there it is dumped on the dock. It is stocked in the winter months. Then it is unloaded and put into cars. Now, we have an agreement with the dock managers for the unloading of the boats during the summer season. We secured last December an agreement for the first time with the dock managers for the handling of this ore from the stock piles to the cars. We have both of those agreements. Prominent among the dock managers are M. A. Hanna & Co., the Carnegie Steel Company, the Pittsburgh Steamship Company, the Angeline Steam Dock Company, and such firms as that.

The first agreement that we made with the dock managers was a year ago, the 15th day of March, 1900, and this agreement I can submit. It is the winter contract. I also submit the spring contract. You will notice the arbitration clause there. That agreement is for the unloading of the iron ore, stipulating a wage rate for the hoisters, engineers, dock firemen, and laborers in general employed on the ore docks—brakemen.

Q. In cases of disputes between the officers of your locals or even your gangs in respect to wages or the construction of these contracts or hours of labor, how do you manage to make settlement of them?—A. You will notice in that agreement, in section 6 of the summer scale, it says, "It is understood that occasionally, when any unusual work arises in isolated cases not covered by this agreement, the men, when called upon, shall perform such labor, and the compensation therefor shall be determined and adjusted between the representatives of the local organizations and the dock managers or owners, and in the event of any disagreement, shall be arbitrated as hereinafter provided for the arbitration of differences, controversies, or grievances."

Section 7 says: "All items not mentioned in this contract or the schedules hereto attached shall be performed, and all payments shall be made for work done under this agreement in accordance with the usual custom heretofore prevailing upon the respective docks."

Q. So that in case of a disagreement as to the rates or manner of unloading, your men go to work?—A. Our men go to work.

Q. And it is ultimately settled by arbitration between the dock managers?—A. Not exactly arbitration, but by conciliatory methods. It is simply by the foreman of the gang and the general superintendent.

Q. Committee arrangement?—A. By committee arrangement. But we have this arbitration clause in here; I will read it to you. This is section 8.

(Reading:) "In the event of any controversy arising between the men or local organizations and the dock managers or owners, or in the event any of the men or local organizations have any grievances, the men shall continue to work, and any and all such controversies and grievances shall be settled, if possible, by the representative of the local organization and the representative of the dock managers or owners."

That is the first method that is pursued, and it has been successful.

(Reading:) "If such controversies and grievances can not be so settled, then they shall be arbitrated by choosing a third disinterested man upon whom the representative of the local organization and the dock managers shall agree, and the decision of any two shall be final. If the representative of the local organization and the representative of the dock managers or owners can not agree upon a third man, then each side shall choose a disinterested man, and the two disinterested men thus chosen to choose a third disinterested man, and said three men shall constitute a board of arbitration, and the decision of a majority of said three shall be final and all parties shall abide thereby."

Q. What has been the practical effect of that rule?—A. The practical effect of that has been the means of keeping the men at work. We have not had to resort to the arbitration clause—only once actually have we had to resort to the arbitration clause.

Q. You have been able to settle it by a committee?—A. Through a committee, by conciliatory methods.

Q. By a committee of parties directly interested?—A. Yes.

Q. Then does that account for the infrequency of strikes of late years?—A. That is the reason that there have been so few strikes on the lakes.

Q. If that agreement was carried out in good faith by both parties, would there be any opportunity for strike?—A. No; and it would be the solution of labor troubles.

Q. Is it satisfactory to both parties now or have you some trouble in getting the agreement annually?—A. No; I do not think we have any trouble. We expect Wednesday to meet with the lake carriers and secure a renewal of the grain contract in Buffalo, and Thursday with the Lumber Carriers' Association, which has just been newly organized. They control the loading and unloading of lumber on the Great Lakes. They meet Thursday in Detroit. We expect to have a conference with them which will bring about good results. We expect next March to meet with the dock managers and secure a renewal of our agreement. I do not believe there is any intention on the part of the dock managers to break away, but they rather prefer to do business with our organization than to do business under the old system. We expect to meet with the different freight dock managers during the spring and make individual agreements. We have done that in certain points for package freight.

Q. In cases of attempts to break those agreements and also troubles that occur in your business, do the dock managers and owners and other parties in interest there quite freely receive your complaints and listen to them and enter into negotiations?—A. Yes.

Q. For the settlement of them?—A. Always willing to meet a committee of our organization when there is anything that the men think that is wrong.

Q. Have you practical control of the various lines on the lake—of the loading and unloading?—A. Yes.

Q. Of all of them?—A. Well, of all the unloading, I may say—of all the unloading of iron-ore boats, and practically of the loading and unloading of lumber and cedar, and of the loading and unloading of coal. I think if you were to meet any fair-minded lake interests who have dealt with our organization, they will tell you they would rather do business with our organization than under the old system, because they get a quicker dispatch. I have lived on the water all my life, worked on the water most all of my time, and at no time on the chain of lakes have boats been given the dispatch that they have the last season.

Q. Are your officers able to furnish men immediately at call?—A. Yes; we have had no complaints in that regard, with a single exception—no serious complaints with the single exception of one particular port, or two ports, rather, and that was not our fault. It was late this fall, and they crowded the lumber. Freight rates took a rise. You see, freight rates are not steady—freight rates on carrying one particular freight—and freight rates increased in the lumber-carrying

ranch this fall, and there was then a rush in that particular market, and the lumber rushed to Cleveland, and at one time it was impossible to take care of it with the quick dispatch that had been given. That was about the time of the losing of navigation; but no complaint was entered, and even the docks could not take care of it. It was not our men's fault, exactly, because it was the fault of the increase in the freight rates that was really to blame.

Q. In previous years the men took advantage of the rise in freights, did they not, both in ore and lumber?—A. Under the old stevedore system; I can not say that they have under our organization.

Q. Under your arrangement there seems to be an even wage and time going through the whole of it, so that with a change of freight rates on the lakes really your men do not get the advantage that they did in former times by these rapid rises?—A. Yes, the men did get it; the men had to have the work to get it under the old-time stevedore method. The marine traffic has settled more of late. Now, last year that was a little on boom times, and we got a voluntary increase, as you see by the agreement, which was a very desirable change; and that was the means of bringing about a closer relation between our organization and the dock managers, and the dispatch has been everything that could be desired. Under the old stevedore system, of course, the advantage is taken of doing business with responsible parties. Of course we might not be considered responsible on account of the financial part of it, but we try to be responsible by doing good work so as to bring about a closer alliance between our employers and ourselves. We want the pleasant features to continue.

Q. Do you think you are now sufficiently organized so that as a unit you could contract, be a party to a contract for doing the work in any ports on the lakes?—A. Yes; if the lake carriers, or lumber carriers, or dock managers were desirous of entering into a contract with us to do any work in every port on the chain of lakes, I believe we are strong enough to do the work and give it proper dispatch.

Q. Now, out of all those engaged in this longshoremen's work on the lakes, what proportion does your organization hold in numbers?—A. On the Great Lakes?

Q. Yes, on the whole lakes?—A. Somewheres from 20,000 to 25,000. I believe 25,000 men is a conservative estimate.

Q. That is your membership?—A. Yes.

Q. Now, how many are engaged altogether, nonunion men, of course, and everything included?—A. I believe that we have all the men on the lakes with the exception of about 1,200 or 1,500. I do not believe there are 1,500 men on the Great Lakes that are nonunion men and not members of our organization; and that 1,500 is in the ports of Chicago, Milwaukee, and Buffalo. We have the men in Buffalo to do the work, but through a factional fight in the stevedores, the system has become so objectionable that our men refuse to work under the present conditions. We have the men to do that work, men who have done that work but who are not working at it now. In the port of Chicago—that is, in the package-freight end, and some of the freight handlers in Milwaukee—we have not got them—and some in Duluth. Outside of that I do not think that there are 1,500 nonunion men working on the Great Lakes to-day—1,500 men who are not in the employ of the organization. There may be, but I do not think there are.

Q. Do you think it would be an advantage to your organization and to the workmen themselves were they to make a direct contract with the ship-owners?—A. Yes; I do think it would be far better for them. The system under which we have been working has the business idea of giving dispatch to both. With the railways running parallel along the shores of the Great Lakes, it is hard competition for the boats. In some instances where freight rates increase, the railways get the work. Our men are learning that it is necessary for them not to attempt to boost their wage rate out of proportion or they will drive the traffic to the railways. They are fast learning, and therefore they are desirous of keeping work on the lakes and giving the boats the dispatch that is essential. In these days it is necessary to have quick dispatch both in loading and unloading boats, and our men realize it and are getting more interested and more educated along marine lines than they were under the old system. Under the old system they were not interested parties. To-day they are interested. They are practically all contractors. They are individually very enlightened men to-day, and every man who works at our business is individually interested in the unloading and loading of the boats on the Great Lakes, both in the question of dispatch and freight rates, because freight rates regulate our wage rate to a very large extent.

Q. Instead of a hard and fast agreement as to rates, either your summer or your winter scales, have you ever taken into account a sliding scale, so that you could get near a partnership in freights rising and falling?—A. In one of our confer-

ences there was something like that talked of. It is being talked of now by the lumber carriers. They meet this week, and that is one of the important things that they are going to discuss, the question of a sliding wage scale. I believe we should be only too willing to meet them and discuss the matter of a sliding wage scale to be in conformity with the sliding freight rate. We have had some discussion of that prior to this, several years ago, and I well remember in one instance where the men voluntarily decreased their wage rate a shilling a thousand. I will submit this card to you. [Witness produces card.] That is the system under which we work in the loading ports. This is something we are trying to bring about with the lake carriers and the lumber carriers, a uniform wage rate, a uniform wage scale for the unloading of boats. Now, you see the conditions which exist in the ore unloading ports. Here we have that agreement because it is a uniform rate. One dock manager is not in sharp competition with another dock manager, because the wage rate now is the same in all the Lake Erie ports. This wage scale was brought about last July and took effect the 1st of August. Now, this scale of unloading lumber was brought about through conferences with individual lumber carriers, and what they were desirous of having was a uniform scale of unloading in each of the unloading ports, so that when they load they know what they have to pay in the unloading ports. Part of their profits went for loading and part for unloading, and as our organization has become an important factor in the loading and unloading on the Great Lakes, so the lumber carriers and other gentlemen have been desirous of getting more closely in touch with us as a business organization, and the lumber carriers meet Thursday, and that is one of the matters which will be discussed, a sliding wage scale in conformity with the freight rate; in other words, that the freight rate shall regulate the wage rate.

Q. I see that you have in your rules and regulations here a positive rule for all classes of your workers, saying, "It is distinctly understood that the men shall continue to work under all circumstances pending arbitration." Has that rule been universally carried out?—A. Yes, with the exception of one case. In the spring of the year the men were not thoroughly acquainted with every section of the agreement. It was our first complete agreement that we had which covered many ports. Now, in this agreement probably 10,000 men were interested, and probably more. We got out the proceedings in book form there, which is not very lengthy, and we distributed probably 25 copies to each branch. We saw that the men could not become educated to every detail of the contract. This fall we had 10,000 copies printed—8,000 in English and 2,000 in German or Slavonian. Of course the Italians we organize in separate branches, and we send them copies in English and then they get them translated and printed in their own language. In that way we have managed to place a copy of this agreement in every man's hands, so he could become acquainted with it. Last spring our men had a little misunderstanding in Conneaut, and the manager and superintendent wired me the particulars and I went there, and the boats were stopped at my request, the superintendent agreeing to it. He did it very pleasantly. He wanted to extend the agreement. We went to the hall, and every condition in the agreement was explained to the men, and after that the men never stopped work. The superintendent said, "I want you to continue to work under extraordinary arrangements, under some arrangement even that is not covered by the agreement, the men to continue to work, and it is to be left to the international officers to settle." And there was a question of overtime which was settled in five minutes after I struck the port—five minutes, rather, after I got into conversation with the general superintendent—a question of \$400, and that was immediately ordered paid. There was only one case after that where the men did not conform to that, and that was in the city of Cleveland. I believe that was in either August or September.

Q. (By Mr. LITCHMAN.) Do you find this agreement satisfactory to the dock managers?—A. Oh, yes; the dock managers were a party to it; they proposed those things.

Q. What I mean by asking the question is, do you find that the result of the agreement is satisfactory to them?—A. Oh, yes; very well satisfied; if they had not been, they would not have entered into this fall agreement.

Q. So far it has resulted in bringing about more pleasant relations between employer and employed?—A. In every way; oh, yes.

We have never had to resort to the arbitration clause, only in one case; it has been done by conciliatory methods. The very fact that this agreement is entered into between the men and the companies and the pleasant relations that exist— from that fact there has never been any occasion to resort to any arbitration at all, only in one instance. Perfect harmony and the very best of friendship exist

between the employers and employees. I believe these agreements are the solution of the labor question.

Q. Have your men in the longshoremen's unions become educated so that they realize that fact themselves?—A. Yes, yes; they do.

Q. And they give loyal obedience to the directions as interpreted by your association?—A. Yes. You must remember that the conditions on the Great Lakes have in the past been so bad under the old stevedore bossism that the men who had gone all through that were not men; they were brutalized; they were forced to use their muscle; and it was either a question of stand up and fight for your rights or else be kicked off the docks and be kicked to pieces in many cases; and many of our men were forced to become brutes. In fact, the wiping out of the stevedore system was done by brute force, by physical force. But as the organization has grown, and as it is going on, and getting in closer touch with the employers, our brains have taken hold instead of muscle, and the conservative man, the man who had some business ideas, has been forced to the front; and they are the men who are leaders of our organization to-day.

Q. Has your organization, so far as its influence predominates, eliminated this evil of which you complain?—A. Yes.

Q. The saloon evil?—A. Yes; it is wiped out now. The only places where it exists to-day are at Buffalo, Chicago, and Milwaukee.

Q. And those are the 3 places where your organization is weak?—A. The only 3 places that—I will not say weak. In Buffalo we have got a hard fight. We have not yet put up any fight in Milwaukee or Chicago, nor do we want to put up any fight. We would rather use, and have always preferred, conciliatory methods instead of physical force. The men who have charge of our organization to-day are conservative; are men who have worked almost all their lives upon the docks, and they are men who have some business ideas and do not want to see strife on the docks, because it hurts us in other ports. Suppose we had men in charge of our organization to-day who would go to a port and inaugurate a strike, what would it mean? It would mean suffering. Suppose it would be an unloading port, the men in the loading port would suffer. It would spread and be the means of hurting us in other ports. So we aim, where these unpleasant features exist, to try and bring about better conditions along conciliatory lines, meeting with the employers.

Q. And your action in this respect meets the hearty cooperation of the employers?—A. Yes; we are, as you say, weak in a great many ports, but instead of resorting to strikes we have resorted to the method of meeting with the employers, explaining it to them, and got them interested, and to-day the present officers of our organization have never yet ordered a strike in any port. We have always prevented it, if possible. We never sanctioned a strike on the lakes yet.

Q. (By Mr. FARQUHAR.) Previous to your unions having jurisdiction over this class of labor on the lakes there, how many strikes would occur in a week during the running season in a port like Buffalo or Cleveland or Toledo or Milwaukee?—A. There would be, most likely, a strike every day.

Q. Would there be more than 1 strike a day?—A. In the large cities?

Q. Yes; take it in lumber, coal, ore, and everything, would you average a strike a day at those ports?—A. I would not mention Buffalo alone, but I mean at all the ports. In all the ports—and I have visited almost every port on the lakes—it was a common thing to see boats tied up in most every port always, most every day. In the competition between the stevedores the fellow that had the best fighters back of him was the fellow that was trying to have a monopoly, and it was a fist fight most every day.

Q. So that your organization coming in now has been a complete revolution in that branch?—A. Yes; I can honestly say that our organization has been a complete revolution in the conditions that existed on the chain of lakes for a great many years. Instead of the drunken, poor, dissipated fellow that used to work on the docks, to-day the good, sober man is prominent. We have many places where they own their own homes and have built their own meeting halls and have temperance societies. There is one place in Ohio where there are Finns who have organized a temperance society, built a hall, and turned around and gave a deed of the hall to the organization. At another port where a lot of our men work for M. A. Hanna & Co., our men have built a hall, paid the cash for it. Three hundred members assessed themselves \$10 apiece and paid the cash for the lot and built the hall, and finished it off in Southern pine, and have got a nice hall, and there they meet and have entertainments. I was there at two of them in Loraine, Ohio, this fall, and I know of one instance where our men got together, had a banquet, and invited all the leading business men, the mayor of the city, their employers, master mechanics, and superintendents of the docks, and they enjoyed themselves very much.

Q. (By Mr. LITCHMAN.) The closed season covers about 4 months, when navigation is closed on the lakes, does it not?—A. Sometimes more. Generally December, January, February, and March, those 4 months. Sometimes it will close the middle of November, and sometimes not open until May, but, as a rule, 4 months.

Q. Now, have you any means of knowing what employment your men seek during those months?—A. This winter we have just got an agreement covering the iron-ore ports whereby about 10,000 of our members will be kept at work this winter in the upper ports on the lakes—that is, in Minnesota, Wisconsin, and upper Michigan ports. Many of our men go to the woods and work in getting out the logs, getting out the timber, ready for the spring. But in the cities our men have become accustomed to save during the summer season, and in some instances they buy in quantities, buy at wholesale for the winter, buy provisions at wholesale, so many tons of coal, so many barrels of flour, and in the winter they do not do anything; they earn good wages, and they earn enough to rest during the winter months. And then, too, a good many of our members are interested in their homes. In the summer they are kept very busily employed, and there is not much opportunity to look after their homes. So they see about their homes and look after their children getting an education. I know of many instances where our men have their children taking music lessons and have pianos. Twenty years ago there were not 20 per cent of our men that had children taking music lessons, and I do not believe there were 10 per cent that cared whether their children went to school or not; and 10 years ago there were not 20 per cent married, and now 90 per cent are married and are raising families.

Q. (By Mr. A. L. HARRIS.) Does this condition obtain all over the territory covered by your organization?—A. These conditions obtain all over the Great Lakes. These conditions that existed on the Great Lakes never existed in the coast ports to such a great extent. There are, of course, ports on the coast where the same conditions prevail to a smaller extent. But we have not been able to give the time to coast ports that we have to the lake ports. Where we have been appealed to we do.

Q. (By Mr. FARQUHAR.) What is the average attendance of members at your local meetings? How frequent are the meetings—monthly or weekly?—A. It is according to the location—according to the method of work. In the summer season about twice a month. Some of them meet weekly—that is, in the summer months. In the winter season in the ports on the upper lakes they do not meet at all. There is no idea of meeting for simply creating trouble. If they do meet, it is for discussing the wage scale and trying to remedy defects that exist.

Q. Where you have no halls, have you any meeting rooms and committee rooms where they can meet?—A. We always own halls, or rent halls if we do not own them.

Q. So you always have a local habitation, as it were, for your members?—A. Yes; about 60 per cent of them. In some localities the men are compelled to attend their meetings regularly, and that is one of the rules that is carried out and enforced.

(Testimony closed.)

WASHINGTON, D. C., January 18, 1901.

TESTIMONY OF MR. F. T. LINDENBERGER.

Chairman of the committee on hostile legislation, American Ticket Brokers' Association.

The commission met at 10.57 a. m., Vice-Chairman Phillips presiding. Whereupon Mr. F. T. Lindenberg, chairman of the committee on hostile legislation of the American Ticket Brokers' Association, Detroit, Mich., was introduced as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. KENNEDY.) Will you please give your name and post-office address?—A. F. T. Lindenberg, Detroit, Mich.

Q. State your business.—A. Ticket broker.

Q. Are you connected with any organization of ticket brokers?—A. American Ticket Brokers' Association.

Q. Have you official connection with that body?—A. My title is chairman of the committee on hostile legislation.

Q. How large a membership has that organization?—A. I think about 330.

Q. Are the objects of the association stated in your testimony, as prepared?—
A. Yes.

Q. You have a prepared statement?—A. Yes.

Q. Would you prefer to make your statement uninterruptedly and answer questions afterwards, or answer questions as you go?—A. I would prefer to be allowed to go through with the testimony, and then shall be glad to answer any question any member of the commission may desire to ask.

Mr. KENNEDY. You may proceed, then, with your statement.

The WITNESS. Mr. Chairman and gentlemen: I have tried to follow as nearly as possible the topical plan of the inquiry as outlined by the commission, and then to afterwards answer the charges against the business of brokerage that have been made by those who have testified before. Your plan of inquiry as to ticket brokerage covers the following heads: (1) In what the practice consists; (2) mileage books and excursion tickets; (3) number of people engaged in the business; (4) by whom carried on; (5) effect on passenger travel, interstate and intrastate; (6) to what extent it is encouraged by railroads and for what purpose; (7) laws prohibiting it; what States have enacted such laws; (8) Arguments for and against such practice.

The first question therefore is:

IN WHAT THE PRACTICE OF TICKET BROKERAGE CONSISTS.

I reply, in the buying from the agents of railways and from passengers of passage tickets and selling the same to travelers at a less price than the published tariff rates.

MILEAGE BOOKS AND EXCURSION TICKETS.

Ticket brokers deal largely in mileage books, which are usually purchased by the broker direct from the various companies and are sold to patrons who have use for a less quantity of mileage than is contained in a full book. The broker is enabled to do this by a rebate system, the passenger paying for the full value of the book and receiving a rebate order on some correspondent of the broker in the city for which he is bound.

Where the customer is known to the broker it is a very common practice to allow him to return the book by mail.

In the New England States and in New York State books are good in the hands of the bearer, and on a large number of roads in various parts of the country the same rule prevails, notwithstanding the fact that persons buying these books are compelled to sign an alleged contract containing restrictions as to personal use and providing for the confiscation of the book by the conductor should the book be used by other than the original purchaser.

The following letter from the general passenger agent of the Lehigh Valley Railway will be interesting in this connection [reading]:

[“Lehigh Valley Railroad Company, Havemeyer Building, 26 Cortlandt street.]

“NEW YORK, October 31, 1900.

“Mr. THOMAS R. GREEN, Woodmont, Conn.

“DEAR SIR: I have yours of 30th regarding the loss of your mileage book No. 75240 and regret to state that owing to the manner in which these books are issued, viz, good in the hands of the holder, our auditing department has been obliged to discontinue the bulletining of same as per circular attached.

“Yours, truly,

“CHAS. S. LEE, General Passenger Agent.”

I have here a cover of a mileage book of Lehigh Valley issue, under date of June 11, 1900, which contains the ordinary so-called contract, with all the restrictions, etc., and while the contract states that the book is not transferable and will be taken up by the conductor if presented by a person other than the purchaser, this letter is proof positive that it is not so. In some of the States, notably New York State, the law requires that mileage shall be good in the hands of the holder.

Q. (By Mr. PHILLIPS.) Is not that a just and equitable law?—A. I believe so; judging from a ticket broker's standpoint. In certain sections what are known as interchangeable mileage books are exclusively sold. I have here a specimen

of the books sold in the territory of the Central Passenger Association, in which 37 lines have combined in the issue of a 1,000-mile book. The passenger is required to pay \$30 for the book, and should he use all of the 1,000 miles on any one or all of the 37 roads, he is entitled to a refund of \$10 on return of the cover. In issuing this book the railroads have reversed the usual custom of the ticket broker. The broker handles the book on a given road for the use of two or more men, while this interchangeable book is good for the use of one man over 37 roads.

I believe the issue of this book is a very great discrimination, inasmuch as it permits the holder to obtain a 2 cent per mile rate over a given distance on a certain road, while another person for the same service must pay 3 cents per mile. The passenger who profits by the 2-cent rate is not compelled by the terms of the interchangeable book to again patronize the road in question, but can use the balance of his mileage on any competing line or lines.

Q. Does that cause great annoyance to the passenger?—A. It may not sound right for a ticket broker to find fault; the book is objectionable, from a business standpoint, to the ticket broker.

Q. Well, is it not from the public standpoint?—A. It is an inconvenience to the public; nearly all travelers object to it, object to the amount of money which they have to invest.

Because of the amount of money involved in the handling of this interchangeable book many traveling men arrange with a ticket broker to advance the necessary money and carry the book for him. I know of brokers who thus act as banker and broker for traveling men in the handling of this special character of transportation, some carrying as high as 200 books for these special customers.

The traveling man is obliged to invest \$30 when he gets his book; he can't cash his book cover and recover his extra \$10 investment until the mileage strips collected by the various conductors have gone into the auditing department, and if he wants to travel farther he must invest another \$30. I have heard traveling men say that they have been obliged to carry two or three covers in which they had that investment of \$10 each before they could get returns from the mileage bureaus.

EXCURSION TICKETS.

Excursion tickets provide a source of business to the broker. Not only does he purchase from travelers the return portions of excursion tickets, but through his correspondents in other cities to which an excursion may go or an excursion may come, both the going and return portions are used by the broker and his customers.

Advance information in regard to these excursions is frequently supplied brokers by lines interested, and through correspondence arrangements are completed by the brokers to handle the stock.

RATE-WAR TICKETS.

A very common method adopted by brokers to cut rates is the use of war-rate tickets when competing lines grow belligerent. I recall a war between the two great Canadian lines that raged for 8 months during the year 1898. One-way tickets were sold at about one-half the usual rate and round-trip tickets at a corresponding reduction. Outside of Canadian territory regular tariff rates were charged. The fare between Detroit and Windsor is but 10 cents; yet when a traveler entered a regular ticket office in Detroit and purchased a ticket to Toronto he was charged \$6.60. Across the river the price was \$3.30. In Detroit the fare to Montreal was \$15, in Windsor \$7. In Detroit the company charged \$6.75 to Niagara Falls, while all that was asked by the agent of the same company in Windsor was \$3.35.

I have here a specimen of the tickets sold at that time that I just happened to find among my ticket stock. It is a ticket between Windsor and Niagara Falls which sold for \$3.55 in Windsor; in Detroit it was \$6.75, and the fare across the river 10 cents.

As is usual in such cases with ticket brokers, the brokers of Detroit sent out at that time, to their western correspondents, furnishing-rate sheets giving prices at which they would supply, on prepaid orders, various tickets to Canadian and eastern points. The prices were usually an advance of \$1 over the war rate.

It was only through brokers that these rates could be obtained within the limits of the United States.

The agents in Detroit were absolutely forbidden to give any information to customers of rates across the river, and that situation continued for 8 months. Instances of this nature could be multiplied indefinitely.

There is to-day a war rate of 75 cents between steamship lines plying between Providence and New York. A new company known as the Joy Line has been established, and the old established lines are trying to prevent them from getting a foothold in the business, and have opened a war rate.

The railway fare between Boston and Providence is \$1, yet the through rate to New York charged at the regular offices in Boston is \$3, an excess of \$1.25 above the added amount of the two fares. It is only through the offices of brokers that travelers learn of this situation, regular agents not being permitted to volunteer information.

FURNISHING-RATE SHEETS.

A common practice with brokers favorably situated to secure tickets is to issue furnishing-rate sheets to their correspondents. To illustrate how this method can be of use, we will suppose a passenger to enter the office of a Washington broker and ask for a rate to Denver. The regular fare is \$48. The broker may have a ticket to Buffalo, or Cleveland, or Pittsburg, or Chicago, as the case may be. He then examines his rate sheets for a furnishing rate from brokers in any of these cities. If a satisfactory furnishing rate is found, and he can agree upon the price with his customer, a bargain is made. The customer takes the part-way ticket and an order upon the correspondent in the intermediate city for a ticket to finish his journey, which insures him a through passage at the agreed price, usually from \$3 to \$5 below the tariff rates. If it should happen that the Washington broker had no ticket, but the furnishing rate was sufficiently low in any of these cities for a Denver ticket, it might be profitable for him to go to the regular agent here and buy a ticket at local rates to this point. Putting the two together he would be able to make a through rate at less than the tariff.

NUMBER OF PEOPLE ENGAGED IN THE BUSINESS.

As to the number of people engaged in the business, I can not give this information to a certainty; but perhaps my estimate will be near enough for the purposes of the commission.

The 2 regularly organized associations of ticket brokers are the American Ticket Brokers' Association and the Guarantee Ticket Brokers' Association.

The American Ticket Brokers' Association has a membership at present of 335. The latest list of the Guarantee Ticket Brokers' Association gives their membership as 83. Outside of the 2 associations there are probably 50 offices. This gives the number of offices as 468. It is fair to assume that an average of 3 clerks are employed in each office in addition to the proprietor, so that in round numbers we may safely say there are 1,800 to 2,000 persons in the United States making a living for themselves by selling reduced-rate railway tickets.

BY WHOM TICKET BROKERAGE IS CARRIED ON.

In the larger cities the business is conducted by those who devote their entire time to its interests. In smaller places many of the brokers are merchants and business men engaged in various lines of trade, such as druggists, dry-goods and clothing dealers, manufacturers, dealers in cigars and tobacco, and, very frequently, persons conducting book and news stands in hotels.

Many of the members of the American Ticket Brokers' Association have been engaged exclusively in this business for from 10 to 30 years. They enjoy the respect and confidence of the communities in which they live, the great traveling public, and the railway managers with whom they deal.

Speaking for myself, with a record of 19 years as a ticket broker, I know of no persons to whom I could more safely refer for a certificate of character than to the railway-passenger men of my home city, and yet many of them are strongly and even bitterly antagonistic to me from a business standpoint. What I can say for myself can safely be said of a very large majority of members of the American Ticket Brokers' Association, which I have the honor to represent before you to-day.

Now I would like to show this commission something of the character of our organization of ticket brokers. This is perhaps best illustrated by our constitution and by-laws. Our motto translated into English means "Our protection travels with you," and illustrates the rule of the association that all transactions of its members with the public are guaranteed by the association.

The association was organized 22 years ago. I submit a copy of the constitution and by-laws:

CONSTITUTION AND BY-LAWS OF THE AMERICAN TICKET BROKERS' ASSOCIATION.¹

[With amendments to and including the twenty-second annual convention, May 9 and 10, 1900.]

CONSTITUTION.

ARTICLE IV.—*Members.*

1. Any person of good moral character, who possesses the necessary ability and capital, shall be eligible to membership in this association upon payment of an initiation fee, if in the judgment of the executive committee the location will admit of the admission of the applicant.
2. If the executive committee shall entertain any just or reasonable doubt of the stability of the applicant, the committee may impose the condition that he shall have been in business for himself for not less than 3 months in the city in which he wishes to locate his office.
4. No member shall hold more than 2 memberships for any 1 city, nor more than 5 in the association.
5. No membership shall be operated except by the member and in the city for which it was originally issued, except under the provisions of the first section of the fifth article of this constitution.

ARTICLE V.—*Memberships—Transfer or sale*

1. A membership under which the holder has conducted the ticket-brokerage business for a term of not less than 6 months may be sold, transferred, or assigned by its holder to any person eligible to membership, provided the executive committee approves the sale, transfer, or assignment.
2. The association shall hold a first lien on the memberships for any debts due the association or its members. All claims against a membership shall be adjusted before it is sold, assigned, or transferred.

BY-LAWS.

ARTICLE II.—*Local divisions.*

1. In every city where there are 3 or more members, the members shall organize a local division on the plan upon which the majority of members may agree, having in view the following objects:
 - (a) Uniformity of selling rates.
 - (b) The destruction of hostile competition.
2. Local divisions shall be entirely free to adopt such rules and regulations for self-government as they may elect, provided they do not conflict with the constitution and by-laws of the American Ticket Brokers' Association.
3. Where there are only 2 memberships, and a division of opinion exists as to forming a local division, the members shall refer the matter to the president, who is empowered to decide it.
4. Any violation of the rules and regulations of the local division may be brought through the chairman or secretary of such division before the executive committee, which committee is empowered to punish the offender by a fine not exceeding \$100, suspension, or expulsion.

ARTICLE III.—*Initiation fees and annual dues—Publication of applications*

3. In cities where 1 or more memberships are operated, the initiation fee for new applicants shall be 40 times the amount of the prescribed fee, as follows: Class A, \$1,000; Class B, \$600, Class C, \$400, Class D, \$200.
4. The initiation fees and dues for additional offices shall be the same as those required of new applicants.
5. Notice of the filing of applications for memberships in this association, with names of the cities for which the memberships are desired, and the full names of the applicants, shall be published in at least 1 issue of the Correction Sheet, and no action shall be taken on applications by the executive committee within less than 15 days after such publication.

ARTICLE IV.—*Offices*

1. A member desiring to establish an additional office in the city where he is located shall obtain the consent of the executive committee before opening such additional office, giving the exact location, and make application for admission in the prescribed form.
2. The executive committee may grant such membership for the proposed additional office if in their judgment the location will warrant the admission of the applicant.
3. A member desiring to establish an office in another city must obtain the consent of the executive committee before opening same and then proceed in the manner prescribed in section 1 of this article.
4. No member shall change the location of his office without first obtaining the consent of the executive committee.
5. No member shall conduct his business in any place where liquor is sold, nor in any place objected to by the executive committee.

¹The following extracts from the constitution and by-laws of the American Ticket Brokers' Association will give an idea of its plan of organization, etc.

ARTICLE VI.—*Rebate and prepaid orders.*

1. All association rebate orders, when properly drawn by members in good standing, shall be honored without question.
2. Rebate orders shall be drawn exclusively upon association blanks, and must be stamped and dated with an office dating stamp.
3. Overdrafts may be made at the pleasure of members, and subject to mutual agreement.
4. All overdrafts must be returned for collection to the office drawing same within 90 days from date of sale of the ticket. In case this requirement is neglected, the office holding the rebate order shall have no claim against the issuing office.

* * * * *

ARTICLE VIII.—*Guaranty.*

1. Every member shall, when requested by a passenger purchasing a ticket, guarantee the same in writing.
2. Upon failure of a member to make good any written or verbal guaranty to a passenger, the same shall be done by the association when so decided by the executive committee, the amount to be charged to the member.
3. Whenever a ticket or coupon purchased of a member by a passenger is not accepted for passage, through no neglect of the passenger, and the passenger is obliged to pay fare, the full amount of fare so paid shall be returned to the passenger.
4. Whenever a ticket is sold without recourse, wholly or in part, the same shall be stated in writing by the passenger at the time of such sale.

ARTICLE IX.—*Arbitration—Costs.*

1. All cases in dispute, whether between members or between patrons and members, shall be assigned directly to the executive committee, as a board of arbitration, from whose decision the right of appeal shall lie to the annual convention.
2. Notice of appeal must be given, and the amount involved deposited in the general office within 20 days from receipt of notice of the finding.
3. A member failing to comply within the specified time with the requirements of the decision of the board of arbitration, or to file an appeal, shall be suspended from the rights and privileges of membership.
4. A member failing to pay into the general office, within 3 days after notification by the secretary, a claim or balance due this association, a member, or patron, shall be liable to suspension.
5. Amounts so paid into the general office shall be subject to subsequent adjustment, as provided for in the first, second, and third sections of this article.
6. A fee of \$3 and 5 per cent of the award shall be charged against the loser in all cases of members against members adjusted by the board of arbitration, and of patrons against members where the member loses the case. Provided, that should the respondent before trial offer to pay to the plaintiff, or admit his liability for, a part of the claim, and the board should find an award for said amount or less, the costs shall be taxed on the plaintiff. In case of appeal, the cost for the same to a member shall be an additional fee of \$5 and 5 per cent of the award. The accumulated charges shall be paid by the member losing on the final determination of the case.
7. Rehearing shall not be granted in any case decided by the executive committee or board of arbitration unless the amount involved is deposited in the general office, and petition filed within 20 days from receipt of notice of the finding.
8. No claim of member against member shall be considered by the board unless filed in the general office within 1 year from date of the transaction.

ARTICLE X.—*Misdemeanors*

1. Any transaction between a member and any person or corporation whereby the system of ticket brokerage may be liable to injury or degradation, or any act by which a member may suffer detriment in his social or financial standing, or be damaged in his business, shall be considered a misdemeanor.
2. The buying or selling of employees', complimentary, or stock passes shall be considered a misdemeanor.
3. The attempt by a member to secure the office of another member, or to cause the advancement of his rent, shall be considered a misdemeanor.
4. Any violation of the common law shall be considered a misdemeanor.
5. The punishment for committing a misdemeanor shall be by reprimand, fine not exceeding \$100, suspension, any one or all, or expulsion, at the discretion of the executive committee. If the offense is of such character as to cause pecuniary damage to either a patron, corporation, or member, the executive committee may also require such restitution from the offender as they may deem proper.

* * * * *

ARTICLE XII.—*Nonintercourse.*

1. No member shall have any transaction of any character whatever pertaining to ticket brokerage with a broker not a member of this association nor with a suspended member. The penalty for the violation of this law shall be, for the first offense, a fine of \$25; for the second offense, a fine of \$50; and for the third and each subsequent offense, a fine of \$100.
2. A member joining any other association of ticket brokers shall be suspended or expelled, at the discretion of the executive committee.

ARTICLE XIII.—*Certificate of membership.*

The secretary shall issue to every member, upon payment of his semiannual dues, a certificate of membership, duly attested, which certificate shall be good until revoked by the executive committee.

ARTICLE XIV.—*Lost, stolen, or fraudulent transportation.*

A member receiving information of any lost, found, stolen, or fraudulent tickets or passes offered for sale shall at once notify the secretary (by telegraph if the case is urgent), who shall take immediate measures to protect the members, the railways, or parties interested.

ARTICLE XV.—*Advertising.*

No member shall issue advertising matter discriminating in favor of any other member or members.

ARTICLE XIX.—*Association rate book and correction sheets.*

1. The association rate book shall be issued semiannually, in pamphlet form, by the secretary, on the 1st day of the months of May and November, or as soon thereafter as practicable. Correction sheets shall be issued semimonthly, on the 1st and 15th days of each month, between the issues of the rate book.

2. Members shall give the regular first-class unlimited, first-class limited, and second-class rates to at least 50 prominent points, subject to change without notice.

ARTICLE XXI.—*Appeals*

1. An appeal may be made from the decision of the executive committee to the annual convention, if filed with the secretary within 30 days after notification.

2. When a fine is imposed and an appeal taken, the amount of the fine shall be deposited in the general office.

ARTICLE XXII.—*Quorum*

A quorum for business at the annual convention shall be not less than 25 members.

ARTICLE XXV.—*Insolvency*

The executive committee may suspend a member upon proof of assignment or insolvency.

ARTICLE XXVI.—*Committee on hostile legislation*

1. The committee on hostile legislation shall consist of one member of the association, who shall be elected annually by the association in convention assembled.

2. The compensation of the committeeman shall be \$2,500 per annum, and such committeeman shall be at the service of the association during the entire year. This committee shall have the power to look after hostile legislation in any of the States or in Congress.

3. In the event of hostile legislation in any State, the members in such State, acting under the direction of the committee on hostile legislation, shall pay 50 per cent of the expense incurred, and the association shall pay 50 per cent.

4. It shall be the duty of the committee on hostile legislation to submit to the executive committee each month a report of the expenses incurred.

To show the commission now careful the officers of this association are as to the character of those seeking membership, and to admit only persons of unblemished reputation and known integrity, I submit copies of our application and reference blanks. In addition to these precautions, the mercantile agencies are called upon for a financial report upon the applicant. [Reading:]

AMERICAN TICKET BROKERS' ASSOCIATION

Application for membership

—, —, 189—

The undersigned hereby applies for membership in the American Ticket Brokers' Association, and makes true answers to the following questions, or others that may be asked by the executive committee.

1. Individual name of applicant for membership? (Give full name.)
2. Name of firm under which business will be conducted?
3. Give exact location of office. (City of —, county of —, State of —)
4. Will any person or persons other than yourself have any interest in the ticket-brokerage business with you? (If so, give full particulars of names and interests.)
5. What other business, if any, is or will be conducted in the same office, and by whom?
6. What other business, if any, do you intend to conduct in connection with the ticket-brokerage business?
7. What amount of money (actual cash) will you now put into the ticket-brokerage business?
8. Are you now a member of the American Ticket Brokers' Association?
9. For what city or town do you hold membership? (If more than one, name them.)
10. Were you ever a member of this association?
11. Do you belong to any other association of ticket brokers? (If so, give name of it.)
12. Have you ever been engaged in the ticket-brokerage business?
13. At what point? (If more than one, name places and length of time in each.)
14. What was your business or occupation immediately preceding your present one, and on what account did you leave it?
15. What is your present occupation, besides the ticket-brokerage business? (If more than one, name them.)
16. Where were you born?
17. When?
18. How long did you reside in your native place?
19. Married or single?
20. Have you ever been bankrupt or insolvent?
21. Did you ever compound with your creditors?
22. If so, state whether now discharged, and in what manner.
23. Give particulars and amount of any debt or liability on you are under, and state if you are indorser or surety for anyone, jointly or individually, and to what extent.
24. What resources, if any, have you outside of your investment in the ticket-brokerage business?
25. If encumbered, state how and to what extent.
26. Give names and addresses of one banker and two merchants to whom you can refer.

27. Give names and addresses of three members of the American Ticket Brokers' Association to whom you can refer.

28. Have you read the constitution and by-laws of the American Ticket Brokers' Association?

29. Do you assent to its provisions and agree to be bound thereby?

30. Do you understand and agree that any false statement or any misrepresentation in answering any of the foregoing questions, or any others relating to them, renders any membership obtained upon this application null and void?

31. (Applicant will sign here.)

NOTE TO APPLICANTS

Each and every question must be fully answered, and full name given wherever indicated. Failure to do so will delay the application.

No alterations or erasures will be permitted.

The information required in this application is for the benefit of the executive committee alone and is strictly confidential. It is essential to the maintenance of a high standard of membership, and, as it is verified from other sources, it is expected that applicants will make their answers as complete and specific as possible.

To be filed at the general office.

No. of application, _____.

No. of membership, _____.

Application published in correction sheet Nos. _____.

Class _____, Initiation fee received, \$_____, Date received, _____, 18____.

R. G. Dun & Co.'s report, dated _____, 18____, attached.

The applicant is required to give the names of three ticket brokers as a reference. The following reference blank is sent to those ticket brokers (reading):

THE AMERICAN TICKET BROKERS' ASSOCIATION.

Member's reference blank.

[Confidential]

M _____,

DEAR SIR: M _____, of _____, is an applicant for admission to this association at _____, and refers to you for recommendation. It is understood this reference does not imply an extended acquaintance or an expected indorsement, but is simply to enable the executive committee to secure as complete information as possible concerning the character of the applicant.

Will you therefore please fill up the subjoined blanks at your earliest convenience and return to the general office?

Respectfully,

Secretary of Executive Committee
(Date here) _____, 1896

1. How long have you known the applicant?
2. What are the nature and extent of the dealings you have had with him?
3. Has he always been prompt in remitting?
4. To what extent would you be willing to credit him in an ordinary open account?
5. Give a general summary of your knowledge of the applicant and your estimate of his character.
6. Understanding the high standard of membership sought to be maintained by this association, do you, on the basis of your knowledge, recommend the applicant for admission?

(Signed) _____.

This is the reference blank sent to bankers and merchants, etc., that are used as references (reading):

AMERICAN TICKET BROKERS' ASSOCIATION

Reference blank

[Confidential]

M _____,

DEAR SIR: _____, of _____, is an applicant for membership in this association at _____, and refers to you for testimony as to his character and commercial integrity. A reply to each of the following questions is requested at your earliest convenience, for the information of the executive committee only, with the understanding that your answers will be held strictly private and confidential, and that they are not to make you in any way responsible.

It is the aim of this association to admit only those of good character and commercial integrity, with sufficient judgment to enter into no contracts which they are not reasonably willing and able to fill, and these qualities weigh more with the committee than abundant capital in unscrupulous and doubtful hands.

Very respectfully,

Secretary of the Executive Committee.
(Date here) _____, 189____.

1. How long have you known the above-named applicant?
2. What opportunity have you had to form an opinion of his character and commercial integrity?
3. Are you related to him through family ties?
4. Where has he been located since you have known him?
5. In what business has he been engaged since you have known him?
6. Has he, to your knowledge, ever been suspected of fraud, dishonorable or improper conduct, or of being addicted to gambling, speculating, or drinking?
7. Has he, to your knowledge, any unsettled debts or claims?
8. Has he been prompt in settling his current expenses or other debts?
9. Has he ever been dismissed from any situation or engagement?
10. If so, under what circumstances?
11. Has he been extravagant in his habits or lived beyond his means at any time?
12. Have his associates been persons of good character and habits?
13. With this understanding of what is sought, do you recommend the applicant as a proper subject for membership?

(Sign here) _____.

Education in a ticket broker's office is a very common stepping stone to employment in the passenger departments of railways. Several prominent railroad men holding very high positions to-day received their first education in the railway ticket business behind a broker's counter.

The fact that a man has been a ticket broker does not act as a bar against his securing a place of trust and responsibility with railways, quite the contrary being the fact.

While our association holds all members to a strict accountability for their acts, we unfortunately can not control every person who chooses to go into the ticket business. There are renegade ticket brokers just as there are rascally men in every calling. The buzzard and the ticket crook will operate in spite of us and of the law, and an antiscaling law would be no check to this character of offenders.

Our association recently made the following offer of reward for the apprehension of persons who do a dishonorable business in the manipulation of railroad tickets [reading]:

AMERICAN TICKET BROKERS' ASSOCIATION, PRESIDENT'S OFFICE,
St. Louis, Mo., December 15, 1900.

Five hundred dollars reward

Announcement having been made that the Association of General Passenger Agents has appointed a committee with power to prosecute persons who may be guilty of the forgery of railway tickets or the criminal manipulation of passage tickets, it is proper to state that the American Ticket Brokers' Association is in hearty accord with the avowed purpose of this movement.

If it is true, as claimed by these passenger men, that there are ticket brokers who are engaged in criminal practices, the sooner such persons are in prison the better for the railways, the traveling public, and all honest men engaged in the ticket business.

With an earnest desire to assist in clearing the country of every disreputable character engaged in handling railway tickets, I am authorized, by and on behalf of the American Ticket Brokers' Association, to make the following offer.

For the arrest and conviction, in a court of competent jurisdiction, of any member of the American Ticket Brokers' Association who is guilty of the crime of forging a railway ticket, or who has changed the destination of a railway ticket with intent to defraud, we will pay the sum of *five hundred dollars*.

For the arrest and conviction of *any ticket broker* who is not a member of the American Ticket Brokers' Association, who is guilty of forging railway tickets, or changing the destination on a railway ticket with intent to defraud, we will pay the sum of *two hundred dollars*.

SIMON STEINER, President,
For the American Ticket Brokers' Association.

This offer of reward has been very generally circulated, and with the reward circular a copy of the following letter of our secretary was mailed to every broker in the United States [reading]:

AMERICAN TICKET BROKERS' ASSOCIATION, GENERAL OFFICE,
Louisville, Ky., December 20, 1900.

[Reward circulars.]

To ticket brokers:

You are earnestly requested to secure the publication of the enclosed circular in as many of your local papers as possible.

In offering this reward for the prosecution and conviction of ticket swindlers, the American Ticket Brokers' Association proposes to prove to the world that the slanderous stories constantly put in circulation by certain railway officials—to the effect that it is the general practice with ticket brokers to forge and alter railway tickets—are infamous falsehoods, invented and circulated for the express purpose of creating a public feeling against ticket brokerage and to so frighten timid travelers that they will buy direct at the various company offices, instead of making a saving by patronizing brokers.

This circular is also intended as a warning to any ticket broker who may be tempted to dishonest practices that the association is in deadly earnest and will spare neither energy nor money to put him out of the calling he has disgraced.

The honest and reliable broker can not afford to have reproach cast upon his calling by the rascally transactions of any crook who may put out a sign as a ticket broker and profit by swindling those who from previous experience have reason to expect honorable treatment at any ticket broker's counter. To the end that the business may be purified of all unworthy characters, the American Ticket Brokers' Association now asks, and confidently expects to receive, the hearty cooperation of every honorable person in the business.

By order of the executive committee—

W. B. CARTER, Secretary.

EFFECT ON PASSENGER TRAVEL, INTERSTATE AND INTRASTATE.

As passenger travel is always stimulated by reductions from ordinary fare, I should say that the effect of ticket brokerage is to increase travel, both local and interstate.

BROKERAGE SUPPORTED. AND ENCOURAGED BY RAILROADS.

The growth and development of ticket brokerage to the immense proportions it assumed from about 1876 to 1896 was due almost entirely to the direct encouragement and support of railways. Nearly every railroad of importance employed brokers; and when they could not make satisfactory arrangements with established offices, new offices were opened.

When I became a ticket broker, 19 years ago, I started out with the regular issues of 3 lines of railways and in the following years dealt on the most friendly terms with all the great lines that looked to Detroit for business. My experience is similar to that of brokers in every part of the country.

The purpose of using brokers by railway lines is no doubt to get competitive business which they are unable to reach by ordinary means.

Brokers who have been long established control a large trade that can be influenced by reduced fares. New lines, desiring quick introduction to the public, commonly place tickets with brokers. After their purpose is accomplished and their trade is built up to the desired magnitude, it is not uncommon for these lines to join the hue and cry against the very source of their success.

The weaker lines, failing to secure a living share of passenger traffic, frequently find that their only means of escaping the receiver is to call in the help of the ticket broker. With correspondents in every part of this great country, it is not difficult for ticket brokers to quickly influence a large passenger traffic over any line where the cost of tickets is sufficiently low.

STATE LAWS PROHIBITING TICKET BROKERAGE.

With the concentration of railway interests, the forming of pools and traffic associations, a system of persecution was inaugurated against ticket brokers.

The legislatures in all the States of the Union have been solicited time and again to pass "antiscaiping" laws. In but 10 States have the opponents of brokers succeeded in passing bills of this character. In 2 of these States the law has since been declared unconstitutional. After years of the most strenuous effort our enemies have but 8 States to their credit, while the rest (some 37) are clear from laws so antagonistic to all rules of right and justice. In the 8 States the law is so extremely obnoxious to the public that it is entirely inoperative except in the city of Philadelphia.

In Congress the fight has raged for a dozen years. Four years ago for the first time, after repeated failures, the advocates of this bill secured its passage in the House, but it failed of consideration in the Senate. Two years ago the bill was again voted upon in the House and won by a vote of 119 to 101, but again the Senate refused to vote upon the bill.

It is a fact worthy of note that the times selected to pass "antiscaiping" bills in Congress were directly after Congressional elections. The bill is very unpopular with the people, and the Congressman who would vote for it stood the chance of losing the support of a large number of his constituents.

Our opponents have claimed some 381 newspapers as opposed to ticket scalping. I have not the statistics—but they are easily obtainable—of the vast number of newspapers there are in the United States, and if only 381 of the entire number advocate an antiscaiping law, it certainly does not speak very well for the proposition. The articles in these papers, as shown by the clipping bureaus, were nearly all from the same pen, it having frequently occurred that the same article would appear as an editorial expression simultaneously in 40 or 50 papers.

To show how the independent press views this subject I will read you a few clippings from editorial opinions in papers representing various parts of the country from New York to San Francisco [Reading]:

[Syracuse (N. Y.) Evening News, February 2, 1897.]

Congressman Poole is being flooded with telegrams from business men in Syracuse to oppose Congressman Sherman's bill prohibiting, except under restrictions, the resale of special rate tickets over the railroads. The bill is clearly against the interests of the people, although it may have some desirable features. Congress will do well to "go slow" on this matter; it has a suspicious parentage.

[The Denver Republican, February 9, 1897.]

THE SCALPERS AND THE RAILROADS.

The action of the Senate Committee on Interstate Commerce, which yesterday decided to postpone action on the so-called antiscaiper bill, at least until the next session, ought to be a lesson to the railroad managers who were eagerly clamoring for protection from the ticket brokers. The decision of the committee is, in effect, that the railroads should come before Congress with clean hands.

They have done all they could to defeat, nullify, and overthrow the interstate-commerce law and are still evading and defeating its provisions in every way possible. They are unwilling to allow any protection to be granted to the public and still demand that they themselves be protected from the ticket brokers by an amendment to the law which they themselves condemn.

While the ticket brokerage system may be an evil in principle, it is not practically the only avenue by which the public is able to profit by the competition between the railroads. When the railroads quit conniving and abandon underhand methods there will be small need for abolishing scalping.

[The World-Herald (Omaha), February 10, 1897.]

SCALPED THE ANTISCALPERS.

The antiscalping bill has been laid to rest by the Senate, and the railroad lobby that had it in charge has turned its attention to other things. It became evident that the House would not sanction the measure when it came from the Senate, so the Senate committee quietly gave it its quietus. There never was any real reason why such a bill should be introduced into the National Legislature, and the only possible excuse for its introduction may be found in the attack made upon ticket brokers by the last report of the Interstate Commerce Commission. Had the proposed antiscalping bill become a law, it would have served to throw further restrictions around travel, and there are enough of these at the present time. A railroad ticket belongs to the purchaser, and there seems to be no good reason why he should be prohibited from selling it if he concluded not to use it or any portion of it. To prohibit him from doing this would be about as sensible as prohibiting a man from selling some furniture for which he had no use to a second-hand dealer. The antiscalping bill had its origin in a desire upon the part of passenger-traffic managers to secure a firmer hold upon the traveling public and force it to yield to the exactions of passenger pools.

[Syracuse (N. Y.) Herald, January 23, 1897.]

Representative Sherman's bill to prohibit by severe penalty the sale of railroad tickets by "scalpers" ought to be "killed." A railroad ticket, paid for at a certain rate per mile, ought to be good until it is used, no matter by whom used, if it has been fairly bought. We are glad to learn that Major Poole will vote against the bill. It is a railroad job.

[Chicago Evening Journal, February 6, 1897.]

ABOLISHING SCALPING TO PROTECT THE PUBLIC.

The Tribune has made a few mistakes in its efforts to aid in abolishing the traffic in railroad tickets. It says the Sherman bill, making the operation familiarly known as "scalping" a penitentiary offense, is in the interests of public morality, public convenience, and fair treatment. Not one of these statements is correct. The public morals have not been undermined by the liberty to buy and sell property. The public convenience has not been sacrificed; if it had been, the business would not have continued 21 hours. And certainly there is nothing unfair about being able to get your money back on a ticket when you are unable to enjoy the privilege you have purchased.

The consideration of morality is a queer point to raise in the interests of the railroads. The companies' agents have, however, succeeded in making the Baptist Young People's Society believe there is something immoral in selling property if you have bought that property from a railroad company which has an interest in extending its control over it after it has passed beyond the railroad's ownership, and the statement of the society is cited by the Tribune to show how immoral the practice is, though no account is given of how the society arrived at its conclusion.

When a railroad sells a round-trip ticket it would rather have the return portion lapse. Where the holder seeks to have it redeemed the sum of the local rates is often computed, and he is lucky if he doesn't find he really owes the company. The offer to redeem means little, and the only way to get fair treatment is to sell the unused portion of the ticket to a broker.

Extensive privileges are given railroads to secure competition between them. They accept the people's property and form pools. These pools kill competition and are unlawful. Some of the weaker lines keep the spirit of the law by violating the unlawful contract and giving large numbers of their tickets to brokers to dispose of. In this way the people get some of the advantage of the competition the pooling agreement seeks unlawfully to kill. Anything violent, or vicious, or criminal, or unlawful in this? The Sherman bill not only attempts to deprive a large number of citizens of their means of livelihood, but to cut off the public from a convenient and lawful and perfectly moral way of getting its rights from the railroad companies, which seek to withhold them. The lobby of 30 lawyers the companies sent to Washington to rush the bill through without giving the brokers a chance to present their side of the case deserves ignominious defeat.

[Addison (N. Y.) Advertiser.]

AN EVIL TENDENCY.

Legislative lunacy is an appropriate name for what is troubling some of our lawmakers. A bill lately introduced in the lower House of Congress is an illustration of that malady. The author of this measure seems to be actuated by a desire to make his name immortal.

The milk of the cocoanut is compressed in the second and third sections of the bill. The second section forbids any person, no matter what may be his condition or circumstances, from selling or in any way disposing of a railroad ticket or mileage book, except by gift, and the third section imposes a penalty of \$1,000 and imprisonment for not more than 1 year for a violation thereof.

Have railroad companies become so helpless that they need to call in the strong arm of the Congress of the United States in order to save themselves from the burden of carrying a poor man for the same price they have contracted to carry a rich man?

Such legislation, though generally couched in language intended to deceive the public as to its true intent, is but an effort to aid rich and powerful corporations to reap a reward at the expense of the common people.

The time is not far distant when those who do the bidding of the corporations and disregard the interest of their constituents, whose votes elevated them to a position of power, will meet the condemnation they so richly merit.

Public sentiment and the good sense of the majority of the present Congress may be trusted to stamp out any such measure as the one proposed.

[Toledo (Ohio) Commercial, February 8, 1897.]

Some of the railway passenger agents express little hope of the passage of antiscalping bill. The measure is one of class, directed against special interests, that should not become a law.

[Staunton (Va.) Argus, February 9, 1897.]

CHOKE OFF THIS BILL.

The people at large have not asked and do not want such a law. It was conceived and is being worked by and in the interest of the railroad companies, and the true representatives of the interests of the people should vote it down in whatever form it is presented. All classes would suffer from such a law save the wealthy. The merchant, the commercial traveler, the artisan, the laborer, and middle classes generally recognize and appreciate the saving made them through ticket brokerage. It means a day's wages to many in these tight times. A constitutional question arises here—whether declaring a chosen vocation to be illegal is not destroying a vested right.

[Daily Times-Herald (Dallas, Tex.), February 2, 1897.]

THE "RAILROAD SCALPERS" BILL.

There is a bill pending in Congress entitled "An act to regulate commerce," and which has been reported favorably by the Committee on Interstate and Foreign Commerce. The object of the bill is to prohibit the business of scalping railroad tickets and to punish the party who undertakes such business.

Outside of the question of the constitutionality of such a measure arises that of the expediency and the justice of the proposed legislation. The business of the scalpers would seem to be as legitimate as any other avocation. It is true that round-trip tickets, mileage tickets, excursion tickets, and the like are sold by the railway companies at a discount under certain conditions, but to make the purchaser and the seller of the unused transportation guilty of a crime is not only going too far, but would be shamefully oppressive and outrageously violative of justice. The baker, the butcher, the grocer, the restaurateur, and other people and firms and corporate bodies do frequently issue return tickets, coupons, etc. They have and set a price upon their property thus sold in lump; they receive the spot cash for the same, while the purchaser takes all the chances of loss, in its manifold ways. It is a neutrality of contract in one sense, and yet it is in many respects a one-sided affair for the very reason that the buyer never gets value received unless and until all those chances have been removed by the possession or use of the property. In the matter of travel the buyer of transportation assumes numberless risks. Now, to at all equalize the matter, it is but right that the seller, that the railway company, in the special subject now under review, should honor this obligation to furnish that which was bought and paid for, whenever presented. A bank note goes out upon the world, and if A presents the one-half of it and B the identified other one-half, each should receive the quantum due to each. And so with a transportation ticket, if A uses it to a certain extent, to one point, B should in all justice be allowed to use it for returning.

From another point of view, the convenience and the saving to thousands of travelers on whom it is incumbent to economize every dime, is a matter that deserves consideration. The richer classes and the favored ones can better afford to expend more, and buy at first hands if they choose, but to the poorer these cut rates are boons, while to those who sell there is just that much saved.

And yet, in view of all these things, it is proposed that the great National Congress, supposed to represent the people, should indulge in such legislation as to make a citizen guilty of a crime with penitentiary punishment simply because he sells or buys an unused transportation ticket. It would seem that where the companies receive their quid pro quo in advance and have fully protected themselves, the legislation should rather be for the protection of the feeble individual in getting back, in some shape, what he has paid for, since he, at least, has obtained nothing under false promises.

There are articles of a similar nature, many of them very strong, from the Piqua, Ohio, Morning Dispatch; Meadville, Pa., Messenger; Chicago Evening Journal; Kansas City Star; Syracuse, N. Y., Evening Herald; Salt Lake City Tribune; Arkansas Gazette; Charleston, S. C., Post; Grand Junction, Colo., Daily Sentinel; Detroit Evening News; Grand Rapids, Mich., Herald; Buffalo Evening News; Youngstown, Ohio, News; Dallas, Tex., Herald-Times; Memphis Commercial Appeal; Hagerstown, Md., Morning Herald; White River Junction, Vt., Landmark; Louisville, Ky., Courier-Journal; Omaha World-Herald; Chattanooga Times; Duluth Evening Herald; Duluth News Tribune; Cleveland Plain Dealer; Denver Republican; Wheeling Register; Sioux City Journal; Richmond State; Cleveland Leader; Roanoke, Va., Times; Baltimore Morning Herald; New York World; St. Louis Star, and from other newspapers all over the country. I will simply file the printed copy, because I would weary the commission by the repetition of these ideas.

Perhaps the strongest factor the advocates of the antiscalping laws have had to contend with is the intense opposition to laws of this character evidenced by the great masses of the people and especially by societies of organized labor.

I have here a pamphlet published in 1898, when this subject was under discussion in Congress, giving the protests from legislatures, traveling men's societies, and, I might say, almost every labor organization in the United States, with the single exception of the distinctively railroad organizations. I recall a conversation with the president of one of the great railway labor organizations. I happened to meet him by accident. I said to him. Why did your people pass that resolution asking Congress to pass the antiscalping bill? He colored and said:

"Well, the conductors asked us to do it." After some little conversation he brought his fist down upon my counter and said: "When I buy a railroad ticket, that ticket is mine and I have got a right to do what I please with it."

And although these railroad organizations have passed resolutions of that kind, I do not believe there is a single individual member, who has given the subject any thought, who does not believe that when he buys any railroad ticket he has a right to do what he pleases with it.

Q. (By Mr. Kennedy.) What are the names of the labor organizations?—A. I will give you some specially. The American Federation of Labor, with a membership of very nearly a million at the present time, I think—they claim to represent 2,000,000—have at their four last annual conventions condemned this bill in every shape. I will give you a specimen. Two years ago in Detroit the American Federation of Labor passed the following resolution [Reading]:

Whereas one of the first bills introduced in the present, the Fifty-fourth, Congress is a measure known as an "antiscauping" bill, the provisions of which make it a crime punishable by heavy fine and imprisonment for any person other than an agent authorized by a transportation company to sell a passage ticket, or for any person to buy a ticket except from such agent; and

Whereas bills of similar character have been before Congress nearly every session for the past 10 years, urged solely by the great trusts and illegal traffic associations and kindred interests, and have failed of final passage because of the fact that in the United States Senate and House of Representatives there are still many staunch champions of right who have listened to the unanimous protest of organized labor and fought loyally for the liberty and property rights of the common people; Therefore be it

Resolved, That the American Federation of Labor, in this its nineteenth annual convention assembled, hereby reaffirms the resolutions of the seventeenth and eighteenth conventions denouncing "antiscauping" legislation, and we now call upon all United States Senators and members of Congress who place the rights and best interests of the great masses of the people before that of trusts, corporations, and monopolies to bury this monstrous bill, and others of like character, in an oblivion so deep that there will be for it hereafter no resurrection.

At the last meeting of the federation, in Louisville, in December, 1900, the following resolution was adopted. This is a certificate from the secretary [reading]:

WASHINGTON, D. C., January 18, 1901

To whom it may concern

This is to certify that at the twentieth annual convention of the American Federation of Labor the following preamble and resolutions were unanimously adopted:

Whereas the so-called "antiscauping" bill, which has been denounced by resolutions in the three last annual conventions of this organization, is before the Committee on Foreign and Interstate Commerce of both Houses of Congress. Therefore be it

Resolved, That the American Federation of Labor, in this its twentieth annual session assembled, again declares unalterable opposition to the letter and spirit of this bill.

Resolved, That the members of our legislative committee be, and are hereby, instructed to oppose, by all honorable means, the passage by Congress of this bill, or any other bill embodying the same principles.

FRANK MORRISON, *Secretary A. F. of L.*

The general assembly of the Knights of Labor that met in Birmingham, Ala., November 13-17, 1900, adopted the following resolution [reading]:

Whereas the so-called antiscauping bill was introduced into both Houses in the present session of this, the Fifty-sixth, Congress, and

Whereas this bill proposes to make criminal and punish by heavy fine and imprisonment the act of selling a railway ticket unless the party so selling has written authority from a corporation controlling railways; and

Whereas the provisions of this bill would convert an innocent act into a new crime or take from the citizen his liberty and rights of property guaranteed under the Constitution, invest corporations with a sovereign and oppressive power, strip the State of jurisdiction, and confer it upon the Federal courts. Therefore be it

Resolved, That the order of the Knights of Labor in general convention assembled denounces this bill as a strictly corporation measure, designed to throttle competition, make easy the maintenance of pool and illegal traffic associations and combinations, and to force those who pay railway fares to submit to the prices fixed by these trusts.

Resolved, That we hereby enter an earnest and emphatic protest against the passage of this bill or any other measure embodying the same principles, and urge all members of Congress who desire to truly represent the people to use their best efforts to prevent a measure so antagonistic to all right and justice from becoming a law.

Resolved, That the secretary be, and is hereby, instructed to mail a copy of these resolutions to each member of Congress.

The National Building Trades Council of America, in convention at Milwaukee, passed the following resolutions January 12, 1900 [reading]:

To whom it may concern

The following is a copy of the preamble and resolutions passed by a unanimous vote of the National Building Trades Council of America January 12, while assembled in annual convention at Milwaukee, Wis.

Whereas there has been introduced by Senator Gear, of Iowa, in the United States Senate, and Congressman Sherman, of New York, in the House of Representatives, measures known as "antiscauping" bills; and

Whereas the purpose of these bills is to abolish, through the Federal courts, the business of offices selling railway passage tickets at reduced rates, and force upon all who travel and pay their fare the rates fixed by illegal pools and traffic associations; and

Whereas these bills provide a heavy fine and imprisonment for any person to sell a railway ticket unless he has a certificate of authority from a transportation company, thus conferring upon corporations a sovereign power: Therefore, be it

Resolved, That the National Building Trades Council, in this its annual convention assembled, declare these bills to be trust measures of the most offensive character; that it is class legislation, and a dangerous menace to the liberty of American citizens and to individual property rights.

Resolved, That we request all labor organizations and kindred interests to unite with us in urging upon Congress the intense opposition to this obnoxious trust measure felt by the wage-earners of America.

Resolved, That the secretary be, and he is hereby, instructed to mail a copy of these resolutions to each member of this the Fifty-sixth Congress.

Respectfully submitted.

H. W. STEINBISS, *General Secretary-Treasurer*.

The printers and, in fact, all of the great labor organizations of this country have adopted similar resolutions.

Now I wish to refer to matters and statements that have been made before this commission. In looking over the testimony of several distinguished railroad men who have appeared and testified, I find the only case where anything like specific charges against the practice of ticket brokerage have been made is in the testimony of Mr. Blanchard. I will try to reply to these charges in the same order in which they appear in the printed proceedings.

As to the statement that the laws of 10 States prohibit ticket brokerage, it is sufficient to reply that in 36 States the legislatures have refused to pass similar laws, that in 2 of the 10 States where such laws have been passed the highest courts of the States have declared the acts unconstitutional, and that in the 8 States where the law exists it is inoperative. As to the fact that a law exists in Canada prohibiting ticket brokerage, I will say that at the time this law went into effect there were but 3 brokers in the Dominion, 2 in Toronto and 1 in Montreal. No resistance could be organized to show the case from the standpoint of the broker. But at that time and for many years after the Canadian roads openly paid commissions to brokers in the United States and it is probable they are doing so today. The traffic in tickets by individual passengers and by hotel clerks is common. I have never heard of a prosecution under the law.

The advocates of an "antiscalping" law have laid great stress upon the recommendation of the Interstate Commerce Commission, in December, 1896, that a law be enacted prohibiting the sale of interstate passage tickets except by authorized agents of the railways. That was 4 years ago. Three annual reports have since been filed by that commission. All the principal subjects relating to transportation have been exhaustively treated in these reports, except that of ticket brokerage. This omission appears very significant. It is not the result of accident or oversight. The commission has chosen to ignore the subject. Is it not probable that a closer acquaintance with the objects and methods of those who are so loudly calling for the scalp of the broker has taught them the error of their earlier judgment, and convinced them that the power an antiscalping law would place in the hands of the managers of the great pools and traffic associations could be, and would be used to the detriment of the people?

Mr. Blanchard says in his testimony that the best moral sense of all the commercial world is against the business of ticket brokerage. To give the commission an idea of how the "best moral sense of the great commercial world" was secured, I call your attention to the following circular, which was sent out from this city by a committee employed to urge upon Congress the passage of the so-called "antiscalping" bill during the session of 1897-98 [reading]:

"ANTISCALPING BILL. HEADQUARTERS, SHOREHAM HOTEL,
"Washington, D. C., December 10, 1897.

"MR. L. P. FARMER,

"Commissioner, 145 Liberty street, New York.

"MR. N. E. WEEKS,

"Chairman N. E. Passenger Association, Boston, Mass.

"MR. F. C. DONALD,

"Commissioner, Central Passenger Association, Chicago.

"MR. B. D. CALDWELL,

"Chairman Western Passenger Association, Chicago.

"W. W. KENT,

"Chairman, 723 Security Building, St. Louis.

"JOSEPH RICHARDSON,

"Chairman S. E. Passenger Association, Atlanta, Ga.

"GENTLEMEN: The House Committee on Interstate Commerce will give a hearing on the antiscalping bill on Friday, December 17. This committee consists of 17 members, 8 of whom, viz, Hepburn, Fletcher, Sherman, Wanger, Joy, Corliss, Bennett, and Stewart, served in the Fifty-fourth Congress and were favorable to

our measure. The other 9 members, viz, Simpkins, Davy, Henrichsen, Adamson, Barham, Hawley, Mann, McAleer, and Davis, are new members who have as yet been untried, and on these latter-named gentlemen it is absolutely necessary that all possible influence be brought to bear by telegrams or letters before the date of meeting to secure their favorable cooperation in passing the bill favorably from the committee to the House calendar. Can I therefore suggest that you will promulgate this information to each and every member of your association, in order that they may take immediate action?

"I would also request that correspondence be opened at once with the president or secretary of each and every society, organization, etc., requesting reduced rates for conventions and meetings, with a view that you secure the aid of said organizations in passing favorable resolutions, addressed to Senator Cullom and Representative Hepburn, and also for individual letters from prominent members of said organizations, addressed to their respective Senators and Representatives, and, so far as possible, keep this office advised of action taken.

"The enemy are sending in petitions from minor labor organizations and letters from country merchants and various persons in opposition to the bill."

(I know in Michigan we had everyone—the legislature and the governor, every commercial organization in the city of Detroit, the mayor and city council, the board of trade, the merchants and manufacturers' exchange, all of the banks, and all of the commercial-traveling and labor organizations—protesting against this bill. I do not know whether they would resent the imputation that they were country merchants or not.)

[Reading:] "After action on the 17th it may be necessary to again organize throughout the country for an aggressive campaign in securing petitions in every town along the lines of railways.

"Should this plan be adopted, and I hope it will, it would be wise to have each local agent instructed to secure at the head of each petition the name of the most prominent man in his town, inasmuch as the Congressional Record reprints the petition, as follows: 'Petition from John Brown and 25 other citizens of ——— town.' You will understand by this that the leading man should be one of influence, in order to command attention. The agent should also be instructed to totalize the number of names on each petition and forward a postal card to this bureau, stating as follows: 'Petitions of John Brown and ——— others forwarded to Senator ——— and Representative ——— this ——— date.' This is essential, inasmuch as we propose watching the Record, and if within a reasonable time the petition is not shown in the Record we will undertake to follow it up by a personal canvass and secure its recognition.

"This work is most useful, as from time to time we are enabled to show the chairman of the committee in the House and in the Senate, or the Senator or Member in immediate charge of the bill, the totalization of people who are in favor of the measure."

(This shows the methods by which the petitions in favor of the passage of that bill were obtained. An agent of a railroad company in a country town, probably the most important man in the town, had instructions to obtain these signatures and he got them; his job depended upon it.)

[Reading:] "The cooperation of the clergy is essential, provided they largely dwell upon the fraudulent character of the ticket-scalping business; also from leading merchants, manufacturers, editors, and other influential citizens.

"If we could receive copies of letters from the most influential clergymen and merchants for publication in circular form it would be most beneficial.

"The scalpers are here in force and are systematically organizing a strong opposition."

(The force of the "scalpers" consisted of two men, representative ticket brokers. One was from Chicago and one from St. Louis. They were here simply to present the case before the committees of Congress and to explain the business of ticket brokerage, of course, to any members who might be willing to listen to them.)

[Reading:] "I trust that all members of your associations will not overlook the fact that unless the bill is passed in both Houses this session it will be, in our opinion, almost impossible to secure favorable action for some years. After the close of this session the members then commence a strong canvass for reelection, and unless the feeling is overwhelmingly expressed in our favor they will be lukewarm in order to avoid criticism from the opponents of the measure in their respective districts."

(It cost votes, and, as I explained in my testimony before, the two notable attempts that have been made to pass this bill were sprung directly after an election. A Congressman then had two years before him anyway, and his constituents would probably forget all about it before the next election.)

[Reading:] "We would also respectfully request that all general passenger agents, in addition to the instructions given to local agents, will thoroughly canvass the matter with the traveling passenger agents to promulgate this measure throughout the country, securing whatever aid they can with business people generally, and also to closely work up the matter with local agents.

"In order to thoroughly acquaint the traveling passenger agents with the bill, principles of same, etc., we would suggest that each general passenger agent call his force together and advise them fully upon the necessity of careful and efficient work.

"At some length we have outlined the general work required, feeling assured of the hearty cooperation of all officials of the railroads throughout the United States.

"Very truly, yours,

"M. C. ROACH,
"JAS. V. MAHONEY,
"Bureau Com."

Mr. Blanchard makes reference to the business of stock and merchandise brokers, that they deal only with principals, and that ticket brokers are independent, and therefore there is no means of regulating them, etc. I reply: While stock and merchandise brokers may originally deal with principals, do these agents retain control over the commodities they handle after receiving the price? Railroad tickets are first purchased, of course, through authorized sources; but the advocates of the antiscaoping bill would try to still retain control over that property after it passes from their hands.

He says further: In order to sell cheaper, the brokers must get the tickets cheaper, and therefore it is a violation of law, because railroads are compelled to file their rates. This argument carries with it the proposition that the acts of traffic associations must have the sanction of law.

It is well understood that the rate-making power has been taken out of the hands of the officers of individual roads. A railroad may not even run an excursion without the consent of the passenger association of which it is compelled to be a member.

Therefore, according to his logic, when a rate is made, that is the law. The man who cuts that rate is a violator of the law. "The king can do no wrong," and we should meekly bow to the dictates of rate-making associations.

He says again that "every dollar they realize belongs to some railway company or passenger who has been wronged to that extent."

After having received its price, how can a railway be wronged? And how can a passenger be wronged who voluntarily sells his ticket to a broker, and, as an almost invariable rule, receiving more for it than the redemption bureau would allow him?

The method of redemption is to deduct for the part of a ticket used the regular local fare and return to the passenger whatever difference there may be. I will get to that later, showing what value the redemption bureau would be ordinarily to a passenger who has a ticket he can not use.

Mr. Blanchard says (Report of the Industrial Commission, Vol. IV, p. 622) [reading]:

"Proceeding from these foundation principles, we oppose scaoping:

"(a) Because its cessation means the stoppage of many secret, fraudulent, and illegal practices, which create undue, unreasonable, and unauthorized discriminations in the passenger fares duly made, published, posted, and filed according to law."

I reply that the cessation of ticket brokerage means the destruction of competition. The broker in some degree prevents discrimination by the very publicity of his business. Discriminations are going on constantly in the offices of railways. Social and political debts are paid by passes and special-rate tickets. Shippers and men of influence are hourly favored. Holders of tickets upon which limits have expired, if they have influence sufficient, can get an extension of time. The ordinary passenger, not enjoying these special privileges, has to submit to the regular rules, except for the relief secured through the offices of ticket brokers.

Mr. Blanchard further says [reading]: "(b) Because resold tickets cut the local fares from the points where they are sold, and thereby produce fares and differences in fares not intended or authorized by the railroads and forbidden by law. To that extent they create unjustifiable preferences between persons, localities, and also to trade bodies, conventions, and other associations moving in large numbers, by extending the reduced fares granted to such bodies to persons not entitled to receive or use them."

Is this not a distinct advantage to the public? After receiving its price, can the railway be improperly injured? The law requires that excursion rates shall be available to the general public. After selling tickets and providing accommoda-

tions, the railway can not be injured by A riding on the ticket sold to B. As a matter of fact, round-trip tickets are never questioned on the going trip. It is only the return parts of tickets that railroads try to repudiate.

I have in mind a case that I noticed particularly on an overland trip to California—on the return trip. The ticket collector on the train came to me in great glee and said, "I have just made \$15; I have caught 3 'scalps.'" "What were they?" "Why," explained the collector, "there are 3 passengers on this train that have tickets that I refused to honor and have taken up, and I get \$5 apiece for such tickets." "What was the matter with them; were they fraudulent?" "Oh, no; but they had not been properly executed, or something of that kind, and, according to the contract, the company does not have to accept them."

I looked up the cases, and I found that in every case the tickets had been properly purchased; at least the full fare of the round-trip tourist rate had been given. One case in particular I remember. A young man with his sister had gone from Minneapolis to California, purchasing 2 round-trip tickets, 6 months' tickets, and the lady had signed the 2 tickets. The name I have forgotten. Going, the tickets were not questioned. On the return journey it was necessary for the lady to return first. She went to the proper office and signed her name to both the tickets, as she had done when purchasing them originally, and they were stamped by the agent. When, a few days later, the brother took the train, his ticket was refused, no excuse would go, and his ticket was confiscated and he was compelled to pay the local fares from point to point, and local fares West are very high. He was not instructed how to get his money. I told him (when he got to his destination, if he had money enough) how to apply for a refund. In that way the company received twice the fare.

Mr. Blanchard said [reading]: "(c) Because the closing of unauthorized brokers' offices would doubtless stop the inducements now existing to steal, alter, forge, counterfeit, or plug tickets, or issue tickets bearing fictitious indorsements as to extensions of time, and would also curb or prevent the sales of passes, advertising, editorial, and mileage tickets by sellers, buyers, and reissuers. It is also to be emphasized that it would substitute authorized and accurate information to the traveler, for the false representations now constantly made by brokers in order to sell their tickets, in respect of routes, time, change of cars, sleeping cars, checking of baggage, connections, etc. Recent tests show the great extent to which this misrepresentation still exists.

"I would like to say, in connection with this subject, that the ticket offices of the scalpers in New York were visited recently, and in nearly all of those visited untrue or misleading representations were made in some regard as to connections, time, or some other fact in connection with the actual facilities of travel."

There are laws in every State against stealing and forging. If the laws we have are not considered sufficiently stringent to correct such abuses, we make no objection to the enacting of the most stringent laws upon this subject.

I have already shown that our association has a standing offer of reward for the arrest and conviction of parties guilty of this particular variety of crime.

As to the authorized and accurate information, the ticket broker is often better qualified and is more disinterested in giving accurate information than the authorized agents of rival lines.

The confidence and good will of his patrons are very essential to his success. He must be obliging and truthful as a matter of business.

It is a very common experience in the offices of brokers to have travelers who are already equipped with tickets ask for information, claiming that the regular agent was either too busy or too indifferent to give them attention.

In the commission's report of the testimony of Mr. Blanchard the following occurs [reading]: "Q. (By Professor Johnson.) How could you get at such information?—A. By sending persons to the scalpers' offices to ask if such and such lines made certain connections, or did this or that; would such and such tickets be accepted on certain trains, etc.; the time of trains, number of times transfers took place, and information of that general kind.

"Q. And you know from sending for that information?—A. Yes."

This reference by Mr. Blanchard to the spotter opens up a subject upon which volumes could be written. He is the useful tool of the rate-making powers and the traffic pools. A fair idea of his methods and the way that professional liars are made of people who would prefer to be honest may be gained from the following article, clipped from the Chicago Daily News of June 7, 1900 [reading]:

ON THE SCALPERS' TRAIL—HOW THE BIG PASSENGER ASSOCIATIONS RUN DOWN ILLEGAL TRAFFIC IN RAILWAY TICKETS—MEN AND WOMEN "SPOTTERS"—A NOVEL KIND OF DETECTIVE WORK.

Old and new methods: In years gone by each individual railroad company, when it thought the general passenger agent of another line was manipulating the market through some friendly scalper, used to coast about in a dilatory sort of way and find out what he could, and then sharp letters would fly back and forth making accusations against competitors, and there the affair would end. Now all

this is changed, and the change was brought about by the growth of the passenger associations, two of which, the largest in the country, have their headquarters in Chicago. One of these is the Western Passenger Association, which is made up of all the lines running west from Chicago and governing also the roads reaching to the Southwest and Northwest. The other is the Central Passenger Association, which controls the doings of the Eastern trunk lines and also those reaching to the Ohio River. Keeping tab on the "market." To these organizations, during the past 3 years, have been relegated the duties of keeping tab on the "market," as the scalpers are designated. Each year the chairmen of these two associations have put into effect more expert methods of spying out the conditions as regards the abuse of railway tickets and passes, until the brokers now freely admit that the system of espionage is so strict that it very seriously handicaps their business and subjects them to a large loss annually.

Not only does this system of "testing the market" apply to Chicago. It is so extensive that it includes all other cities and towns of any importance where scalpers thrive, and such cities as Omaha, Denver, Kansas City, St. Paul, and Minneapolis, St. Louis, Cincinnati, and all places where conventions of any importance are held, are as closely watched under the direction of the head of the passenger association as is Clark street in Chicago, the hotbed of all ticket brokers.

The "spotters" employed for making the tests are usually men furnished by some one of the private detective agencies, and oftentimes special details of women are asked for.

When the agents are not from a detective agency, some of the clerks, young men and women employed in the mileage bureaus of the associations, are sent out on the street and are initiated into the business unless they make decided objection to the work.

Such tickets as are picked up by the operators are turned into the association's office, and then the chairman proceeds to notify the roads by which they were issued that a certain ticket of a certain kind has been found in the street, and the road is requested to remit for its full tariff value. This is in the cases of editorial and half-rate transportation. In the case of passes, immense numbers of which get into the hands of the brokers, the parties or concerns to whom they were given are simply placed on the so-called "confidential list," which means that further courtesies will not be extended.

As regards free transportation by the scalpers, it is said that only a certain class of the brokers will handle this business, the more reputable ones refusing to have anything to do with it.

* * * * *

"Spotters move from city to city." When the operators have become too well known to continue their work in one field, they are shipped to another city, and the testing of the street is taken up there. En route they are used as so many "spotters" on the train conductors, the passenger associations also keeping in touch with the transportation that is handled by conductors on trains.

A feature of this testing the market which perhaps is not generally known to the public, and which hits the brokers the hardest, is the lifting of the mileage tickets. All such tickets bought up on the market are confiscated by the two passenger associations, and in a year's time it means an immense financial loss to the brokers, who are just so much out of pocket. When very severe tests of the market are being made, the associations oftentimes get outsiders, in the guise of traveling men, to help, and in this manner much mileage is secured from the scalpers which otherwise they would not let go, because of their fear of the "spotters."

This innovation of recent years put into effect by the railroads has practically clipped the wings of the broker element and has had the effect of driving many of them out of the business."

This shows a method that is in vogue with some of the more unscrupulous roads. It is but fair to say that there are railroads or managers of railroads who are opposed to us from a business standpoint, who are too honorable to stoop to such methods. But with the unscrupulous the ticket broker is helpless. He puts out a mileage book and has to guarantee it to the passenger; the man may be a spotter, and come back with a receipt—ticket taken up by the conductor—all lost, and the value must necessarily be refunded; and this article says it goes into the treasury of the great traffic association and causes annually a great loss to the ticket broker.

Mr. Blanchard says [reading]: "(d) Because scalpers have induced some conductors not to cancel tickets taken up, in order that they may resell them in their scalping offices—and sometimes more than once—for their joint benefit."

In an experience of 19 years I have personally known of but three or four cases of this kind and I had the satisfaction of reporting them to the railroads interested.

Mr. Blanchard says [reading]: "(e) Because they have corrupted clerks and ticket distributors in some railway general offices by inducing them to purloin and dispose of irregularly issued tickets for a consideration."

Such things have no doubt occurred, but if common among brokers the spotter system of railways would soon unearth the scandal. I have seen no evidence that such customs are at all prevalent in all the information laid before legislative bodies during the past 10 years.

In that connection I want to call your attention to a specimen of the sort of argument that is used against ticket brokers. In this little pamphlet entitled Museum of Ticket Scalping Iniquity, are shown tickets that were some of them issued 10 years ago; photographs of the tickets showing the methods by which they were used—by which changes were made, tickets plugged, etc. In all this alleged evidence there is but one single case where a direct charge is made against a broker; but it says "a scalper did so and so;" "this was done by a broker." There is only one case, as I remember, where a name is mentioned, and in that case the man was exonerated by the courts.

This pamphlet came out about two years ago, and was issued by the central antiscalping committee, of Chicago. Quite recently an exact counterpart of the greater part of this pamphlet, this time purporting to be issued by the National Association of Merchants and Travelers of Chicago, has appeared.

It seems to me a singular thing that men as shrewd as the passenger agents and managers of railways should try to use this sort of thing as evidence before a body of men of as high intelligence as United States Senators and members of the House of Representatives, when the pretended evidence would not convict any one of wrongdoing before a country justice of the peace. Of course I can not say that none of these specimens were used by a ticket broker, but I know something of the class of men that are employed by railroads to get evidence, and I know that these men are entirely capable of making evidence if they can not get it by any other means.

This is a specimen of the class of charges that are brought against ticket brokers. Now, in trying to combat these false representations, we are absolutely helpless. Statements will be published in the newspapers that such and such a person was defrauded by a "scalper;" his ticket was no good. The name of no broker is used, and there is no chance for a libel suit. A year ago in St. Louis a newspaper came out with a very scathing article against ticket brokers, calling them rogues and thieves. Two or three ticket brokers in that city brought suits for damages for libel, but they were thrown out of court because the charge was general—no particular person had been mentioned. We have to suffer that sort of persecution and are helpless.

Mr. Blanchard says [reading]: "(f) Because many scalpers operate in clear violation of law, notably in 10 States wherein they nullify the statutes thereof."

This has been replied to before. It may be well to refer to recent cases in the city of Philadelphia where 4 hotel clerks were fined \$200 each for handling railroad tickets. Of all the cities in this great Union Philadelphia is the only one where a citizen can be fined in court and rest under the fear of imprisonment for the sale of a railway ticket. I know nothing of the merits of these cases, but from published reports the only offense committed by these young men was that of disposing of tickets handed them by guests of their hotel, the transactions being greatly similar to the transaction illustrated to this commission by President Stickney when he sold his ticket to Big John in the Grand Pacific Hotel in Chicago.

Mr. Blanchard says [reading]: "(g) Because many scalping offices are in the nature of fences or pawnshops, both of which latter are subject to legal or police regulations and examinations, while scalpers' offices, being used for similar purposes in another commodity escape such safeguards against misuse and fraud."

In many of the cities of this country ticket brokers are licensed. This license has often been solicited and secured by brokers, who by this means have sought to keep out undesirable characters.

Mr. Blanchard says [reading]: "(h) Because the railroad companies are held responsible for disturbing passenger conditions, which they disapprove, and which they ask the aid of law to effectually resist and prevent."

If railroads contend that ticket brokers are responsible for disturbing passenger conditions, how do they account for disturbed conditions in freight traffic where brokers do not operate?

Mr. Blanchard says [reading]: "(i) Because scalpers incite railroad wars and reprisals as the best means by which they can procure the greatest number of tickets at the lowest cost, and by shifting their business from one road to another and by working in conjunction with other unauthorized or pliable agencies, they have frequently produced the serious contentions in fares which they desired."

The rate wars of Canada refute the statement that brokers are responsible for rate wars. But if rate wars are undesirable, a law could be enacted forbidding them.

Mr. Blanchard says [reading]: "(k) Because when a railway company decides to secretly reduce one or more classes of through fares, it dares not do it in its own offices in violation of the interstate act, of various State statutes, and of the several tariffs which it has published, filed, and posted pursuant thereto, but usually avails of ticket scalpers' offices to collusively violate the act, a course which involves better intending lines in a demoralized scramble for business. I do not mean that this practice is now even considerably resorted to by the railroads. It has been gradually circumscribed, but if scalping offices were altogether abolished, or their authority required to be made legal, it would tend to the entire cessation of these joint resources and practices."

The ticket broker offers to-day the only means by which the traveling public may escape the autocratic rule of the great traffic associations. Abolish him and exactions would be practiced from which there would be no relief, at least not within the means of the poor and uninformed.

Mr. Blanchard says [reading]: "(l) Because scalpers afford no honest information or accommodations to travelers which the railroad companies do not desire

to extend to all their patrons under just and uniform charges and rules, administered through their authorized bureaus of information and redemption, where they will return to the holders of unused portions of tickets all amounts exceeding the fares which duly accrue between the points which the passenger actually traverses, correct errors of their agents in selling tickets as to routes, the erroneous checking or losses of baggage, etc. Even the scalpers must send their patrons to such offices for those purposes or substitute a show of authority made up often of fraud, ignorance, collusion, dishonesty, and depleted and unequal fares. The railroad ticket agents at all points will transmit unused coupons to the redemption bureaus and give all desired information."

In this the gentleman is wholly at fault. As before explained, an element necessary to the success of a broker is the confidence and good will of his patrons. As to the matter of redemption, I will answer that a little later.

I think I might, perhaps, illustrate the value of the broker in saving the passenger from loss through the undue exactions and iron-clad rules of railroads by a case that occurred recently in my own experience. A young man came into the office with the return part of a ticket to Duluth, Minn. The fare is \$19.25. He asked me what I would pay for it. I inquired of him if he was going back. He said: "Yes; but I want to stop at Saginaw, 100 miles north, and the agent here in the city told me I could not stop on the ticket." I instructed him to go to the district passenger agent and ask for an instruction to the agent at Saginaw to stamp the ticket when he was ready to go on. I advised him that he could pay the local fare, \$2.91, to Saginaw, and in that way he would save his ticket. The ticket had been sold on account of some teachers' convention, and was good until the 9th of January. It had cost him the ordinary rate plus \$2. That would be \$21.25. The young man came back to the office in a little while and said the passenger agent insisted that the conditions on that ticket could not be waived; that he would be obliged to either return to Detroit to have his ticket executed for the return journey or give up the stop at Saginaw. I told him to leave the ticket at my office, and in case I got a passenger to Duluth I would send for him and he could go and have the ticket stamped and executed by the agent so my customer could use it, and when he got ready to go himself he could pay the company the local fare. He did so. I realized \$15 for his ticket. I guaranteed this ticket to the passenger, who took it, and as I have not heard from him no doubt he made his journey safely. The original owner of the ticket paid regular fare to the same company when he was ready to go. In that transaction it seems to me a ticket broker saved the passenger from a loss that practically amounted to the confiscation of his ticket and in no way defrauded the railroad company. That is simply an illustration of what is going on every day and every hour all over the United States.

There is another subject that may be pertinent in this connection. Some time in the latter part of 1898 an edict went forth by the railroads cutting off second-class rates generally through the southwest. No corresponding reduction was made on the first-class rate. The lowest rate prior to January 1, 1899, between New Orleans and Louisville was \$13.50; the lowest present rate, \$10. I will just pick out a few of these; there is a long list of them: The lowest rate, New Orleans to Kansas City, old rate \$20, present rate \$24.35; Chicago to Austin, Tex., former rate \$23.75, present rate \$32.15; Washington to Waco, Tex., former rate \$30.30, present rate \$38.30.

Q. (By Mr. FARQUHAR.) Are those first-class rates you are now reading?—A. These are the first-class rates at present, and the only rates.

Q. The old first-class rates and the present?—A. The old second-class and the present first-class. The first-class rates have not been changed, but the second-class rate has been abolished.

Q. (By Mr. LITCHMAN.) The lowest sum you mention is the second-class rate?—A. It is the old second-class rate. There is none to-day. There was an average difference, I think, of 40 per cent. This order was sent out by the commissioner; and, perhaps through oversight, it was not filed with the Interstate Commerce Commission; but I do not care to discuss that part of the subject. It was only through brokers that the people who wished to travel cheaply could get any relief.

This condition continued until 4 days ago. I received a wire dated January 14, 1901, from New Orleans, as follows: "Owing to heavy brokers' competition railroads yesterday put on sale second-class tickets to Chicago, St. Louis, Kansas City, sixteen fifty, twelve fifty, fifteen fifty, a reduction about fifty per cent." And by letter of same date: "Am glad to inform you that the railroad companies out of N. O., owing to the brokers selling so many second-class passengers to Northern points via round-about routes and at reduced rates, have been compelled to reduce their second-class rates to Northern points as follows: Former rate to

Chicago, \$23, now rates for second-class passengers are \$16.50; St. Louis, reduced from \$18 to \$12.50; Kansas City, from \$24.35 to \$15.50. In addition they have been compelled to place on sale at reduced rates party tickets to various Northern points. These reduced rates went into effect yesterday, Jan. 13th."

This I simply use as an illustration of the fact that ticket brokers are an advantage to the public, frequently bringing about reductions in railroad rates.

(After a recess of one hour the commission resumed the hearing of Mr. Lindenberger, as follows:)

The WITNESS. In speaking of this order taking off the second-class rate South I omitted to speak of the circular that was sent out by Mr. Joseph Richardson, chairman of the Central Passenger Association. I would like to submit it and allow it to go into the evidence in the proper place. The order was as follows:

[Central Passenger Association, office of the commissioner, eighth floor Monadnock Building, F. C. Donald, commissioner. Gerrit Fort, secretary.]

CHICAGO, ILL., December 22, 1898.

[Circular Letter No. 1090.]

To the Members of the Central Passenger Association

DEAR SIR: The subjoined communication is respectfully submitted for your information

Yours, truly,

F. C. DONALD, Commissioner.

[File 3796.]

SOUTHEASTERN PASSENGER ASSOCIATION,
Atlanta, December 19, 1898.

STANDARD RATES—WITHDRAWAL SECOND-CLASS FARES.

B. D. CALDWELL, Esq., Chairman.

DEAR SIR: Replying to yours of December 16, we beg to state that at a meeting of the representatives of southeastern lines, held at Cincinnati, December 15 and 16, it was arranged to cancel all second-class fares from this territory to Buffalo, Chicago, Council Bluffs, St. Louis, Kansas City, Deming, and intermediate points, as well as to points lying thereon, to take effect at the earliest date possible. This will only have in effect second-class fares from the southeast to eastern cities and Virginia points to Montana and Pacific coast points, and to points in Mexico; also to a few points beyond St. Paul, lying thereon. Second class fares between the South and Virginia cities, including Washington, D. C., may possibly be withdrawn later on, as this subject is listed for consideration at next meeting of the conference committee of this association.

Very respectfully,

JOSEPH RICHARDSON, Chairman.

(Copy to F. C. Donald, esq.)

I made an illustration of the redemption value of a Duluth ticket and explained how the broker came to the relief of the passenger. There is another oppressive rule practiced by most of the railroads. Notwithstanding the fact that a limited ticket may be good to stop at certain points—junction points and ends of coupons—there is a rule that baggage can only be checked to the destination of the ticket. For instance, if a passenger in New York buys a Chicago ticket, while his ticket may permit of his stopping at Detroit, they will not check his baggage to Detroit but will check it through to Chicago. I have known of cases where a passenger had occasion to stop at Detroit and wanted his baggage. The railroad company refused to deliver it up, and in order to get it the passenger was compelled to pay the excess rate from Chicago to Detroit the same as though the baggage had been carried to Chicago by the railroad company and then transported back again. The excess rate, being about 13 per cent of the regular passenger fare, amounts to about \$1 per 100 pounds. I have known passengers to be mulcted out of \$1 or \$2 just to get their baggage. In some cases the companies have required the surrender of the balance of the ticket—take it away from the passenger before they would give him his baggage. I have known that to be done. For instance, in California at all eastern points you can get a ticket to Los Angeles via San Francisco, or to San Francisco via Los Angeles at the same price as to go to either point direct. A passenger with baggage checked to Frisco may want to discontinue his journey and get his baggage at Los Angeles. The company confiscates the ticket, although they may not have carried the baggage or the passenger 1 mile, and are paid their proportion of the through rate by the company issuing the ticket. The fare from Los Angeles to San Francisco is \$15.

Mr. Blanchard says [reading]: "(m) Railway companies sometimes decline to issue reduced-fare tickets of such forms as are easily manipulated, because of the certainty that scalping will ensue and thus unduly extend the privilege granted to unauthorized users of such tickets. The same fear actuates some companies to impose conditions upon the faces of their special tickets and limit their durations of sale and use, whereas, if scalpers' offices were abolished, they could

safely dispense with such safeguards, because the bona fide passenger would not use the methods, misrepresentation, or abuses which scalpers practice."

I say in reply to that that railways should not issue tickets upon which they are unwilling to carry the holder of the ticket. Having fixed the price, sold the ticket, and provided for the transportation of a certain number of passengers, they should carry out the arrangement irrespective as to what particular individual holds the ticket.

Mr. Blanchard says [reading]: "(n) The cessation of scalping would in no wise lessen the public facilities, because each company could retain the services of an experienced scalper by conferring upon him a proper appointment as agent, and regulate him thereafter by the rules which govern their own agents."

This is an acknowledgment that experienced "scalpers" are a recognized benefit to the traveling public. But if the broker was regulated by the rules of the combine he would be quickly robbed of the very attributes that now make him a public convenience.

If it seems desirable that some powerful influence should control ticket sellers I suggest that they be licensed by the Government. Let the requirements be as strict as you choose, so that every seller of tickets must pass the same examination and be subject to the same Government control. This would be something very much to be desired by reputable ticket brokers, and especially by members of the American Ticket Brokers' Association. We do not want a license issued by the railroads and subject to their rules, but by the Government, and let the supervision be over all men who sell tickets, railroads as well as brokers. If a man then violated the law his license could be withdrawn, and his career as a ticket man would end.

Mr. Blanchard says [reading]: "(o) There are two organized bodies of scalpers—the American Ticket Brokers' Association and the Guarantee Ticket Brokers' Association. They have their directors, officers, agents, rules and regulations, they discuss and decide some question of cut fares, and they adopt resolutions and deal with the property of others in which they have no direct interest, while at the same time, under the decisions of the Supreme Court, the railroad can not adopt counter agreements without violating its decisions.

"Moreover, the rules and decisions of the Interstate Commerce Commission do not reach scalpers' fares or practices, because they hold the railways accountable. Furthermore, the fares of the railway companies proper can only be changed by 3 days' notice as to reductions and 10 days' notice as to advances, while the scalpers can change them either way, daily or hourly. In this way a railway company, acting with a scalper, can also change the fares and evade the law. There is a manifest injustice in all this which could and should be corrected by appropriate national legislation."

I can see no objection to the broker filing rates. It is safe to say that should this be required, the law would be equally as well obeyed as is the law relating to interstate commerce by the average railroad.

Mr. Blanchard says [reading]: "(p.) Another feature of ticket brokerage has not been sufficiently urged upon public attention. If a passenger purchasing a through ticket from New York to Chicago is required or desires to discontinue his journey at Buffalo, the unused coupon west of Buffalo will be redeemed by the issuing company or its unused connection. If he takes the same unused coupon to a scalper he is offered by him less for the ticket from Buffalo to Chicago than the railway would redeem it for. His fare from New York to Buffalo would, therefore, be more than its due amount to the extent that he received less than his remaining coupon was worth. Against this the purchasing passenger west of Buffalo may get a ticket under the legal fare, but he is not entitled by law to that preference. In this way we answer the loudly vaunted public advantages of brokers, and venture the further assertion that if scalping was abolished the average fares paid by passengers would not exceed those which prevail under its continuance."

Mr. Blanchard is evidently misinformed. The passenger, in any event, has the option of patronizing the redemption bureau or the broker, as his inclination or the state of his finances will permit.

I think he is rather unfortunate in his selection of an illustration. Take the ticket mentioned. The through rate, first class, from New York to Chicago via Buffalo is \$17; the cheapest rate from New York to Buffalo is \$8. If the passenger after reaching Buffalo was to send in his ticket for redemption to the railroad company they would deduct from the \$17 the tariff from New York to Buffalo, which is \$8, and refund him \$9. The lowest first-class fare between Chicago and Buffalo, or from Buffalo to Chicago, is \$12. There is a difference between the price the railroad company would pay him for his ticket and the regular price of the ticket of

\$3. The passenger holding that ticket, for which the railroad company would pay him \$9, would have little difficulty in selling it to a broker for \$10; the broker in turn would sell it to a customer for \$11. The broker would make a dollar, he would save his customer a dollar, and the original purchaser of the ticket from New York to Chicago would have saved a dollar over the tariff rate in his trip to Buffalo.

I have a number of tickets here that I picked out of my own stock that will probably serve to illustrate this redemption feature [exhibiting tickets].

Here is a ticket issued originally from New York to Chicago. It comes in very nearly like this illustration that Mr. Blanchard attempted on the ticket from New York to Chicago. This is a second-class ticket. The through rate on that ticket was \$17 from New York to Chicago, and the rate for a similar ticket from New York to Detroit was \$13. When the passenger gets to Detroit he would then have \$4 invested in his ticket. The lowest tariff rate between Detroit and Chicago is \$7.75. Should the passenger send that ticket in to the company for redemption, the most that he could get, after going through the necessarily slow methods of railroads in redeeming tickets, would be \$4. If that ticket is good for one day, in the hands of any broker in Detroit it is worth \$5.50. The passenger thus saves \$1.50 by buying that through ticket and selling it at Detroit. The broker could sell it for an advance of a dollar and thus make a dollar; and the passenger buying it of the broker would save \$1.25, if the broker sold it, as they usually do, for \$6.50, after paying \$5.50.

Here is a ticket issued in Kansas City for New York. This part of the coupon reads from Buffalo to New York. It has been used to Buffalo. The through fare was \$29.50; the fare over the same road from Kansas City to Buffalo was \$25.50; the redemption value of that ticket is \$4. The regular fare is \$8. Any broker in Buffalo, if that ticket was good in his hands a day, would pay at least \$6.50 and he could resell it for \$7 or \$7.50—cut the rate, and make something for himself and customer, and the railway company gets the through tariff.

Here is a second-class ticket from Chicago to Buffalo. The through fare is \$9.50. The rate from Chicago to Detroit is \$7.75. There is no second-class rate between Chicago and Detroit. The rate from Detroit to Buffalo, second class, is \$5. The through rate is \$9.50 instead of the added fares of \$5 and \$7.75. The passenger, in buying this ticket in Chicago and riding to Detroit and then sending it in for redemption, would get the difference between \$7.75 and \$9.50, which would be \$1.75. The regular second-class fare from Detroit to Buffalo is \$5. Now, between the broker and the two passengers there is the difference between \$5 and \$1.75 to be divided.

Here are quite a number of tickets that will serve further as illustrations.

Q. (By Mr. KENNEDY.) Are those dead tickets?—A. Yes; they are dead tickets. I suppose they are very dead now, because they can not be sent in for redemption. Here is a ticket over the Grand Trunk Railway from Detroit to Grand Rapids, Mich. Now, it very frequently happens that passengers coming from some Eastern point, en route for Grand Rapids, get into Detroit on Sunday. Except in the summer time, when there are excursion trains, there are no trains on that line on Sunday. There are three regular lines between Detroit and Grand Rapids. Only one runs a Sunday train. The passenger gets into Detroit on Sunday. There is no train on the line for which he holds a ticket by which he can go to Grand Rapids; his business requires him to be there. If this antiscaling bill was a law, he could hold his ticket and send it in for redemption and get the redemption value inside of 30 days. But if he happens to be short of money and wants to make an exchange, or does not want to go through the red-tape routine, he takes it into a broker's office and trades it for a ticket good on a train leaving that day. That is a very ordinary circumstance, and I presume similar cases happen constantly in almost all the cities of the Union.

I have here quite a large number of excursion tickets that have no redemption value. Here is a ticket from Detroit to Ann Arbor; it is good for a stated time and is printed "Not transferable." If an antiscaling law were passed—that is, the law as it has been offered here in Congress—this ticket would be absolutely valueless.

The bill states, as a kind of sop to the public, that the purchaser of a transferable ticket which he is using in the prosecution of a journey may sell that ticket to another person who will use it in the prosecution of the journey. Now, all that railroad companies would have to do to make it illegal for anyone to do that would be to print "Not transferable" on the ticket, as is done in this case. I believe that feature alone would make the law unconstitutional, because it puts it within the power of the railroad company to make an act criminal or not, depending simply on the way they print the ticket.

Here are excursion tickets from Detroit to Lansing, Detroit to Grand Rapids, Detroit to Kalamazoo; they are sold on special occasions. The round trip rate is less than the tariff one way; they have, therefore, no redemption value. If it should be unlawful to sell these tickets the railroad companies would get pay for services which they never render. They would carry a certain number of persons one way and refuse to carry an equal number back.

Here are commutation tickets good in the hands of the bearer, sold in lots of 10 tickets in competition with the electric lines. These come in blocks of 10 at 25 cents, and are good detached; the local fare is 78 cents. If we had an antiscalping law the act of any individual passenger or broker selling one of those tickets to another individual would be criminal. The selling of a ticket that cost 25 cents could subject him to punishment not to exceed \$1,000 fine and a year in jail. Should he steal a ticket the penalty would merely be for petty larceny. Similar cases with relation to commutation tickets could be multiplied indefinitely.

Here is a ticket on the Canadian Pacific from Detroit to Quebec, issued on the 14th of October and good to the 23d. It bears the printed statement, "Not transferable;" no name appears on the ticket; it does not show to what individual issued. The ticket was sold for one fare for the round trip. The regular fare is \$18; redemption value, nothing.

There are any quantity of tickets here that are good in the hands of any passenger, but yet have no redemption value.

In case brokers were not allowed to handle tickets of this character, I do not know as it would be proper to call it a saving, but the gain to the railroads of the United States would amount to a sum that I would hardly dare to compute. I believe it would run into the millions annually. Of course the ticket brokers do not and can not in all cases make this saving to the people by using all these tickets, but they do to an extent that is very important to the traveling public.

We had at one time a State law in Michigan requiring railroads to issue a family mileage ticket. The ticket was printed with the usual restrictions, and in large letters the State laws of Michigan were referred to—the nontransferability of the ticket—that the conductor would take it up and collect fare, etc., if offered by other than the original purchaser. A prominent passenger agent in that State, desiring to increase the travel on his road, put these tickets in large quantities into the hands of brokers and guaranteed them against question. We worked amicably for some time. But suddenly the passenger agent changed his mind and issued orders to his conductors, and a great many of these books which we had a right to assume had been bought under that understanding were taken up. For books costing \$20 I got in some cases no more than a ride of 100 miles—\$2—and the loss to me was \$18. There was no recourse unless we went into court and established the circumstances, and that does not pay. Ticket brokers are long-suffering. They can not afford to quarrel, because it interferes with future business, not only with the railroad in question but with any other railroad that they may deal with. This is perhaps enough to illustrate the idea.

Mr. Blanchard says [reading]: "(g) The payment of commissions by railroad companies is an inciting cause to the continuance of scalping, because such commissions are often divided between scalper and passenger. The payment of commissions is justly chargeable upon the railways. Therefore I think that with the discontinuance of the one should go the stoppage of the other, and the perpetuation of either or both of the evils may prevent, in some instances, open and uniform reductions of fare more nearly to the net basis received out of the fares from which commissions and scalping must be deducted before the real or true fares are ascertained."

When a railway pays a commission for the sale of a ticket it necessarily agrees to accept a net rate for the ticket, and can not be defrauded if the ticket is sold for any amount above the net price. Should an antiscalping law be passed, an agent with authority from a transportation company would not be subject to punishment for doing any of the acts complained of by Mr. Blanchard.

Mr. Blanchard says [reading]: "(r) I believe you would promptly advocate our view if corresponding brokerage offices were opened throughout the country for scalping freight rates through advancing, reducing, manipulating, and secretly and fraudulently altering them for the benefit of some shippers by persons utterly unauthorized to deal with such values and bills of lading. Yet I know of no act or justification in the scalping of tickets and fares which would not with equal justice warrant similar scalping in freight rates and bills of lading."

With reference to the statement that he knew of no justification in the scalping of passenger tickets that could not apply to freight rates, I think I entirely agree with the gentleman. I think it would be greatly to the interests of the people who pay freight rates if there were brokers in that line. The average shipper

would gladly welcome some method of evading the often arbitrary and excessive rates extorted from freight shippers. I believe the ticket broker has been a useful factor in correcting abuses in passenger traffic, and if the same conditions could obtain in freight, a great many of the abuses that are now so patent, and have been brought out in the testimony that has been heard by this commission, could be done away with.

Mr. Blanchard says [reading]: “(s) I leave to counsel the leading arguments growing out of various decisions pro and con, some of them recent, upon this subject. I am, however, qualified to discuss it by the statement that if that law is best which is expressive of the highest justice, then an act should be passed in this respect which will secure for the mutual, personal, and commercial relations of the citizen and carrier the observance of reciprocal justice, right, and the protection of property. I also leave in their more competent hands the questions of legislative passes.”

Now, as to the legal arguments I want to call your attention to the opinion of the court of appeals of New York. It took the position that the business of ticket brokerage was beneficial and that any act prohibiting it was unconstitutional.

Mr. KENNEDY. I should like it to be understood that that decision is to be printed in full in Mr. Lindenberg's testimony. I think it is important that we should have it in that shape.

Mr. A. L. HARRIS. If there are no objections, that will be done.

ANTISALPING BILL UNCONSTITUTIONAL

Opinion of the court of appeals of New York, decided November 22, 1898

[The People of the State of New York ex rel. George Tyroler, appellant, v. The Warden of the City Prison of the City of New York, respondent. (Decided November 22, 1898)]

Appeal from an order of the appellate division, first department, affirming an order of Mr. Justice Lawrence dismissing relator's petition for a writ of habeas corpus and remanding him to the custody of the defendant.

The relator is a citizen of the State of New York and the United States, and immediately prior to his arrest, and for several years before that time, had been engaged in the city of New York in the business of selling, and offering for sale, and procuring tickets, giving, and purporting to give, the right to a passage and conveyance on vessels and railway trains.

He is charged with having received the sum of \$8.30 as a consideration for a passage or conveyance upon a ferryboat, train, and vessel from the city of New York to the city of Norfolk, Va., and for the procurement of a ticket giving the absolute right of passage and conveyance upon such ferryboat, train, and vessel, he not being at the time an authorized agent of the owners or consignees of such vessel, or of the company running such train. It is not pretended that the relator did not come into the possession of the tickets lawfully and by purchase from the transportation companies issuing them.

The relator sued out a writ of habeas corpus and demanded his discharge from the custody of the defendant on the ground that the act of 1897 (Ch. 506) violated certain provisions of the constitution of the State of New York and the Constitution of the United States, and was therefore void.

The special term made its order dismissing the writ and remanded the relator.

The appellate division affirmed that order.

Samuel Untermyer for appellant.

Asa Bird Gardner and James D. McClelland for respondent.

PARSON, Ch. J.: The statute that appellant insists is in derogation of the limitation placed upon the legislative power by the people, through the constitution of the State, reads as follows:

“SECTION 1. The Penal Code is hereby amended by inserting therein a new section, to be known as section 615, to read as follows: ‘Sec. 615. Sale of passage tickets on vessels and railroads forbidden, except by agents specially authorized.’

“No person shall issue or sell, or offer to sell, any passage ticket, or an instrument giving or purporting to give any right, either absolutely or upon any condition of contingency, to a passage or conveyance upon any vessel or railway train, or a berth or stateroom in any vessel, unless he is an authorized agent of the owners or consignees of such vessel, or of the company running such train, except as allowed by sections 618 and 622; and no person is deemed an authorized agent of such owners, consignees, or company, within the meaning of the chapter, unless he has received authority in writing therefor, specifying the name of the company, line, vessel, or railway for which he is authorized to act as agent, and the city, town, or village, together with the street and street number, in which his office is kept, for the sale of tickets.

“SEC. 2. Section 616 of the Penal Code is hereby amended so as to read as follows: ‘Sec. 616. Sale by authorized agents restricted. No person, except as allowed in section 622, shall ask, take, or receive any money or valuable thing as a consideration for any passage or conveyance upon any vessel or railway train, or for the procurement of any ticket or instrument giving or purporting to give a right, either absolutely or upon a condition or contingency, to a passage or conveyance upon a vessel or railway train, or a berth or stateroom on a vessel, unless he is an authorized agent within the provisions of the last section; nor shall any person, as such agent, sell, or offer to sell, any such ticket, instrument, berth, or stateroom, or ask, take, or receive any consideration for any such passage, conveyance, berth or stateroom, except at the office designated in his appointment, nor until he has been authorized to act as such agent according to the provisions of the last section, nor for a sum exceeding the price charged at the time of such sale by the company, owners, or consignees of the vessel or railway mentioned in the ticket.’

“Nothing in this section or chapter contained shall prevent the properly authorized agent of any transportation company from purchasing from the properly authorized agent of any other transpor-

tation company a ticket for a passenger to whom he may sell a ticket to travel over any part of the line for which he is the properly authorized agent, so as to enable such passenger to travel to the place or junction from which his ticket shall read."

The remaining portion of the section relates to the redemption of tickets purchased from an authorized agent of a railway company, under certain contingencies, and within certain periods of time, and is not in any wise involved in this appeal.

Having observed how the statute reads, it will be well next to analyze it and see if we can find out what was intended to be accomplished and is in fact accomplished by the phraseology of the statute, in order that we may ascertain whether the statute is in contravention of any of the rights secured by the Constitution to the citizen. It will be observed in the first place that it does not prohibit the sale of tickets absolutely, nor does it limit to the particular transportation company over whose route he desires to be conveyed the right to sell tickets to the traveler.

It may be said in passing that the last assertion is in conflict with the position taken by the learned judge who wrote the opinion of the appellate division; for he assumes that as only persons appointed agents can sell, the effect of the provision is that a corporation "shall only sell through its agents and is merely a declaration that the corporation itself was to sell its tickets."

The first section and the first part of the second section do restrict the sale of passage tickets to agents specially authorized by transportation companies, and if there was nothing else in the statute upon the subject it would bear the construction put upon it that its only effect is to confine the right to sell passage tickets of a corporation to that corporation itself, which can act only through agents; but between the opening and the closing sentences of the second section may be found the following: "Nothing in this section or chapter contained shall prevent the properly authorized agent of any transportation company from purchasing from the properly authorized agent of any other transportation company a ticket for a passenger to whom he may sell a ticket to travel over any part of the line for which he is the properly authorized agent, so as to enable such passenger to travel to the place or junction from which his ticket shall read."

Thus we see that the moment a man becomes the agent of a transportation company he is by that designation authorized to buy tickets of any other transportation company in the United States or the world, and may sell such tickets to any person who applies for them. In the sale of tickets of the various transportation companies, other than those of the company of which he is an agent, he necessarily acts as a broker. He can buy the tickets and sell them again, making a profit that may perhaps depend more or less on the degree of competition between railroads in various parts of the country.

Clearly, the agent of a transportation company, in the purchase and sale of tickets of foreign corporations, is not engaged in selling the passage tickets of the transportation company appointing him. It is not the sale of the tickets of his principal alone that the agent is thus engaged in, but when a transportation company appoints an agent to sell its tickets, then the State, by this statute, steps in and attempts to clothe him with the power which it takes from all other citizens to deal in the tickets of as many other transportation companies as he may be able to make satisfactory arrangements with.

This leads us to note another interesting feature of this remarkable statute. The buying and selling of passage tickets is not abolished. It is only condemned where the seller has not authority from some one of the transportation companies to act as its agent. It has happened before that for the protection of the people the lawmaking power has provided for an examination for the purpose of ascertaining whether applicants possessed suitable qualifications as to character, intelligence, and financial responsibility to fill certain positions of trust or to engage in a business which might prove dangerous to the people in the hands of a person either incompetent or of bad character, but in no instance has it conferred a general and unlimited power of appointment upon a class of persons or corporations wholly unconnected with the State government.

It may possibly be that there was such a situation as would have justified an enactment placing some restrictions upon those engaged in the selling of passage tickets and prescribing penalties by way of fine or imprisonment for those who should break over such restraints. Our excuse legislation affords an illustration. By its provisions all are permitted to sell liquor within certain limitations that apply to all citizens alike, and for the violation of the regulations of the traffic are provided certain penalties that are expected to assure to the public some measure of protection from unlawfully engaged citizens engaged in the business.

But this act simply turns over to the transportation companies the selection of those who are hereafter to be permitted to sell tickets. It imposes no restraints whatever upon the appointing power, nor upon the agent selected, other than that in the purchase of tickets he must confine himself to the properly authorized agents of the transportation companies. The business of buying and selling tickets, as to such agents, continues to be a legitimate business, but to all citizens other than those who may be selected by the transportation companies the right to buy and sell tickets is denied, and an actual sale by them constitutes a felony. The act itself is silent as to the motive of its enactment by the legislature, and it contains no suggestion as to the public interests which its purpose is to subserve.

Ticket brokerage as a business has been in existence for many years. It is a matter of common knowledge that at great agencies, such as Cook's and Gaze's, tickets can be purchased over a great portion of the transportation routes of the world. Intending travelers in great numbers have gone to those agencies for advice as to choice of routes to be taken in contemplated journeys and to purchase the tickets for the trip, whether it should require days, or weeks, or months to make it.

The traveling public in large numbers have come to make use of the facilities afforded by such agencies, of which there are now very many. And Cook's and Gaze's are among the agencies that must go out of business in this State if this statute can live, unless some transportation company shall deem it wise to clothe them with the authority to act as its agents.

It is asserted by counsel that the traveling public and the transportation companies have been so defrauded by the acts of the brokers in the selling of unused or alleged to be unused passage tickets as to call for legislation of a protective character, of which this statute is the outcome. The tendency of the times undoubtedly is to rush to the legislature for a cure for all the grievances of citizens, whether real or imaginary, and many novel experiments in legislation are the result.

But usually in case of wrongs penalties have been provided. It is a novel legislation indeed that attempts to take away from all people the right to conduct a given business because there are wrongdoers in it, from whose conduct the people suffer. But where in the statute is to be found the evidence that its purpose is to prevent fraud? "In the title of the act," answers counsel, and with that answer he has to be content. For while the act is entitled "Frauds in the sale of passage tickets," the body of the statute does not contain any reference to forged, altered, used, or stolen tickets. The sale of such tickets is made a punishable offense under other sections of the Penal Code.

The provisions of the act, therefore, have reference to the selling of valid tickets regularly issued by a transportation company. Can the legislature declare such sales to be fraudulent, or prohibit them on the ground that it tends to prevent fraud? If the act prohibited is fraudulent, there can be no doubt that the legislature, under its police power, may provide for its punishment; but

whether it may, under such power, interdict the sale of a valid ticket by one person to another upon the pretext that fraud will thus be prevented presents a very different question.

I confess I am unable to see how such a sale defrauds a transportation company. If a transportation company sells a ticket from New York to San Francisco, it undertakes to carry the holder from one place to the other. It costs the company no more to carry one person than it does the other. How, then, can it be defrauded or in any way prejudiced by the transfer of such a ticket by the purchaser to another person? It is said that the prohibition of such a sale tends to protect the traveler from being defrauded. If it is a sale of a valid ticket, no fraud can possibly result; and if it is not a sale of a valid ticket, then the sale is fraudulent and is prohibited by other provisions of the Penal Code.

Only one prop remains which it is pretended can support the weight of this statute, and that is that the penal laws not having proved sufficiently efficacious to wholly prevent fraud, an emergency is presented which justifies the taking away from the general public the right to engage in the business of ticket selling.

It is not contended that the business of ticket brokerage is in itself of a fraudulent character. The business can be honestly conducted; it has been so conducted in the past by honest men engaged in it; and the most that is asserted is that there are some men engaged in the business who have imposed on the public. The same assertion can be made with equal truth of every business, trade, and profession.

Because some coal dealers and venders in sugar cheat in weight, and dealers in paints and oils in measurements, and in tobacco in quality, it has not hitherto, we venture to say, been thought the proper remedy to make it a felony for persons to hereafter engage in such business unless they shall have been duly appointed as agents by the corporations manufacturing or producing the product.

Still another motive for this enactment is suggested, and that is that its real purpose is to enable transportation companies to compel others with which they may enter into pooling arrangements to preserve their agreement from secret violation, which is frequently the outcome under the present ticket-brokerage system, which offers an avenue by which the weaker corporation to such an agreement can dispose of its tickets at a price lower than that agreed upon.

In *Nashville, Cincinnati and St. Louis Railway Company v. McConnell* (82 Fed. Rep., 65), where a statute, having apparently the same object in view as this one, was under consideration, the court in its opinion quotes from *Minnesota v. Corbet* (57 Minn., 316) the following: "It was also commonly believed that, in order to evade statutes designed to secure uniformity of rates and to prevent discriminations, some carriers of passengers were in the habit of placing large blocks of their tickets with 'scalpers,' ostensibly not their agents, for sale at cut rates. To remedy these and similar abuses, real or supposed, this statute was passed. That all its provisions have some relation to, and tendency to accomplish, this end is quite clear."

Counsel argue that the helpfulness of the ticket broker in securing to the traveling public the benefits of such competition was of such a fraudulent character as to wholly justify the legislation, and appeal to the decisions quoted from in support of such contention. But we pass for the present the subject of motive, to be again referred to when we come to consider whether, under the police power, the legislation can be justified.

Whatever the legislature's motive, the fact is that it has passed an act which does not declare ticket brokerage unlawful, for it allows any person who may be fortunate enough to secure an appointment as agent for a transportation company to engage in ticket brokerage, but the act does declare that if any person, other than an agent of a transportation company, undertakes to engage in the passenger-ticket brokerage business he shall be guilty of a felony; in other words, that it is unlawful for all citizens of New York to engage in the buying and selling of passage tickets unless empowered to do so by the written appointment of a transportation company.

Much has been said in argument with reference to this statute in a more agreeable vein, placing the statute in a somewhat more attractive form, but it is as well to go beneath the surface and get at the truth, which is that the statute was intended to and does, in fact, vest the control of the sale of passage tickets within this State, not only of transportation companies doing business in this State, but throughout the world, exclusively in the hands of such companies.

The business of selling passage tickets continues, therefore, to be regarded as a lawful and legitimate business. Public policy is still declared to favor a business which recognizes the propriety of the middleman between the passenger and the transportation company, but the right to engage in it is denied to the general public.

The question, then, is whether the organic law prohibits legislation of this character.

Before referring to the provisions of the Constitution that it is confidently asserted condemn such legislation, it may not be out of place to note that the granting of monopolies or exclusive privileges to corporations or persons has been regarded as an invasion of the rights of others to follow a lawful calling and an infringement of personal liberty from the times of the reigns of Elizabeth and James. The statute of 21 Jac., abolishing monopolies, has been from the time of its enactment regarded as a statutory landmark of English liberty, and that nation has jealously preserved it. It was a part of that inheritance which our fathers brought with them and incorporated into the organic law, to the end that the lawmaking power shall be restrained from interference with it.

In this connection the language employed by Mr. Justice Field in *Butchers' Union Co. v. Crescent City Co.* (111 U. S., 746, 756, 757) is most instructive: "As in our intercourse with our fellow-men certain principles of morality are assumed to exist, without which society would be impossible, so certain inherent rights lie at the foundation of all action, and upon a recognition of them alone can free institutions be maintained. These inherent rights have never been more happily expressed than in the Declaration of Independence, that new evangel of liberty to the people:

"We hold these truths to be self-evident"—that is, so plain that their truth is recognized upon their mere statement—"that all men are endowed"—not by edicts of emperors, or decrees of Parliament, or acts of Congress, but "by their Creator, with certain inalienable rights"—that is, rights which can not be bartered away, or given away, or taken away except in punishment of crime—"and that among these are life, liberty, and the pursuit of happiness, and to secure these"—not grant them, but secure them—"governments are instituted among men deriving their just powers from the consent of the governed."

Among these inalienable rights, as proclaimed in that great document, is the right of men to pursue their happiness, by which is meant the right to pursue any lawful business or vocation, in any manner not inconsistent with the equal rights of others, which may increase their property or develop their faculties, so as to give to them their highest enjoyment. The common business and callings of life, the ordinary trades and pursuits, which are innocuous in themselves and have been followed in all communities from time immemorial, must, therefore, be free in this country to all alike upon the same conditions.

The right to pursue them, without let or hindrance, except that which is applied to all persons of the same age, sex, and condition, is a distinguishing privilege of citizens of the United States, and an essential element of that freedom which they claim as their birthright. * * *

In this country it has seldom been held, and never in so odious a form as is here claimed, that an entire trade and business could be taken from citizens and vested in a single corporation. Such legislation has been regarded everywhere else as inconsistent with civil liberty. That exists only where every individual has the power to pursue his own happiness according to his own views, unrestrained except by equal, just, and impartial laws.

From the opinion of Mr. Justice Matthews in *Yick Wo v. Hopkins* (118 U. S., 356, 370) the following is taken: "But the fundamental rights of life, liberty, and the pursuit of happiness, considered as individual possessions, are secured by those maxims of constitutional law which are the monuments showing the victorious progress of the race in securing to men the blessings of civilization under the reign of just and equal laws, so that, in the famous language of the Massachusetts bill of rights, the government of the Commonwealth 'may be a government of laws and not of men.'"

"For the very idea that one man may be compelled to hold his life, or the means of living, or any material right essential to the enjoyment of life, at the mere will of another, seems to be intolerable in any country where freedom prevails, as being the essence of slavery itself."

These principles have also been incorporated into the organic law of this State. Article 1, section 1, of the State constitution reads as follows: "No member of this State shall be disfranchised, or deprived of any of the rights or privileges secured to any citizen thereof, unless by the law of the land or the judgment of his peers."

Article 1, section 6, of the State constitution provides that "no person shall * * * be deprived of life, liberty, or property without due process of law." The word "liberty," as employed in the provision of the constitution quoted, was considered by this court in *In re Jacobs* (98 N. Y., 98), in a masterful opinion by Judge Earl. He said (pp. 106, 107):

"So, too, one may be deprived of his liberty, and his constitutional rights thereto violated without the actual imprisonment or restraint of his person. Liberty, in its broad sense, as understood in this country, means the right, not only of freedom from actual servitude, imprisonment, or restraint, but the right of one to use his faculties in all lawful ways, to live and work where he will, to earn his livelihood in any lawful calling, and to pursue any lawful trade or avocation."

"All laws, therefore, which impair or trammel these rights, which limit one in his choice of a trade or profession, or confine him to work or live in a specified locality, or exclude him from his own house, or restrain his otherwise lawful movements (except as such laws may be passed in the exercise by the legislature of the police power, which will be noticed later), are infringements upon his fundamental rights of liberty, which are under constitutional protection."

In *People v. Marx* (99 N. Y., 377) this court declared unconstitutional a statute that prohibited the manufacture and sale of any substitute for butter or cheese produced from pure unadulterated milk or cream. Judge Rapallo, speaking for the court, said: "Among these no proposition is now more firmly settled than that it is one of the fundamental rights and privileges of every American citizen to adopt and follow such lawful industrial pursuits, not injurious to the community, as he may see fit."

"The term 'liberty,' as protected by the Constitution, is not cramped into a mere freedom from physical restraint of the person of the citizen, as by incarceration, but is deemed to embrace the right of man to be free in the enjoyment of the faculties with which he has been endowed by his Creator, subject only to such restraints as are necessary for the common welfare."

In *People v. Gilson* (109 N. Y., 398) a statute was declared to be unconstitutional which prohibited the sale of any article of food, or offering or attempting to do so, upon any representation or inducement that anything else would be delivered as a prize, premium, or reward to the purchaser. Judge Peckham, in delivering the opinion of the court, after considering the statute said, (p. 399) "A liberty to adopt or follow for a livelihood a lawful industrial pursuit, and in a manner not injurious to the community, is certainly infringed upon, limited, perhaps weakened or destroyed, by such legislation."

Argument certainly is not needed in the light of these decisions to support the assertion that the "liberty" of this relator and other citizens of this State to engage in the business of brokerage in passage tickets is sought to be interfered with by the statute under consideration, for brokerage in such tickets has been a lawful business in this State for many years and many persons have pursued it. It is still a lawful business, although the right to engage in it is limited to such persons as may be appointed by the transportation companies.

The statute is, therefore, in contravention of the State constitution, and is void unless its enactment by the legislature constituted a valid exercise of the police power. That power is very broad and comprehensive, and has not as yet been fully described or its extent plainly limited, but it is exercised to promote the health, comfort, safety, and welfare of society. In each of the last three cases cited it was invoked by counsel to sustain a statute, and it received very careful consideration at the hands of this court.

It was held that the power, however broad and extensive, is not above the Constitution, in obedience to the commands of which the courts will protect the rights of individuals from invasion under the guise of police regulations, when it is manifest that such is not the object and purpose of the regulation; and while it is the general province of the legislature to determine what laws and regulations are needed to protect the public health, comfort, and safety, courts must be able to say, upon a perusal of the enactment, that there is some fair and reasonable connection between it and the ends above mentioned. Unless such relation exists, an enactment can not be upheld as an exercise of the police power.

The doctrine of these cases was very recently considered and reasserted by this court in *Colton v. Lisk* (158 N. Y., 189), and its further discussion at this time would be a work of supererogation. Under the law of this State, therefore, it is the duty of the courts to examine legislation complained of as in violation of the rights secured to the citizens by the Constitution, for the purpose of ascertaining whether the health, morals, safety, or welfare of the public justifies its enactment.

In passing, it may be observed that while it is undoubtedly the rule that railroads, steamboats, warehouses, and other associations of that nature, impressed with a public duty and intended to perform certain quasi-public functions, may be the subject of legislative control and regulation so long as the legislature does not transcend the limit of State or Federal Constitution, still that rule is without application to the features of the statute before the court on this review.

This inquiry involves such portion of the statute only as undertakes to prohibit citizens of the State from engaging in the brokerage business in passage tickets. That portion of the statute certainly places no burden upon transportation companies, nor does it in any way regulate the manner in which transportation companies shall conduct their business or any part of it.

The legislature has no jurisdiction to regulate the methods of business of foreign transportation companies, nor can it prevent them from selling their passage tickets in this State, but by this act it does undertake to prevent any citizen of this State from purchasing the passage tickets of foreign companies for sale to others, unless such citizen shall have been regularly appointed an agent by some transportation company. The right hitherto exercised by citizens to deal in passage tickets over transportation routes without, as well as within, this State, is sought to be cut off.

Again, it may be conceded that it is within the power of the legislature to regulate the manner in

which certain kinds of business may be conducted, that it may require one seeking to engage in a given pursuit to secure from the State, or one of its agents, a license; that it may require one pursuing any particular occupation to pay a tax for the privilege of conducting his business, and that as a condition to the right of carrying on a business that in the hands of incompetent persons may be productive of injury to others, the legislature may require that before engaging therein one must satisfy the public authorities that he is competent and morally qualified to conduct it.

But none of these methods was adopted. No attempt is made to exclude persons of bad character from engaging in the business, nor are the public authorities given the right to determine, by examination or otherwise, the character of the person to be engaged in it, but the transportation companies alone are invested with the power to allow whomsoever they will to engage in the business.

Nor can the contention be tolerated that because there have been, in times past, dishonest persons engaged in the ticket-brokerage business, with the result that frauds have been perpetrated on both travelers and transportation companies, therefore the legislature can deprive every citizen engaged therein of the "liberty" to further conduct such business.

Stringent rules undoubtedly may be enacted to punish those who are guilty of dishonest practices in the conduct of such a business and the machinery of the law put in motion for its rigorous enforcement, but to cut up, root and branch, a business that may be honestly conducted, to the convenience of the public and the profit of the persons engaged in it is beyond the legislative power.

If the law were otherwise, no trade, business, or profession could escape destruction at the hands of the legislature if a situation should arise that would stimulate it to exercise its power, for in every field of endeavor can be found men that seek profit by fraudulent processes. Transportation tickets have been forged, it is said, so have notes, checks, and bank bills. Railroad companies are no more bound to honor forged tickets than the alleged maker of a forged note is bound to pay it.

An innocent person who suffers by parting with his money on a forged ticket has his remedy against the vendor just the same as has the bank that discounts a forged note. Such instances might be multiplied, but it would serve no good purpose, for it is well known that no business can be suggested through which innocent parties may not be occasionally victimized. But because of that fact honest men can not be prevented from engaging in their chosen occupations.

Again, it is said that ticket brokers enable the railroads to engage in unfair competition. This is accomplished by the sale to the broker by a competing railroad, at much less than the regular rates, of a block of tickets that the broker is enabled to sell to his customers, and this to a certain extent takes travel from its competitors.

An opinion is cited in which the court in another jurisdiction denounces the ticket scalper for engaging in a business of this character, and pronounces such business fraudulent alike in its conception and operation, but we pass this opinion without other comment than to say that whatever may be regarded as the law in other jurisdictions, in this one it is well established that the public welfare is best subserved by the encouragement of competition (*People v. Sheldon*, 139 N. Y., 263; *Judd v. Harrington*, id., 165), and hence this so-called reason furnishes no support to the claim that this legislation was for the public good.

I have now called attention to all the arguments that have been advanced in support of the claim that the provisions of the statute under consideration are so evidently intended for the public good as to constitute a valid exercise of the police power by the legislature, and those arguments seem so wholly without merit as to suggest that they constitute a mere pretext put forward to uphold legislation hostile to the liberty of the citizen as that word is used in the Constitution. If the views expressed be well founded, it follows that it is the duty of the court to declare that portion of the statute we have considered to be in contravention of the Constitution and void.

The order should be reversed and the prisoner discharged.
(A copy.)

E. H. SMITH, *Reporter*.

THE WITNESS. There is an amusing circumstance in connection with that matter. George H. Daniels, general passenger agent of the New York Central Railroad, in his talk before the Senate committee when the antiscalping bill was under consideration, made the statement that the great Empire State of New York, of which he was proud to say he was a citizen, had stamped this contemptible business with the brand of outlawry. Well, it happened a few days later that the highest court—the court of appeals of New York, of this great Empire State of which he was so proud to be a citizen—declared the business to be a legal one, and that it had been honestly conducted and was being honestly conducted, and also declared the antiscalping law of that State unconstitutional. Mr. Daniels did not for a moment stop his efforts to secure the passage of the bill in Congress. The vote in the House of Representatives was taken a few days after that decision had been rendered. Failing in the Senate, the bill died with the Fifty-fifth Congress, but was promptly introduced at the next session—the present session. Being just before a national election, the bill was shelved in committee, because it is not a popular measure with the people, and might injure the chances of the reelection of a great many of the Congressmen who were under obligations to railroad managers to vote for it. The only reason I can give for its not being brought up in the later days of this session (it is now lying in committee) is that there is too much business before Congress for it to be considered, and I think anyway that with the present Congress it would have no chance for passage.

The object of the tremendous effort of two years ago to pass an antiscalping bill became apparent when the edict went forth a year ago to stop the payment of commissions. With the broker out of the way, commissions discontinued, and competition throttled, the absorption of weak lines would be easy work and pools could be easily and secretly conducted.

There may possibly be some reason in the argument that absolute equality should prevail in freight rates, for every dealer, every farmer, and every consumer of goods is interested. It is due to the people that rates should be reasonable and uniform. It is right to the owners and managers of railways that they

should receive a fair compensation for services performed. But unless the element of competition is eliminated, the building of unnecessary lines prohibited, and the conduct of the railway and steamship lines taken out of the hands of the enterprising "hustlers for trade" who now manage them, I do not understand how the desired end can be accomplished.

Now, as to passenger traffic, I can not see how the price of tickets can be of so great and absorbing interest to the welfare of the country as to call for interference by Congress. While all are affected by freight rates, but a small proportion of our population is affected by passenger tariffs. The price of sugar, of flour, of potatoes, the cost of clothing and boots and shoes, and even the cost of patent medicines, are of more importance to the masses than this subject of passenger travel.

We believe the practice of circuitous tickets justifiable. The short line establishes the rate and is naturally entitled to the through business. If a combination of lines is formed that makes a mileage of from 100 to 500 more, and a loss in time to the passenger of from 3 hours to 24 in transit, a broker is perfectly justified in applying his methods of business to this class of tickets. The railroads seem to act upon the principle that conspiracies against each other are entirely justifiable. Railroad properties may be wrecked, offensive and defensive alliances perfected, rates may be made by illegal agreements, and such actions shall be the law; but what a wicked act for the detestable "scalper," without their most righteous authority, to step in and break up this scheme, with a vulgar intent to make money for himself and effect a saving for his customer!

I believe that is all, and I would be glad now, Mr. Chairman, to answer, to the best of my ability, any questions which the members of the commission choose to ask.

Q. (By Mr. KENNEDY.) What other State has declared an antiscalping law unconstitutional?—A. Pennsylvania was the pioneer in that. I think they passed a law in 1863, but it never was known there was such a law outside of the city of Philadelphia. There is Pennsylvania, Minnesota, New Jersey, Montana, Indiana, Texas, Florida, New York, and Illinois.

Q. What I want to know is this: Did not the court of some other State declare a law to be unconstitutional about the time that the court of appeals of the State of New York acted on this case?—A. Texas. I think the Texas decision was after that of the court of appeals of New York.

Q. When was the Illinois decision given?—A. When we say that these decisions were made in two States declaring it unconstitutional, we refer to Texas and New York. In Illinois I think our only legal opinions were given by the lower courts. The matter was rushed in a peculiar manner before the supreme court of the State of Illinois in a prepared case from some out-of-the-way place. There was no opposition made to it, and in some way a decision was rendered by the supreme court of Illinois. In the lower courts there have been several decisions declaring it unconstitutional, but not in the supreme court.

(The witness submitted copies, taken from the Chicago Law Journal of dates July 29, 1898, and February 17, 1899, of opinions in cases in the circuit court of Cook County, Ill., deciding that the law of that State aimed at ticket brokerage was unconstitutional. So much of said opinions as relates to ticket brokerage follows:)

TICKET BROKERS LAW FORBIDDING SALE OF RAILWAY TICKETS—UNCONSTITUTIONAL.

[The People v. Edward Ullman. In the circuit court of Cook County, Ill. Gibbons, John, judge. (Filed July 23, 1898.)]

Motion to quash indictment.

1. The law of 1875, making it unlawful for any person not authorized by the owner or operator of a railroad to sell or transfer tickets, passes, or other evidence of the holder's title to travel on any railroad or steamboat, is unconstitutional, as the legislature can not make an act criminal which is in itself innocent.
2. The police power of a State defined, and instances given wherein it may be exercised.

GIBBONS, J.: The defendant has been indicted under a statute of this State passed in the year 1875 entitled "An act to prevent frauds upon travelers and owner or owners of any railroad, steamboat, or other conveyance for the transportation of passengers," a part of which act reads as follows:

"That it shall be the duty of owner or owners of any railroad or steamboat for the transportation of passengers to provide each agent who may be authorized to sell tickets or other certificates entitling the holder to travel upon any railroad or steamboat with a certificate setting forth the authority of such agent to make such sales, which certificate shall be duly attested by the corporate seal of the owner of such railroad or steamboat."

Defendant sued out a writ of habeas corpus before me to test the constitutionality of this act, but, upon my suggestion, a motion was made to quash the indictment, and that the question be presented on that motion instead of on habeas corpus.

* * * * *

The constitutionality of the law must be tested with reference to the provision of section 2 of the act, because that is the only part of the act the violation of which is made a penal offense; that is, probably so far as the sale of a ticket is concerned. That section provides: "That it shall not be lawful for any person not possessed of such authority" (meaning the authority specified in the first section), "so evidenced, to sell, barter, or transfer, for any consideration whatever, the whole or any part of any ticket or tickets, passes, or other evidence of the holder's title to travel on any railroad or steamboat, whether the same be situated, operated, or owned within or without the limits of this State."

The act is not aimed at nor directed to the prevention of fraud in respect to the barter, sale, or transfer of tickets or passes which do not entitle the holder to travel on a railroad, steamboat, or the like, but is specially limited to and directed against the barter or sale of tickets, passes, or other evidences of the holder's title to travel, etc.

It is contended that a railway ticket is not personal property, nor a chattel, nor a contract, but merely a receipt for the money paid to transportation. Decisions may be found in support of this proposition, but they do not seem to me to be based upon the reason or logic of the law.

To say that a railway ticket is not personal property, nor a chattel, nor a contract is, in my opinion, judicial nonsense. A promissory note is not personal property nor a chattel in the sense that the same reasoning might be applied to railroad tickets. It is simply the evidence of an indebtedness from the maker of the note to the legal holder thereof. What is a railroad ticket? It is simply the evidence of the holder's right to travel over the roads specified thereon, and, when not limited to any particular person, it may be sold, transferred, or given away by the holder thereof the same as the owner of a promissory note may make a gift, sale, or transfer thereof.

I am not unmindful of the fact that railroads, steamboats, warehouses, and other associations of that nature, impressed with a public duty and intended to perform certain quasi-public functions, may be the subject of legislative control and regulation so long as the legislature does not transcend the limit of the State or Federal Constitution. But it is claimed in this case, a contention which has been urged with great earnestness in many cases and which has found support in judicial decisions, that the legislature, under no police power, may enact any law which it may deem expedient for the public good, and that, unless the law falls within the ban of some constitutional provision, State or national, the courts must uphold it. There is no conceivable doctrine which would be more dangerous to the State if sanctioned by the courts than the doctrine here contended for.

Blackstone, in his classification of fundamental rights, says: "The third absolute right inherent in every Englishman is that of property, which consists in the free use, enjoyment, and disposal of his acquisitions without any control or diminution save only by laws of the land." * * * The laws of England are, therefore, in point of honor and justice, extremely watchful in asserting and protecting this right. Upon this principle the Great Charter has declared that no free man shall be disseized or divested of his freehold or of his liberties or free customs but by judgment of his peers or the law of the land. * * * In vain may it be urged that the good of the individual ought to yield to that of the community; for it would be dangerous to allow any private men or even any public tribunal to be the judge of this common good and to decide whether it would be expedient or not. Besides, the public is nothing more essentially interested than in the protection of every individual's private rights as modeled by the municipal law. In this and similar cases the legislature alone can, and indeed frequently does, interpose and compel the individual to acquiesce. But how does it interpose and compel? Not by absolutely stripping the subject of his property in an arbitrary manner; but by giving him a full indemnification and equivalent for the injury thereby sustained." This absolute right of property inherent in every Englishman was supposed to be protected against legislative spoliation, not only in Magna Charta, but by the unwritten constitution of England, yet the fact remains that if the British Parliament should pass a law declaring that the property of A should thereafter vest in B even without compensation, there is no power in the English judiciary to declare such an act void or unconstitutional.

If the contention here urged should be sanctioned as sound law, the State legislature would be as omnipotent as the British Parliament, and there would be no power in the judiciary of this State or of the United States to annul its enactments.

Mr. Justice Miller, delivering the unanimous opinion of the Supreme Court of the United States in *Yates v. Milwaukee*, 10 Wallace, 497, asserts that the mere declaration by the city council of Milwaukee that a certain structure was an encroachment or obstruction did not make it so; nor could such declaration make it a nuisance unless it in fact had that character.

"It is a doctrine," he says, "not to be tolerated in this country that a municipal corporation, without any general laws, either of the city or of the State within which a given structure can be shown to be a nuisance, can, by its mere declaration that it is one, subject it to removal by any person supposed to be aggrieved, or even by the city itself. This would place every house, every business, and all the property of the city at the uncontrolled will and temper of the legal authorities."

In *Loan Association v. Topick*, 20 Wallace, 655, this same immortal jurist was the first to give judicial intenance to the great principle of individual right and personal security under the law when he said: "It must be conceded that there are such rights in every free government beyond the control of the State. A government which recognized no such rights, which held the lives, the liberty, and the property of its citizens subject at all times to the absolute disposition and unlimited control of even the most democratic depository of power is, after all, but a despotism. It is true it is a despotism of the many, of the majority, if you choose to call it so; but it is none the less a despotism."

"It may well be doubted if a man has to hold all that he is accustomed to call his own or in which he has placed his happiness, and the security of which is essential to that happiness, under the unlimited dominion of others; whether it is not wiser that this power should be exercised by one man than by many. The theory of our Governments, State and National, is opposed to the deposit of unlimited power anywhere. The executive, legislative, and judicial branches of these Governments are all of limited and defined powers. There are limitations on such power which grow out of the essential nature of all free governments—implied reservations of individual rights, without which the social compact could not exist, and which are respected by all governments entitled to the name."

Speaking of the police power of the State, Mr. Justice Field held in *re Jacobs*, 98 New York, 98, that "Under the conduct of an individual and the use of property may be regulated so as to interfere to some extent with the freedom of the one and the enjoyment of the other; and in cases of great emergency, engendering overruling necessity, property may be taken or destroyed without compensation and without what is commonly called due process of law. The limit of this power can not be accurately defined, and the courts have not been able or willing definitely to circumscribe it; but the power, however broad and extensive, is not above the Constitution; when it (the Constitution) speaks it must be heeded. It furnishes the supreme law, the guide for the conduct of legislators, judges, and executive persons, and, so far as it imposes restraints, the police power must be exercised in subordination thereto."

What is meant by the police power of the State? It is that power and dominion inherent in every

government over the liberty and property of the individual which may be exercised in case of necessity for the protection of the general public. For example, the legislature may authorize health commissioners or other officers of the law to quarantine a person suffering from smallpox or other infectious disease, at his home or elsewhere, and thus deprive him for the time being of his personal liberty; may justify the invasion of the habitation of such a person so as to burn or destroy his effects in order to prevent the spread of the disease; may empower municipal officers to blow up buildings in order to stay the ravages of a conflagration which threatens the destruction of a city; may justify the seizure and distribution of food in order to avert a threatened famine; may pass laws for the regulation or suppression of gambling or of the sale of intoxicating liquors, based upon the assumption that the conduct of such a business is destructive of public morals and has a tendency to promote pauperism and crime. And even in such cases the reasonableness of the law is always open to inquiry by the judiciary. But the legislature can not, under the guise of the police power, prohibit the sale of wholesome food, or declare that to be criminal which in its nature can not be destructive of morals or detrimental to the well-being of the people.

* * * * *

Our institutions are not founded on the feudal principle that a parliament is supreme, omnipotent, but are founded upon compact—founded upon a written Constitution, binding upon the State and upon the individual, and a guide for officers, for legislators, and for judges. *People v. Eden*, Chicago, L. J. Monthly, 1895, p. 819, S. C., 161 Ill., 296.

Cases might be multiplied asserting and maintaining this principle, but I deem it unnecessary to do so, because if we once concede that the police power of a State is above the Constitution, we might as well abolish all constitutional restrictions and adopt the feudal principle prevailing in Continental Europe based upon the theory of divine right of kings and the omnipotence of parliaments.

I, for one, shall never follow the decisions of any court announcing such a dangerous doctrine, and, I am happy to say, that I am not compelled to do so in this case, because the supreme court of Illinois has never asserted a doctrine that is destructive of personal liberty, individual security, or the right of property.

There was a time when courts strove to arrive at the right and justice of each particular case based upon its own peculiar facts by applying some legal truth, some maxim of the law, to the facts of that case. But now we seldom reason from first principles of right and justice, but rather content ourselves by blindly following some judicial bellwether whose decision fills space in an encyclopedia and is quoted approvingly by a modern book builder.

This criticism is fully warranted by the fact that our supreme court, in what is alleged to be a fictitious case presented to it, based upon an indictment charging an infraction of the statute under consideration, was led to proclaim its constitutionality, and the courts of other sister States have upheld similar statutes, quoting the case of *Burdick v. The People*, 119 Ill., 600, as a precedent.

In 162 Ill., 48, the attention of the supreme court was directed to this case on a motion to expunge the opinion from the record on the alleged ground that the court was imposed upon and falsely induced to render a decision sustaining the constitutionality of the act, but the court, by a vote of 4 to 3, refused the motion on the ground that the parties who made the motion were strangers to the record, and the court made the novel and significant announcement that the judgment of affirmance in the *Burdick* cases and the opinions of the court in deciding them are conclusive only as between the parties to those cases. This announcement was made knowingly, and there can be no mistaking its meaning in view of the record made in the case. So that I am not bound by the decision in the *Burdick* cases unless it should appeal to me as sound law.

In view of the many able and exhaustive decisions of the supreme court announcing principles so antagonistic to the rule laid down in the *Burdick* cases, I am constrained to believe that this law would never have received the seal of its approval had the case been presented to it in all its bearings. I am so confident that the statute under consideration is not only in conflict with the bill of rights of our Constitution the fourteenth amendment, and the interstate commerce clause of the National Constitution that it seems unnecessary to further discuss the question or repeat the reasoning advanced by me in declaring the harsh Sunday closing law unconstitutional in *People v. Eden*, supra. I am willing, however, that the cause should be appended to the supreme court, and, notwithstanding the fact that I am convinced of the unconstitutionality of the law, I will overrule the motion to quash the indictment so that if the defendant is convicted thereon an appeal may be taken to the supreme court, where that court will have a chance to explain its former ruling, and if need be overrule and nullify it.

TICKET BROKERS' ACT UNCONSTITUTIONAL—RAILROAD TICKET PERSONAL PROPERTY OF PURCHASER—
POLICE POWER—JUDICIAL NOTICE—HABEAS CORPUS

(Opinion filed February 16, 1899.)

[*People ex rel. Bennett D. Marks et al. v. James Pease, Sheriff*. Circuit court of Cook County. Richard Prendergast, solicitor for relator. Charles S. Deenen, State's attorney, and W. S. Forrest, solicitors for respondent.]

- (1) The law of 1875, making it unlawful for any person not authorized by the owner or operator of a railroad to sell or transfer tickets, passes, or other evidence of the holder's title to travel on any railroad or steamboat is unconstitutional, as the legislature can not make an act criminal which is in itself innocent.
- (2) The police power of a State defined, and instances given wherein it may be exercised.
- (3) A person, by a proceeding in habeas corpus, may, before trial, test the constitutionality of the statute under which he is indicted.

GIBBONS, J.: In 1806 the legislature of this State enacted a law having for its apparent scope and purpose the prevention of frauds upon travelers and owners of railroads, steamboats, or other conveyances for the transportation of passengers. The first section thereof provides that it shall be the duty of the owner of any railroad or steamboat for the transportation of passengers to provide each agent who may be authorized to sell tickets or other certificates entitling the holder to travel upon such railroad or steamboat with a certificate setting forth the authority of such agent to make such sales. The second section provides that it shall be unlawful for any person not possessed of such authority to sell, barter, or transfer for any consideration the whole or any part of any ticket or tickets, passes, or other evidence of the holder's title to travel on any railroad, whether the same be situated, operated, or owned within or without the limits of this State.

The petitioner was indicted by the grand jury of this county for violating the provisions of this act, and he sued out a writ of habeas corpus before me to test its constitutionality.

A similar petition was presented in the case of *People ex rel. Edward Ullman*, in July last, but I then insisted upon the question being raised by motion to quash the indictment. Acting upon the suggestion of the court, the case was accordingly submitted, after having been elaborately argued by counsel. I carefully investigated the authorities then presented, and after due deliberation I held that the law was invalid, but I refused to quash the indictment in order to give the prosecution a chance to present the matter to the supreme court of this State. (See opinion published in *extenso*, *People ex rel. Ullman v. James Pease, Sheriff*, volume 3, *Chicago Law Journal Weekly*, p. 337.)

The learned counsel for the people urge with much earnestness that I reached an erroneous conclusion in that case, and still contend that the law is a proper exercise of the police power of the State. In view of the persistent contention of counsel, I have reexamined the questions involved, and the more thought and reflection I have given them the more convinced I am of the correctness of my conclusion. There is, doubtless, much force in the contention of learned counsel, if the crime denounced in the statute was the sale of a ticket which did not entitle the holder to travel thereon, but such is not the aim or purpose of the law. If I enter a railroad office and ask for a ticket from Chicago to New York, and I pay the price demanded therefor, it is as much my property as the coat I wear. I may have purchased the ticket for some member of my family, for my domestic, or friend, or for myself. As I paid the price demanded, it was of no consequence to the company for whom I purchased it.

That the legislature of the State has the power to regulate, restrain, or prohibit the sale of any article or commodity, or the conduct of any business which may be deleterious to health, destructive of morals, or which might produce pauperism or crime, no one will deny.

* * * * *

What is there in the nature of this business which our modern Solons should place under the ban of outlawry?

This court can not plead ignorance of facts which are of common knowledge; and it therefore asserts that the men engaged in the ticket brokers' business have seldom occupied the time or attention of our courts, which is *prima facie* evidence of bar dealings with their patrons, and of earnest efforts to please them. Members of this association are found in every city and in nearly every town which is reached by a railroad, and the traveler who seeks information at their offices as to the best and cheapest mode of conveyance receives it without fee or reward.

Had the supreme court of this State upheld the law in a case between real parties litigant, I should acknowledge its superior authority, but, as it has not, and as the court of appeals of New York, by a majority of its members, has declared a similar act of that State unconstitutional, I have not the slightest doubt but that the act in question is unconstitutional. (See *People ex rel. Tyrder v. Warden of City Prison*, 31 N. E., 1006. Also, the opinion of Judge Bruce of this court in *People ex rel. v. James Pease, Sheriff*, vol. 3, *Chicago Law Journal Weekly*, p. 301.)

* * * * *

The petitioner in this case will be discharged from his illegal restraint, and it is so ordered.
Petitioner discharged.

Q. You say the Texas decision was about the same time as that of New York?—
A. Very soon after, I think. The Texas decision did not go into the merits of the case; it was on a point of law. By the wording of the bill the legislature had left it optional with the railroads as to whether they should or should not print "not transferable" on a ticket. If they did not print that, all right; but if they did print that it was a crime to sell the ticket; and the court threw it out on that point—that it left it optional with the railroad as to whether it should be a crime or not. I am not a lawyer and it is not easy for me to explain these points of law.

Q. You spoke about your responsibility going with the ticket that the traveling man purchased from you unless he signed a contract by which he assumed the responsibility. Is that a common practice?—A. That is a fact, it is a rule, an absolute and invariable rule with the association.

Q. Why do you enter into a contract of that kind with the traveling public in any instance?—A. To protect them. There may be a ticket which was made out to a particular individual, and the railroad conductor might refuse to accept it as fare. So we reverse the ordinary principles of business. If you claim that you are defrauded in a transaction, ordinarily you would have to prove that you had been defrauded. We say that unless the broker has a written agreement to the contrary with his passenger, he, the broker, is responsible for that ticket. It is to meet cases like this that the acts of all ticket brokers in the American Ticket Brokers' Association are absolutely guaranteed to the public. It is to make our patrons feel absolutely fearless in purchasing tickets, and to counteract the influence of the articles the railroads are constantly putting in the papers in an effort to educate the people to be afraid of the ticket broker.

Q. Why do you get tickets for which you do not care to assume responsibility, and put that responsibility on the traveler?—A. I have never, in my own experience, sold a ticket of a character that I was not willing to assume responsibility for. I do not think that in the 19 years of the existence of my office in Detroit there has ever been a transaction of that kind; but that is a rule, one of the rules of the association.

(A VOICE.) There is a question here I think you are not quite clear on. The by-law is not intended to mean that the broker is not responsible for the amount of money that the passenger pays for tickets. It is only intended to show to the executive committee, who arbitrate these cases between passenger and broker, that he is not permitted to receive any more money than the amount of money

paid. In no instance do we sell a ticket with any kind of a contract that he assumes any more risk than the amount of money he pays.

Q. (By Mr. A. L. HARRIS.) Do you accept that as your testimony?—A. Yes. In this way; our guaranty is this: Suppose you buy a ticket of me for \$8; the regular fare is \$10; the ticket is refused; I am compelled by the rules of our association to make you whole. I pay \$10—not \$8 that you pay me—and I have no recourse. If I refuse to do it and the passenger appeals to the association, unless I have this written contract with the passenger that he will take that ticket and assume his own responsibility, I must refund the \$10.

Q. (By Mr. LITCHMAN.) As I understand it, the point of the question of Mr. Kennedy is whether it is your usual custom to ask for a contract of that kind?—A. I never did so in my life.

Q. (By Mr. KENNEDY.) Can you give the names of any men who are now prominent in railway management or the railway business, who have gone up from brokers' offices?—A. I could do so, but I would rather not do it, from the fact that they might imagine it would lower their dignity and might feel offended. I know of a very popular traffic manager who commenced his career in a ticket broker's office, a gentleman who has a record, from the time he was a boy until he grew up to manhood, of strict integrity, and he is not an enemy to-day of the ticket broker. One of the commissioners, whose name is known the world over, got his first education in the office of one of the ticket brokers here to-day.

Q. Interstate Commerce Commissioner, you mean?—A. No, of the railroad commission; not the Industrial Commission or the Interstate Commerce Commission. Although I recall a case—I should not like to produce the contract—but one of the early members of the Interstate Commerce Commission, who spoke very bitterly of ticket brokerage, or at least the reports say so, did make a contract with me shortly before he was made a member of the commission for a large block of tickets, and I was to sell them at a specified rate. The contract was signed by his successor, and the tickets were not turned over until after he became a member of the commission. I suppose the number would run into the hundreds—railroad men occupying high positions to-day, at least positions of trust and responsibility, who worked for brokers. It is very common for men to leave the railway service and work for a broker, and then go back to the railway service. In fact, work in a broker's office is an education which makes a man valuable for the ticket business. He gets familiar with every form of ticket issued, and the different lines of railroads in the United States, the railway connections, and everything of that kind.

Q. How do your members view the movement which is now going on among the railroads of the United States looking toward what some of them call community of interest?—A. We think that if those schemes are carried out that they will destroy our business. We are in business not from sentiment, but to make money in an honorable way. When in the course of business any combinations that are honorably and legally formed put us out of business, we will make no complaint; we will go down; we will rise or go down as the situation may be brought about; but what we do object to is to be stigmatized as doing an illegitimate and dishonorable business.

Q. Do you believe that so long as there shall be competition in railway passenger traffic there will be room for the brokers?—A. As long as there is competition there is room for brokers. There is this about it: The broker thrives best when trade is bad and when rates are high. When people are making money they don't care so much—the savings effected through brokers do not amount to so much to them; they are not so anxious to buy. When the railroads are doing lots of business they do not care for us. But when the railroad companies get in a close place and need business—it is like any other business—they get out and look for it, and the ticket broker is in a position to give it to them.

Q. This is one business, then, that does not thrive on prosperity?—A. Not so much so.

Q. Have you any written contract made between ticket brokers and railroad officials for the selling of cut-rate tickets in bulk?—A. They could be procured, but it would be a violation of a business agreement, and something that we should greatly hesitate to do. We do not think it would be right to do it.

Q. (By Mr. LITCHMAN.) You are sure that such things exist?—A. Such things exist. I am willing to say that on my oath.

Q. (By Mr. KENNEDY.) And you could furnish them if you were inclined to?—A. I suppose it would be possible. I would not like to say that we will do it. I will say this, in regard to contracts of late years, that it is a matter of honor between the ticket broker and railroad men. For instance, a ticket broker may write to a general passenger agent that he wants something, that he can do him

some good, and instead of getting a reply by mail a district passenger agent or a traveling passenger agent comes in and talks the matter over and says, "We will do so and so;" and that contract stands. The agent will say, "Buy tickets reading over our road, report to us the forms and numbers at the end of the month, and a check will follow." That is the general custom of doing business, and, to the credit of the roads, there are very few instances on record where the contract has been violated to the slightest extent.

Q. Would you mind furnishing such a contract for publication in your testimony if the commission were to omit the names?—A. Contract for the sale of tickets?

Q. Yes.—A. Personally I might not object to show the one in which the commissioner was interested, but I believe that even in that case I might be condemned by the ticket brokers of the United States as violating a confidence.

Q. I will not press it, then.—A. When prominent railroad men who have dealt with us come before this commission, or a commission of this character, and give testimony derogatory to the ticket brokers, there is a great temptation to get back at them. When, as I have mentioned here, a member of the Interstate Commerce Commission—one of the early members—attacked us, I felt very bitter when I had in my hands the contract from the road that he represented, and the arrangement had been made before he left the road. I felt like showing him up, but I never have.

Q. (By Mr. LITCHMAN.) It is a fact, then, that the officers of railroad lines find it expedient and profitable at times to deal with the Ticket Brokers' Association?—A. We proved before the Committee on Interstate Commerce in the Senate that 95 per cent of the business of the ticket brokers in the United States was done with the railroads direct.

Q. And yet, when they want legislation from Congress, they turn around and denounce your association as dishonest. Is that right?—A. There were just two cases shown up in that testimony before the Senate committee by Mr. George M. McKenzie. The Pennsylvania Company, represented by Mr. Boyd, was one of our bitterest enemies. The New York Central, through Mr. Daniels, was also exceedingly bitter against the brokers. Mr. McKenzie, to defend himself, showed (and the testimony is in the records of that hearing) that the Pennsylvania Company had dealt through brokers to the extent of tens of thousands of dollars. The canceled checks paid by brokers and returned to them through the banks and indorsed by the railroads' treasurers were shown to prove dealings with brokers by the New York Central (and some of the gentlemen are present who drew those checks). The checks were for tickets over the West Shore road, owned by the New York Central, and they showed the indorsement of the treasurer of the New York Central.

Q. (By Mr. KENNEDY.) What proportion of your business can you say now comes to you through the railroad officials?—A. The statement of Mr. McKenzie was 95 per cent. Now, when we say 95 per cent of our tickets were bought directly from the railroads I do not mean that each individual broker buys all his tickets from the railroads. For instance, some broker at a starting point East, New York or Boston, starts that ticket West. It may travel from New York to San Francisco, but it was originally purchased from the railroad direct by the broker, and is used from point to point.

Q. Have you any idea what proportion of your business now comes from the railroads?—A. Well, there is a less proportion, especially in the last year, when the traffic associations are the whole thing.

Q. Could you keep open your ticket offices and do business and make a living without the trade which you get through the railroad officials?—A. No; I do not think so, to anything like the extent to which the business was formerly conducted. Where a broker would have perhaps anywhere from thirty, fifty, to a hundred thousand dollars invested in stock, he would necessarily have to do the comparatively small business that is done through tickets that passengers don't use and through excursion business, and of course that would greatly injure the advantages the public now enjoy, because when a broker is doing a thriving business he can buy almost any quantity offered of these tickets by passengers, and he can depend on a large sale to his customers. If the trade is restricted and he can't buy of the railroads, he has got to take some other line in with his ticket business, and perhaps take a less public location. He would not have the same facilities for handling tickets, and of course he would not be in position to handle a large amount of stock.

Q. If you are doing business in Washington, and a gentleman comes to you and says he desires to travel to Chicago, and wants to know what you will make him a rate to Chicago for, and you tell him that you will buy a ticket for Omaha or

some point farther West, and give him an order on a Chicago broker to buy the unused portion of that ticket—is that a common practice?—A. It is a very common way. That is what is called “scalping” a ticket—buying to some through point, which is perhaps a competitive point, and upon which very likely some one of the various roads in this line are anxious for business, and will pay a commission. We sell the passenger the through ticket and give him a rebate order on a broker at the intermediate point for which he is bound.

Q. What I wanted to know in that particular instance was this: Do the railroads know generally that those tickets are bought in that way, being purchased by or for a ticket broker or scalper?—A. It is a very difficult thing not to know it, because the broker buys the ticket. They know it, and it is encouraged by the roads. For instance, there may be some road—say some one of the weaker lines—from, we will say, Buffalo to Chicago, that wants business. The passenger agent of that road comes to a broker and says, “Try and induce your Eastern correspondents or Western correspondents to send their business our way; get the business over our road, and if any tickets expire we will extend the limits.” Sometimes they pay a commission and sometimes they do not.

Q. Do the traveling men of the United States, those who are known as traveling men of business houses, patronize your members to any considerable extent now?—A. I think that every organization of traveling men, every organization that I know of, has adopted resolutions denouncing the antiscalping bill, and is in favor of the broker.

Q. Have the railroad companies recently made concessions to traveling men in any way?—A. In the way I have explained—in the interchangeable book. Where these books are sold, it may be of more advantage to the traveling man to buy the interchangeable book than to deal with brokers, as he gets a net rate of 2 cents.

By the way, this interchangeable book to a great extent is of no particular advantage to the traveling man. When the old custom was in vogue, and each road sold its individual books, a traveling man was allowed by his house 3 cents a mile for travel. He got his mileage from the broker, as a general rule, at about $2\frac{1}{2}$ cents and saved three-fourths of a cent, and that was one of the perquisites of his business. Now, in the territory of these interchangeable books, with a universal rate of 2 cents, he can only put in a bill of 2 cents a mile. The railroad companies can't benefit by it, for the reason that no broker, except in very rare cases, paid them less than 2 cents for mileage. It is the jobbing house that profits by this interchangeable book.

I want to say of this interchangeable book, that while it takes the broker's business from him, we make no complaint. Whenever the railroad companies offer something better to the public than we can give them, we certainly are not coming to a commission to complain nor to Congress to complain, and ask that a law be changed to put business into our hands.

Q. I notice that you have many expired tickets. Do you buy all the tickets that come to you if there is a day or half a day's limit on them?—A. It depends upon circumstances; but as a general rule we do.

Q. Do you lose many of them?—A. We lose enormous numbers of them, but it is good policy for us to buy everything that comes along, because it shows the people that there is a market for tickets, and in the aggregate we make money, of course, or we would not be in the business. Any ticket broker can show you boxes full of expired tickets. We simply buy a ticket as a speculation. If we lose it, why, it is all right; it is a matter of business.

Q. (By Mr. LITCHMAN.) You spoke of selling tickets for the railroad on a commission?—A. Yes.

Q. Would you object to state what the amount of that commission is usually?—A. I think that it is an average of, say, 10 per cent.

Q. Ten per cent of the selling price of the original ticket?—A. About that.

Q. That would be a fair estimate for the whole country?—A. I think so. I guess that is a fair average. It is the same commission, as a general thing, that is paid to agents. A broker is treated usually just as the regular agent is, and if he chooses to divide part of his commission with the passenger, that is between him and the passenger.

Q. Does the use of the interchangeable mileage book, in your judgment, have the approval of the employers of traveling men, as a rule?—A. I should think so. I think they are the ones that profit by it.

Q. You spoke of the fact that the traveling men receive the difference between the cost of the mileage book and the straight 3-cent fare as a perquisite.—A. They did in former times.

Q. Was it not the custom in former times for the employer to furnish the mileage book the same as now?—A. I do not think so to the extent that it is now.

There is one reason why the employer furnishes this book, and that is because it is beyond the means of a great many of the traveling men to put enough money in it. I do not know what amount of money there is invested in these books—the amount of money that the railroad companies have the use of—but this book is No 828028 [referring to book before him], and at \$10 a cover, to say nothing of the mileage inside, it represents an immense sum of money. Of course these are being turned in constantly. It would not be fair to assume that there was about \$3,360,000 out on these books, because a great many of them have been cashed; but there is an enormous sum of money involved. This is only one of at least three in the West. There is, west of Chicago, a different style of book; it is called the Sebastian book. You buy a pocketbook for a dollar or so, and when you buy a ticket of a railroad company you take a receipt and those receipts are registered by the ticket agent and they are filed in the book. When you get up to, say, 2,000 miles you can turn them in and get a rebate. In Michigan there is a kind called the Northern mileage book, controlled by the Northern Mileage Bureau. Another book, known as the Central Passenger Association book, is complained of by traveling men. I am not here to represent traveling men; but there are many restrictions about this book that makes it of great inconvenience to the traveling men, because it is not accepted on the train.

Q. The annoyance of the use of the book at the station?—A. Yes. There is one book that has not this objection—the Northern mileage book, used by the Michigan roads.

Q. Will you kindly explain the manner in which this book is used?—A. To get this book the purchaser writes his name and address and gives it to the ticket agent and pays \$30. There is nothing on this book to identify the original purchaser. When he wishes to travel upon it he goes to the ticket agent, indorses a strip of mileage in this book, and the ticket agent tears out the mileage and gives him a check or a ticket to be used in connection with the book cover. Then he can check his baggage. It is presented to the conductor on the train, who takes this ticket and, I presume, compares it with the mileage book or sees that it does compare with it, and in that way the mileage is used; but, of course, if a man gets to the station close to train time and finds a large number of other mileage holders ahead of him, to get to the ticket agent, go through this complicated system, and get this exchange made, baggage checked, etc., requires considerable time, and frequently he is not able to use the book at all, but has to pay 3-cent fare.

Q. (By Mr. CONGER.) This Northern book you speak of has a different arrangement now, has it not?—A. Yes; I think a much fairer arrangement. It is used like the old mileage book, except that the conductor detaches the mileage and requires the signature of the passenger on a separate slip.

Q. Do you know how that change was brought about; that is, the change in the use of it?—A. I do not. I know that there were a great many traveling men who objected to this style of book, and that passenger men on Michigan railroads believed their objections reasonable and originated a new book.

Q. It is quite likely, then, that the traveling men's association had something to do with it?—A. They may have had something to do with it.

Q. (By Mr. LITCHMAN.) They make a deposit with that book the same as this?—A. Ten dollars; yes.

Q. (By Mr. CONGER.) I would like to ask whether you can tell us if the book in use in Michigan—I think you called it the book issued by the Northern Mileage Bureau—has the official approval of the Traveling Men's Association of Michigan?—A. I can not say positively that it has; I believe it has. I do not believe that any of them like the \$10 cover, however. I know they do not. Nevertheless, it is the best thing that has been offered up to this time.

Q. Is not this interchangeable mileage book an advantage to the travelers in the amount of money they have to invest in mileage books? For instance, if the traveling man with Michigan for his territory, and who would have to travel over, say, 5 different railroads, were to invest in mileage books in the usual way he would have to pay \$100 for 5 books over as many roads, whereas by the purchase of 1 of these interchangeable books he could have a book that would be good over 5 roads for an investment of \$30?—A. I think that is an advantage; an advantage to a man in that position.

Mr. KINNER. Mr. Lindemberger has given much time to our cause and has covered the ground quite thoroughly; but there is just a little thing I would like to answer in regard to the question asked by Mr. Conger. It is to some extent an advantage and in another way a great disadvantage, because in accepting that mileage on the train they will only check baggage to the passenger's destination on that particular line. If they are going to change on another road, they have

got to recheck; they can not check through in a great many instances. I am not in Michigan; but formerly they could check only to the road where they were going to change cars. I know that was in vogue.

The WITNESS. Now, I believe this is obviated in the Michigan book; but in the Central Passenger Association book you can not get a through ticket issued beyond the line of the road that you first ride upon, and you can not check your baggage through; you have to change your ticket and recheck your baggage if you go on another road. This is very disagreeable on a night trip.

Q. (By Mr. CONGER.) I would like to ask a few questions in regard to the complaint that you made as to some of the Michigan roads having practically violated an agreement with you some years ago.—A. Not very long ago.

Q. Family mileage books were in vogue. Was that or was it not brought about by a change in the passenger agents?—A. The passenger agent has since been advanced to larger responsibilities. He is a good fellow yet, but he don't come into my office as he used to.

Q. When these family mileage books were in vogue it was the custom for this railroad to put many names on the book?—A. That was a good deal like the spelling of Sam Weller's name—depended on the taste and fancy of the speller. They put on about as many as the purchaser wanted.

Q. Now, when one of those books was used did not the man who used it have to sign one of the names on the book, whether it was his name or not?—A. That was the requirement, I believe, in the contract.

Q. What was the practice?—A. I believe it was the practice.

Q. Well, isn't there an element of forgery in that?—A. I will tell you: In the first place the tickets were almost universally purchased by brokers, and the broker, in order that the names would not all be the same, asked the first traveler to put his name on the book. The contract, so far as that is concerned, was entirely disregarded. And here is another feature I want to bring out in this contract on railroad tickets. There seems to be a different understanding in relation to this contract—if it is a contract—and to an ordinary business contract. The subject has been brought up or has been suggested to me. If this is a contract, why do not the revenue laws apply to it? In all business contracts the revenue laws require a stamp. You have not seen a stamp on a mileage book, or a railroad ticket.

If this is in the nature of an evasion—the using another person's name—it is the result of an education from the railroad companies, and if there is anything wrong in it the responsibility rests with the railroad companies. I believe the requirement making any person sign a name on a ticket or mileage book is wrong, and it is being discontinued to a certain extent, just as in New England, where the mileage book is now good in the hands of bearer, and while the contract on some of the books sold in that section requires the signature, it is not recognized.

Q. Do you know of any action having been taken by a railroad company, or by anyone in their interest, for forgery against a person who had illegally signed a name on a mileage book?—A. I remember reading of one case in California, where the Southern Pacific Company tried to punish a man for signing a name, and the court decided that the original purchaser in selling that ticket necessarily gave the power of attorney to use his name in that connection to the person to whom he sold it.

Q. What proportion of your business now consists in mileage books, approximately?—A. Personally it amounts to almost nothing since the interchangeable book was put in force. The only business to any extent that is done in mileage is simply buying these books for the use of individual traveling men who can not afford the outlay of money to carry them, and simply charging a percentage on the mileage, he using the book personally. Now, the conditions in my home city are very likely different from what they are in other cities. There are a great many parts of the United States where the old conditions prevail, and the roads issue individual 500 and 1,000 mile books at a flat 2-cent rate.

Q. Do the roads who are issuing these interchangeable books also issue a book of their own?—A. It has been discontinued. The last was within 3 months, I think—by the Grand Trunk Railroad—in our territory.

Q. What proportion of your business 10 years ago consisted in selling and dealing in mileage books?—A. I think 10 years ago it was very largely mileage books.

Q. And those mileage books in a great measure were purchased from the railroads direct?—A. Almost exclusively. In fact, it was dangerous to do otherwise. I would want to know my passenger if I should buy his mileage. I have known cases where a dishonest man would sell his mileage book to a broker, and then go to the company and report it lost, and have it taken up on the train and returned

to him; he was that much ahead and the broker that much out. In buying a ticket or mileage book requiring signature of any person not known to the broker he would have to be assured that everything was all right.

Q. Now, a little while ago you practically declined to give the commission a contract or a copy of a contract between your agency and the railroad company for the sale of books, and the reason, as I understood it, was that it would be a violation of an agreement which you—A. (Interrupting.) Breach of faith.

Q. I want to ask you whether you are not aware or whether it is not a fact that in times past, when these railroads were selling you these books, they by selling them to you at a less rate than the tariff rate—A. (Interrupting.) No; they usually sold to us at tariff rate.

Q. (Continuing.) Or paying you a commission on their sales, were not, as a matter of fact, violating the agreement which they had entered into with other roads?—A. I do not know as to that. The agreements they make with other roads, I understand, are unlawful, and they might object to show up; they might have a greater objection to showing that up than I would have, because my acts with the roads were not unlawful, but a combine in restraint of trade is unlawful. But then a great many of those transactions were in the days before the Interstate Commerce Commission was organized.

Q. The point I am getting at is this: Whether there was any difference from a moral standpoint, from your point of view, between breaking your agreement with the roads yourself or helping one road to break its agreement with another road?—A. I do not believe these agreements with other roads are right.

Q. Hence you feel justified in being a party to assisting a road to break its agreement?—A. You may say it is a rule more honored in the breach than in the observance.

Q. You afterwards touched on equality of freight rates, and, as I remember, expressed an opinion that they were justifiable and desirable to the public.—A. I say it might be argued that they were.

Q. Would it not be desirable from the standpoint of the public to have an equality of passenger rates?—A. Well, it is the inequality and discrimination in the passenger business that gives the broker his business. If the roads treated the public with exact and equal justice, there would be no room for ticket brokers.

Q. Would not the universal rate of 2 cents a mile bring it about?—A. It would absolutely destroy the brokers' business. When roads make no discriminations to individuals or companies there is no business for the ticket brokers.

Q. And there would not be enough to keep ticket brokers' offices?—A. No.

Q. From the standpoint of the legislator, then, who desires to serve the public primarily, and incidentally to abolish the ticket broker, if he would legislate so as to bring about a universal rate of 2 cents per mile, he would accomplish his object?—A. Yes; the ticket brokerage business would be unprofitable. The broker is a creature of conditions.

Q. (By Mr. FARQUHAR.) I would like to know if it has ever been decided in law whether when a person buys a ticket of a railroad, the railroad being a common carrier, the purchaser of that ticket makes a contract?—A. I don't think so. I do not believe that everything that railroads print upon railroad tickets is a contract—that all the conditions could be enforced. You will see it on almost every railroad ticket, the statement that the railroad will be responsible for only a certain amount of baggage. That wouldn't hold in law. There is frequently on tickets issued by some companies a caution in big letters warning the passenger that anyone who attempts to use that ticket other than the original purchaser is liable to prosecution for forgery. There is nothing in that; it is simply a falsehood.

Q. Do you know whether there has ever been a test in law of a case where a person has been prosecuted for signing the name of another on a ticket?—A. I have referred to one case; I have not the records of it, but I remember of this California case, where the Southern Pacific attempted to prosecute a man for such an act. But this is certain, that if the signing of another person's name on a ticket could subject the person so doing to successful prosecution for forgery, it would have been done hundreds of times in the past few years, while certain railroads, or certain combinations of railroads, have been trying to destroy the broker. There is this about it: I do not suppose there is a broker here to-day—I do not know that there is a broker now in the American Ticket Brokers' Association—that was ever arrested and charged with fraud. I never was. I never had the least intimation made that I had handled anything improper. I do not know of any present member of the association ever being charged with fraud, let alone being convicted. I know of cases where we have expelled members because we became satisfied they had been doing an illegitimate business.

Q. Of course a railroad is a common carrier, and they have on the face or back of their tickets certain conditions that you say are illegal. There is a condition on all common carriers, is there not, under the common law, that they shall carry safely to their destination the parties who have purchased tickets?—A. I think it would be more correct to say the "parties holding" than the party purchasing.

Q. The railroad sells a ticket to a man. The contract is with him. He does not use it, but sells it to another man, who uses it. Now, would the railroad be responsible to the latter for an injury to limb or life, if it were known that he had not bought the ticket from the railroad in the first instance? I want to know what your experience and the experience of your friends has been when the law was brought up.—A. I never have known where a passenger that rode upon one of those tickets was injured and that question was brought up. My opinion is that the railroad company is responsible for an injury to a person even if he carries a complimentary pass upon which there is an agreement that a railroad would not be responsible and the party has signed it.

Q. If the ticket says on its face that it is not transferable, do you think that the second party that holds it and uses it can sue the railroad for damages?—A. I believe so, under all rules of right and reason. I do not know what the technicalities of the law might say in regard to it. I believe when a railroad company sells a ticket, accepts the price from anyone who will buy, that then its business is to transport a passenger on that ticket to his final destination, and not to question what particular person holds that ticket. Tickets are sold to anybody, without regard to weight, complexion, or nationality.

Q. So that you do not know that the question has ever been brought up in law on the nontransferability of a ticket?—A. I remember I was interested in reading something in the printed proceedings of this commission. Some railroad president was asked that same question, and he was much better qualified to answer than I. He seemed to be a little hazy on that proposition.

Q. You mentioned incidentally in your testimony the licensing by national or State governments of ticket brokers. Do you know of any case where private business is licensed by nation or State?—A. I see Mr. Lansing nods his head. Perhaps he can answer that for me.

Mr. LANSING. Yes; express companies are licensed in Savannah, Ga., and in Augusta, Ga. In fact, all lines of business are licensed.

Q. (By Mr. KENNEDY.) I have a few questions that have been handed me to ask Mr. Lindenberger. Are there any restrictions in the sale of immigrant tickets—that is the cheapest class of tickets—with regard to time and accommodation?—A. I do not know as to that. It has not come in my experience. I know this, now that you are speaking of immigrant tickets, that a European immigrant gets a cheaper rate in the United States than an American citizen; that the rates will be from \$2 to \$5, perhaps, from New York or the landing point in America, to his destination, less than American citizens can get.

Q. Those tickets are sold in Europe?—A. They may be prepaid in America. But the ticket which an ordinary American citizen and a voter can get for, say, \$18 can be had by the foreign immigrant for \$15.

Q. That is universal?

Mr. LANSING. The business in Atlantic ports is so controlled by a pool that no person other than one who has arrived from some foreign port can buy an immigrant ticket. If he has been here over 2 weeks, then he is debarred from purchasing an immigrant ticket. And his name must appear on the manifest of some steamship company. But the immigrant fares have been raised within the last 2 years about 20 per cent. Within the last 8 years there has been no discovery of any transaction in which ticket brokers have been engaged in handling immigrant tickets. That has been confined to a different kind of people—men who make a specialty of selling land and looking after the interests of foreigners.

Q. (By Mr. LITCHMAN.) Touch a little on the difference in accommodations.

Mr. LANSING. Yes; the accommodation of the immigrant passengers has somewhat changed within the last few years. They do not run as many immigrant trains as they did heretofore; they hitch them onto some freight train, which reduces the cost of transportation considerably. But in many instances the immigrant who pays \$2 or \$3 or even in some cases as much as \$5 less rides side by side with an American citizen who has paid a higher amount, simply because the railways control in a pool organization all the immigrant business of this country.

Mr. A. L. HARRIS. You accept this now as your testimony?

The WITNESS. I do. I want to say in connection with that statement that immigrants ride in the same car, or perhaps in the same seat, with American citizens that pay a higher rate of fare; that in a great many cases in this country to-day,

where second-class rates have not been abolished, roads have stopped using second-class cars or making any distinction in class, and that two passengers will ride side by side, one paying the first-class rate and one the second-class rate—a difference, perhaps, of \$2—and have exactly the same accommodations.

Q. (By Mr. FARQUHAR.) Do not some of the roads that carry the immigrants on through rates let them ride in the smoker?—A. The smoker is not second class; a railroad company can not force a second-class passenger to ride in a smoker; in fact, they can keep him from doing so. As a general thing, to-day the first-class man that smokes has a right to the smoker and he is not compelled to go into a second-class car to smoke. I know of roads running reclining-chair cars; they are first class; the holders of second-class tickets have the same rights as the holders of first-class tickets right from the railroad companies. The person who knows his business buys a second-class ticket and saves the difference. There is only this difference, that a second-class ticket will not be accepted for a sleeping car; if he wants to ride at night he will have to have a first-class ticket and pay the sleeping-car fare difference.

Speaking of sleeping cars reminds me of the experience of one of the brokers present coming from Chicago to Washington. The usual rate for a sleeper is \$5. He bought his to Pittsburgh for \$2.50; then from Pittsburgh to Washington for \$2. By buying two tickets he got here for \$4.50; if he had bought a through ticket he would have had to pay \$5. Those conditions obtain in many cases in ticket as well as in sleeper rates, and where brokers know of it they advise their customers and make a saving to them.

Q. (By Mr. FARQUHAR.) Do you think that the Wabash, which you know well, does not run second-class passengers in the smokers?—A. I never knew of a passenger on the Wabash being obliged to go into the smoker. I think the gentlemen present will bear me out that a second-class passenger can not be compelled to go into the smoker; that a smoker is not second class. It is a common thing, when our customers come in, for us to say, "Are you going to take a sleeper?" "No." "Buy second-class; get the same accommodation and it is a saving of \$2."

Q. (By Mr. CONGER.) You buy a second-class ticket and sell it to them as first-class fare?—A. Oh, no. [Laughter.] We sell a great many tickets at tariff. We brokers all have a large business. The railroad companies may be in an agreement not to cut rates. They say, We are perfectly willing to pay you a commission, but the rate is not to be cut. We work for them and get business. Our passengers, a great many of them, are our friends that we have known for years. They say, We would rather buy of you than the other fellow if you can make the same rate. There is a great deal of trade of that kind. If there should be a regulation that all tickets must be sold at tariff rates, it would not destroy the brokers' offices. The passenger associations now say how many outside offices a railroad may have. They say to the general passenger agent, You must take your office out of that place or out of this hotel. If an antiscaiping law were passed, and a man could not sell tickets without a certificate, the passenger associations would control the business entirely. But without the certificate they can not control us. We can sell tickets against anybody, even if it is necessary to sell at tariff rates. But if a law is passed making it criminal for any man to sell them without a railroad certificate, they would restrain that man from selling a ticket and close his office.

Q. (By Mr. KENNEDY.) What percentage of the members of your organization have been in the brokerage business 10 years or more?

Mr. CARTER. Between 65 and 70 per cent.

The WITNESS. Mr. Carter says between 65 and 70 per cent.

Q. And you say none of these gentlemen have ever been charged with or ever been convicted of fraud?—A. I think our secretary, Mr. Carter, will know, and I will let him answer for me. He will know whether any person whom we have permitted to remain in our association was ever charged with or convicted of fraud.

Mr. CARTER. No, not once.

Q. What position have ticket brokers occupied politically and socially, so far as you know?—A. A few of us have been sentenced to State legislatures or something of that kind, but ticket brokers as a general thing are business men and not office seekers.

Q. Were you ever a member of a legislature?—A. I have been a member of the California legislature. We are business men and pay very little attention to local politics, and I should think it would be a rare thing to find any of us engaged in ward politics in the cities in which we live.

It is true that ticket brokers have served as councilmen and aldermen of cities and were honored members of those bodies, but as an association we are not a

political body. But ticket brokers are wide-awake citizens; they take a lively interest in all public matters, but I mean they are not politicians to the extent of seeking political preferment and political positions.

Q. Can you tell us something about the classes of people who effect a saving by patronizing ticket brokers, other than the traveling men you spoke of? Are they more generally laboring people or middle-class people, or is it true of all classes of people?—A. I should say they were from all classes. I think in my own city there is hardly any class of people, excepting those who can go to a railroad and get a pass, but what deal with the ticket brokers. We have sold to United States Senators, Congressmen, governors, judges, ministers of the gospel, officers of the Army, doctors, merchants, and business men, as well as to the great masses of the people in more humble walks of life; even railroad employees are among our customers. Of late years the roads have been drawing the lines and making it difficult for men in the lower positions of railroad employment to get free transportation or even special rates. A great many of them have come to us. Men employed on the passenger trains, knowing of the honorable character of ticket brokers, frequently recommended their friends to come to us because they knew that whatever we sell would be all right.

Mr. LANSING. It is not an infrequent occurrence for poor people in Eastern cities, particularly New York, to deposit week by week or month by month a small sum to buy tickets West, or buy tickets for some one in the West to come East, or from the South to come North, and the saving through the ticket broker often means a day's wages or 10 or 12 hours' work to a workingman. And again, in the cities where merchants and small tradesmen from the West and South come on to buy goods the wholesale houses, knowing that these men do not buy very extensively and do not ship very largely, and so are unable to get any consideration in the shape of passes or half-rate transportation from the railway companies, seek out the ticket broker and get the small tradesmen, the buyer, the crossroads grocer, and similar people something cheap from the ticket broker. It saves them a dollar or two. In the country, down in Kentucky and Tennessee and Missouri, a dollar is bigger than it is in New York and the big cities. Those men will walk five or six blocks and wait over a day or two to save a dollar on a ticket. Those are only the wage-earners and frugal people. I have talked with our Eastern people, and a great many find that men who are well to do and who are frugal save money by patronizing brokers. They do not always expect to save money simply on a ticket, but they hope to save it by getting some information about some route that a railway company does not inform them about. Each railway office only informs the passenger about its own particular line, whereas in a ticket broker's office the passenger is informed about the various lines—eight or nine of them in some instances—to a given place; and by that means the passenger is saved a great deal of tramping over the city, a great deal of time, and he knows that the information is correct, and he selects his route and makes a saving in money without any sacrifice of comfort.

Q. (By Mr. KENNEDY.) Mr. Lindenberger, you said something about selling railroad passes. If a man should come into your office in Detroit and offer to sell a railroad pass, would you take forcible possession of that pass and send it to the railroad or would you inform the railroad that such a pass had been offered for sale?—A. I have frequently done so, but of late years I prefer not to see the pass. If a man should offer to sell me a pass, I would say: "We do not handle them; I do not want to see it." Sometimes some very painful results grow out of reporting passes. I remember hearing one of my friends tell of the custom that he had, in common with other brokers, of reporting passes. He reported a pass that was offered for sale. It proved to have been given by a general passenger agent to a young man who was a friend of his family and whom he was trying to assist in getting something to do. And the fact that that young man had offered the pass for sale—had violated his confidence—hurt him so badly that he said: "I am very much obliged to you all right enough, but I am very sorry to know this thing. I would very gladly have known nothing about it." And it affected the broker so much that he said: "Hereafter I will just let those things go." And I have had something of the same experience. Most of the passenger agents simply ignore our advice, and say: "Oh, well, that scalper is trying to curry favor with the road and is trying to make something out of it." But I never buy a pass, and I never have sold one nor permitted one to be sold in my office. It is disreputable and dishonorable. While railroad companies may issue passes improperly, for political purposes or otherwise, it does not justify brokers in handling them. We confine our operations to tickets that the railroad company receives its price for. Such tickets I believe to be proper articles for sale, notwithstanding the fact that John Jones or Tom Smith may have been compelled to sign them.

Here is a point that might be of interest. The total amount of passenger revenue during the past five years amounted to \$1,250,000,000. The amount of fraudulent tickets during that period could not possibly exceed \$10,000. Of course I am not in the fraudulent-ticket business, and I do not know what it could amount to; but I know this: That with the system of espionage that is exercised by the traffic associations and railways by the spotters who are paid to get information—and I think are sometimes inclined to manufacture it—certainly our enemies, if they had information of that kind, would present it; and from that I judge that the loss to railroads in fraudulent tickets must be an exceedingly small fraction of the whole amount of business done. Take these limited tickets. While the railroad companies have been paid for them, it is of course a fraud upon the road and a dishonest act to extend the limits upon them. And yet most of the fraudulent tickets are extensions of the limit, or the using of these tickets outside of the proper agreement; so that as a matter of fact the railroads have actually been paid for carrying the passenger. Of course that is no excuse for the ticket being used. But I think that we can safely say that the value of fraudulent tickets that the railroads carry passengers upon, for which they receive no compensation, is very small indeed. Ticket frauds have been usually discovered through brokers. Recently a forged ticket was discovered, reading from Eastern cities to Colorado. It was an actual forgery, discovered by a broker. The broker is present. He notified the railroads, and the rascals were caught. The brokers gave every information possible, and the forgers are serving, and very properly serving, a term in the penitentiary.

I have something here that might interest the commission. I spoke in my testimony of our correction sheet that is issued twice a month from the secretary's office in Louisville, Ky. Among the standing instructions on that sheet is the following [reading]:

"Lost, stolen, and fraudulent tickets. Members will report to the general office all lost, fraudulent, and stolen tickets, in conformity with article 15. This rule is mandatory, and failure to comply is punishable by fine."

(The witness then read the remainder of the article, instructing brokers how to proceed upon the presentation at their counters of fraudulent tickets.)

Q. (By Mr. LITCHMAN.) And then follows a list for that particular month?—A. Yes. Now, it has been the custom with railroad companies, and is really the most effectual way of detecting frauds, burglaries, etc., as soon as they learn of a fraudulent issue of tickets or of tickets being stolen, to notify a broker, who in turn notifies our secretary. That information is wired all over the country or goes by the first mail, so that every ticket broker in the United States is on the lookout for those tickets; and no fraud can long continue, because the party will be caught.

Mr. FRANK. With your permission, I should like to say a few words.

Mr. A. L. HARRIS. All testimony will have to be sworn to, and if you appear as a witness you will have to take the oath. If Mr. Lindemberger, however, will accept your testimony as his, it will be all right.

The WITNESS. If I object to it, I will say so and have it straightened out.

Mr. FRANK. To show how impossible it is for fraudulent tickets to be accepted on a road for any length of time without the consent of the auditing department, a ticket presented on a train to-day is turned in by the conductor to the auditing department, say, to-morrow or next day—to-morrow, as a rule—the moment he finishes his trip; and by the next day it is checked up, so that it would be only a matter of one or two days that a fraud could continue without being discovered. All the brokers in this room have averaged in the business over 15 years. There is not one of us that has ever been arrested, or ever suspected, even, of selling a ticket that was connected with fraud. There is less chance of fraudulent tickets being accepted by a railroad than of almost any other kind of fraud being perpetrated on a railroad or bank or any other institution.

The WITNESS. Here is a clipping from the Dallas Herald, which was copied from the Chicago papers and published for an object all over the country, that I want to lay before the commission. [Reading:]

RAILROADS DISTRIBUTING INFORMATION ON TICKET SCALPING.

Under the heading of "Warning to the public," the railroads are sending out copies of the following article, which recently appeared in the Rochester Herald:

"The railroads are thoroughly in earnest in their purpose to put an end to the ticket-scalping business, and a few incidents such as took place in Chicago the other day will be sufficient warning to the traveling public that it can not hope to successfully defy the contract under which it secures reduced rates of transportation. The story as we have it from a Chicago newspaper is an interesting one.

"A man and his wife, whose home appeared to have been in the Windy City, bought for \$16 two tickets, valued in the regular way at twice that sum, and returned home with the crowds which

were flocking in to attend the corner-stone laying. The contract required the deposit of the tickets at the arrival station, and they did this, but returned the next day to inquire when they could secure possession of them again, but were told that they would be ready for them in ample time to catch their train for home.

"Saturday the man and wife called for their tickets and were told that they could secure them at the train. They said they wished to take them Saturday evening. The man made quite a disturbance, but the clerk was firm, and so the couple left and returned with an officer and warrant from Justice Martin's court and arrested the clerk. Commissioner Donald, of the association, went to Justice Martin's court, and the case was immediately called and dismissed, as the judge said he thought the offer of the agency was fair in any event, as the couple said they wished to go by the evening train and were promised their tickets in ample time.

"Three association men went to the train and found the couple waiting. One man remained near by, while the other two handed the tickets over and left. Immediately after the two men left the couple were joined by a man and woman, to whom the tickets were turned over and their baggage checked to Cincinnati. The conductor was notified, and the tickets were taken up before the train reached Forty-seventh street, where the purchasers preferred leaving the train to paying their fare down to Ohio.

"This is the first instance of the kind that has come to public notice, and it would seem that the railroad company acted within its moral and legal rights. The selling of a ticket at a largely reduced rate is a favor to the traveling public, which the carrier has a right to keep from being abused. If it lacks this power, its only recourse is to withdraw such tickets from sale, which would be a hardship to that class of persons who can take these pleasure jaunts only by the favors which they receive from the railroads in the matter of reduced rates. It was no hardship to the original purchaser in this particular instance, as he went into the speculation with his eyes fully open to the consequences of failure, but it was a humiliation and annoyance to the scalper's customer, which might have been avoided by a little closer observation of the code of honor on both sides."

In this article I do not see where they can connect the ticket broker with the transaction. It appears that the couple bought round-trip tickets from where they started to Chicago and return, found another couple who were going back to this place, and desired to turn these tickets over to them. The railroad put their spotters on them. They go and sign these tickets, and the tickets are taken up and the people ejected from the train. Now, I believe that that sort of proposition is wrong. It may be contended that when these parties bought these tickets to Chicago and return they became parties to a contract and should comply with all the requirements of the contract, but I believe that when a railroad company sells a ticket it is good to carry a passenger, and as they sell that ticket to anyone that will buy it, it was a perfectly proper transaction for this couple to turn their tickets over to any other couple who would return on the journey. There is nothing of this kind that happens in the United States where a ticket is refused but the "scalper" is blamed for it, and this, of course, is a specimen. I believe it is wrong.

I remember a case, too, where a great deal was said in the newspapers about what they were pleased to term a rascally trick by a scalper to beat the railroad company. From some place out of Chicago, perhaps a hundred miles, there was an excursion rate advertised of a round trip. A Chicago broker organized a company of people, paid the local fare for his party on the train to this point, and got off the train to buy the round-trip tickets. The passenger agent of the road had learned of it, wired to the conductor to shorten the time at this station, who whipped away before the broker had time to buy his tickets. The broker was compelled on the train to pay the local fare for his entire party. This transaction was bulletined in the papers as a proper way for the railroad company to beat the broker and punish him for the very improper act of selling to his party at the full excursion rate that the railroad company had advertised in this place, some little distance from Chicago.

(Testimony closed.)

WASHINGTON, D. C., January 19, 1901.

TESTIMONY OF MR. A. K. TEISBERG,

Secretary of the State Railroad and Warehouse Commission of Minnesota.

The commission met at 10.10 a. m., Vice-Chairman Phillips presiding. Mr. A. K. Teisberg, of St. Paul, Minn., secretary of the railroad and warehouse commission of the State of Minnesota, was introduced as a witness and, being duly sworn, testified as follows:

Q. (By Mr. PHILLIPS.) Mr. Teisberg, will you please give us your residence?—A. Since I became connected with the State railroad commission of Minnesota I have resided in St. Paul. I have been connected with that commission since its creation in 1885, and since 1890 I have been its secretary.

Q. What was your occupation?—A. Formerly I was assistant secretary of the commission.

Q. What was your occupation prior to that?—A. A little prior to that I was a newspaper editor and publisher. Prior to that I was engaged in teaching at college, particularly languages.

Q. Will you please state the duties and powers of your commission?—A. The law adopted by the legislature in 1885 creating the railroad and warehouse commission did not give the commission power directly to fix rates, but the commission was rather what is called an advisory commission. They could recommend to the railways any changes that they thought proper. That law, however, was superseded in 1887 by an act, chapter 10, general laws of the State of Minnesota, which was based upon the act proposed to regulate interstate commerce. My recollection is that such an act was drafted some time in the latter part of 1886 and sent around to the various State commissions, and our commission took the matter up and recommended to the legislature a change of the law in accordance with that act. The greater portion of it is exactly in the same words as the interstate commerce act, as adopted in 1887. There are some exceptions, one of which is that the State act permits the railroad to issue free passes to whomsoever it pleases within the State, good within the State, while, on the other hand, the original act prohibited the railroads from granting clergymen's half-fare permits. That, however, was changed at the following session, so that now any railroad in our State can grant half-fare permits the same as they do in a great many of the other States.

The commission, by this act of 1887, was also empowered to fix or to change rates made by the railroads, and they proceeded to do so with reference to the switching rates at Minneapolis and with reference to rates for the transportation of milk from certain points on the Chicago, Milwaukee and St. Paul Railway. They reduced the switching rate from \$1.50 to \$2 per car to \$1 per car. They reduced the rate on milk from 3 cents per 10 gallons to 2½ cents per 10 gallons for distances up to 75 miles.

Q. (By Mr. FARQUHAR.) These arrangements were within the State of Minnesota?—A. Entirely so.

Q. So that there was no interference with the interstate-commerce act?—A. No. Now, the railways did not obey the order of the commission in these two cases, so mandamus proceedings were instituted. The State court sustained the commission and asserted that the commission had full power to fix those rates. The companies appealed to the United States Supreme Court, where the decision of the State court was overruled and the law as defined by the State court was declared unconstitutional in the case of the Chicago, Milwaukee and St. Paul Railway Company, plaintiff in error, v. the State of Minnesota ex rel. the Railroad and Warehouse Commission of the State of Minnesota, familiarly known as the milk-rate case.

Q. (By Mr. LITCHMAN.) Can you briefly give the grounds of that decision?—A. I think I shall do that in the language of the court. The United States Supreme Court says:

[Reading:] "The construction put upon the statute by the supreme court of Minnesota must be accepted by this court, for the purposes of the present case, as conclusive and not to be reexamined here as to its propriety or accuracy. The supreme court authoritatively declares that it is the expressed intention of the legislature of Minnesota, by the statute, that the rates recommended and published by the commission, if it proceeds in the manner pointed out by the act, are not simply advisory, nor merely prima facie equal and reasonable, but final and conclusive as to what are equal and reasonable charges; that the law neither contemplates nor allows any issue to be made or inquiry to be had as to their equality or reasonableness in fact; that under the statute the rates published by the commission are the only ones that are lawful, and, therefore, in contemplation of law the only ones that are equal and reasonable; and that in a proceeding for a mandamus under the statute, there is no fact to traverse except the violation of law, in not complying with the recommendations of the commission. In other words, although the railroad company is forbidden to establish rates that are not equal and reasonable, there is no power in the courts to stay the hands of the commission if it chooses to establish rates that are unequal and unreasonable.

"This being the construction of the statute by which we are bound in considering the present case, we are of the opinion that, so construed, it conflicts with the Constitution of the United States in the particulars complained of by the railroad company. It deprives the company of its right to a judicial investigation, by due process of law, under the forms and with the machinery provided by the wisdom of the successive ages for the investigation judicially of the truth of a matter in

controversy, and substitutes therefor, as an absolute finality, the action of a railroad commission which, in view of the powers conceded to it by the State court, can not be regarded as clothed with judicial functions or possessing the machinery of a court of justice."

Briefly stated, the law was set aside for the reason that it did not provide for a judicial review of the acts of the commission.

Q. (By Mr. FARQUHAR.) In other words, that it was arbitrary in rates and in jurisdiction?—A. Yes; I may state, however, that there were three justices of the Supreme Court that dissented from the majority opinion in this case.

This decision was rendered in 1889 or 1890 and the following session the legislature, which met in 1891, proceeded immediately to amend the law upon the lines laid down by this decision so as to meet the objections, and under that law, as amended, which provided for complaints being made, duly verified, by any person or corporation or municipality in regard to rates, the commission should proceed to investigate and give the companies due notice and proceed, as near as may be, in the manner pursued in such cases in a court—take testimony, consider all the facts submitted to it, and then render its decisions.

The first and perhaps the most important case that came before the commission under that amended law was the question of grain rates from points in the Red River Valley, the northwestern part of Minnesota, to Minneapolis and Duluth, our chief grain markets.

The complaint in that case was filed in the latter part of 1893. In 1894 the commission made its order reducing the rate about 12½ per cent. The complaint demanded a reduction of 33½ per cent. The complaint covered only three stations, but in making the order the commission felt that if it should simply make an order with reference to three stations it would make a tariff which would be discriminating as to a great many and perhaps all other points on the road, so the commission made a rate covering the whole road. The railway company appealed to the district court where the case under our law was tried *de novo*. The same testimony was introduced before the court as before the commission, and some new and more complete testimony was introduced. The line upon which this case was tried, on the part of the State, was to show the cost of reproducing the railroad, and, taking the earnings of the road for a series of the past four or five years—its earnings upon the grain traffic, which was the only traffic involved in the controversy—by these means to arrive at a fair income for the railroad within that State upon the cash basis of the cost of reproducing that road at that time. The decision of the district court was adverse to the commission. The case was appealed to the State supreme court and was decided by that court in October, 1896. The title of the case is *In re appeal of the Great Northern Railway Company, Elias Steenerson, State of Minnesota et al., appellants, v. Great Northern Railway Company, respondent*. The supreme court of the State reversed the district court, and I can probably best express the point decided by quoting a part of the syllabus of the case:

[Reading:] "2. The question whether the rates for transportation fixed by the State railroad and warehouse commission are unreasonable and confiscatory is not determined by the fact that the income under the rates as so fixed will not pay the amount of the fixed charges of the railroad; neither can the amount at which the railroad sold years ago on mortgage foreclosure sale be taken as the basis on which to determine what are reasonable rates, but that question is determined by ascertaining what, under all the circumstances, is a reasonable income on the cost of reproducing the road at the present time.

"3. Under chapter 10, General Laws, 1887, as amended by chapter 106, Laws of 1891, the burden is on the railroad company to show that the rates fixed by the commission are unreasonable.

"4. *Held*, the fixing of rates is a legislative or administrative act, not a judicial one. Under the constitution the court can not place itself in the shoes of the commission and try *de novo* the question what are reasonable rates; and on appeal under said statutes the court can review the acts of the commission only so far as to determine whether the rates fixed by it are unreasonable and confiscatory, and to what extent, in much the same manner as an appellate court determine whether or not the verdict of a jury is excessive and to what extent.

"5. On appeal from the commission the court should take judicial notice of all those general matters of which the commission should have knowledge and on which it would act without proof thereof made on formal hearing."

The case never was heard again in the district court.

Q. (By Mr. FARQUHAR.) It was sent back to the district court by the supreme court of the State?—A. Yes; it was sent back to the district court for a retrial, but never came up again, for the reason, perhaps, that the Great Northern Rail-

way Company had completed a short line from the Red River Valley and from the wheat country to Duluth, which decreased the distance; and thereupon that company established rates which in some instances, for the longer distances, were lower than the rates that had been ordered by the commission. While the commission, for instance, from Crookston, a distance of 300 miles from Minneapolis, had ordered a rate of 14½ cents, the company put in a rate of 14 cents. Another thing the railway company did in this matter which the commission perhaps could not have ordered was to make the same rates for a stretch of 100 miles from each station; and furthermore it made the same rate to Minneapolis as to Duluth, giving the farmers and producers the advantage of those competing markets at the same freight rate and also doing away with the little rivalry that always exists between adjacent stations for the produce of the farmer where the rate is different. The adoption of this rate by the Great Northern of course compelled the Northern Pacific, which operates in the same territory, to adopt the same rates; and right across the Red River is North Dakota, also a wheat State, and of course they had a corresponding benefit from the reduction. The railroads could not very well give Minnesota a much lower rate for about the same distance than they gave to Dakota. In 1897 the law was again amended so as to permit the railroad commission to proceed to the investigation of rates upon its own motion. Up to that time the law required that a complaint must be made by some one. Under that law the commission in 1898 proceeded to investigate the reasonableness of the rate on hard coal from Duluth to New Ulm over two lines of railway, the St. Paul and Duluth and the Minneapolis and St. Louis. I should say here that our law provides for the fixing of joint rates by the commission, but that feature of the law had never been decided until this case came up. The commission fixed the rate for the two roads, and thereupon also divided that rate as between the two roads. The roads refused to divide the rate themselves, and under the law the commission made the division of the rate as well as the through rate. One of the railway companies, the Minneapolis and St. Louis, appealed to the district court. This case was not tried, however, upon the same lines as the Stearnson rate case. The question of the cost of reproduction did not enter into it. It was tried more on the technical points of law as to the power of the commission to make joint rates. Both the district court and the State supreme court sustained the order of the commission. The case is now pending before the United States Supreme Court. It is a case of very great importance on the question of State regulation, involving as it does the right of the commission to make joint rates; and it becomes so much more important in view of the fact that we have another provision of the law which authorizes the commission to compel two roads crossing each other at grade to put in a Y connection between the two roads for the transfer of traffic from one road to another. This case has gone through all the stages of the courts, and it was decided in the United States Supreme Court, in the case of Jacob F. Jacobson v. The Minneapolis and St. Louis Railroad Company, sustaining the law—sustaining the order of the commission. So that if we get a decision sustaining the right of the commission to make reasonable joint rates for two or more companies as well, the two in connection will be very important factors in the regulation of railroads by States.

Q. (By Mr. LITCHMAN.) Will you briefly state the object of this Y—so the traffic can be transferred from one road to the other?—A. Yes. The commission can not order these Y connections in unless it is shown that a commercial necessity exists in the particular case. The necessity was shown in this case. One of the roads, the Great Northern, passes through a heavy timber belt where the cutting of fuel, wood, posts, etc., is quite an industry. The point of connection was out on the prairie, probably a hundred miles from the woods, and crossing a road that was a prairie road practically leading out to South Dakota, and it was for the benefit of the wood choppers and shippers, as well as the wood consumers, that the commission was justified in making the order. The commission can not make an order just because the roads cross each other. If there is no commercial necessity, the courts would not sustain it, even if there should be such an order.

Q. That applies only where the roads cross at grade?—A. Yes; they must cross at grade.

Q. If it was an overhead crossing, it would not apply?—A. Oh, no.

Q. (By Mr. PHILLIPS.) Have you any other laws in regard to grade crossings?—A. No; we have not paid much attention to the protection of life and limb with reference to railroad crossings. We have, of course, a law or rule that where two railroads cross each other at grade they must come to a full stop, unless interlocking signals are provided and approved by the railroad commission. They are getting to be very numerous in our State now.

Q. (By Mr. LITCHMAN.) A road could evade that order of the commission by elevating the tracks and going over?—A. Yes; they could do that. I do not know whether you desire a few statistics with reference to rate reductions that have taken place in our State.

Q. (By Mr. PHILLIPS.) Certainly; it is very important.—A. I have a few here relating only to grain.

Q. We would be glad to have them.—A. I can take only four points. From Alexandria to Minneapolis, distance 133 miles, the rate on grain in 1880 was 21 cents per 100 pounds; in 1885 it was 19 cents; in 1887, 12 cents, and it remains at that rate now. From Fergus Falls it is 178 miles; in 1880 the rate was 23 cents; it is now 13 cents. From Crookston, 300 miles, the rate in 1880 was 27 cents; in 1887 it was 19 cents, and it is now 14 cents. From St. Vincent, distance 890 miles, the rate in 1880 was 35 cents per 100; in 1887, 21 cents, and now it is 16 cents.

These reductions, according to my best information and belief, have been brought about partly by virtue of the operation of the railroad law, but chiefly by increase in the volume of business of the roads, and the improvements and economies that have been introduced of late years in railroad transportation, increasing the size of cars from 400 bushels capacity to 1,000 bushels capacity, and in the increased weight of the engines. The Great Northern Railway, I am informed, can haul about 80 loaded cars in a train—80,000 bushels. This is all I have to say, that I can recall now, with reference to the railroad part of our duties.

Q. (By Mr. LITCHMAN.) This reduction of rates has been the natural reduction from competition, or has it been brought about through the rulings of your commission?—A. I think that the rulings of the commission and the moral effect of those rulings have had a good deal to do with it, but I think it is the introduction of economical methods in operation that has had more to do with it. I do not believe that competition has had—

Q. (Interrupting.) Anything at all?—A. Very little—very little to do with it. Q. It is largely due to improved methods of transportation?—A. Yes; and, of course, in connection with the very important factor of increase in the volume of business which makes it possible.

Q. (By Mr. PHILLIPS.) Was there not an attempt made several years ago to consolidate the Great Northern and the Northern Pacific?—A. Yes.

Q. What have you to say in regard to it?—A. Our State has had a law upon its statute books since 1871 prohibiting the consolidation of parallel or competing railroads. It is not a law that is particularly within the power of the commission to enforce, but rather within that of the governor or of the attorney-general to enforce. Now, at the time of the reorganization of the Northern Pacific Railway, in 1896, I think, there was a scheme on foot by the Great Northern road to obtain control of it—not by personal ownership or community of interest, but the Great Northern Railway Company was to underwrite the securities of the Northern Pacific Railway Company and receive in consideration therefor a majority of the stock, and thus control it and practically consolidate it. Of course the existence of this law was known to the Great Northern Company, and in order to get a ruling upon it a suit was instituted in the Federal court before Judge Sanborn by one of the stockholders of the Great Northern whose name, I believe, was Pearsall, and the case is entitled Pearsall v. The Great Northern Railway Company. The judgment of Judge Sanborn was that the Great Northern Company might underwrite those securities. The case was appealed to the United States Supreme Court. In the meantime the attorney-general of the State of Minnesota instituted proceedings in the district court to test this law, and the district court sustained the position of the attorney-general; the State supreme court likewise sustained his position, and while the Pearsall case was pending before the United States Supreme Court the attorney-general filed a brief in that case as an intervenor, and the United States Supreme Court sustained the law, so that consolidation did not take place, and competing roads in our State can not be consolidated.

Only last summer the Northern Pacific Railroad Company absorbed or consolidated with the St. Paul and Duluth Railroad Company. The St. Paul and Duluth is a short line between the twin cities, St. Paul and Minneapolis, and Duluth; it is about 150 miles. The Northern Pacific also has a line connecting the two cities, but by a roundabout way. The distance on the Northern Pacific proper, between St. Paul and Duluth, is about 250 miles, or 100 miles longer than the other line. In the meantime the Northern Pacific bought the St. Paul and Duluth. Our commission instituted proceedings to test the law again or to prevent that consolidation; but while the case was pending in the district court, the Northern Pacific Railroad Company, through its president and its general counsel, applied to the commission and entered into an agreement whereby they bound themselves for all time

to come to have the St. Paul and Duluth part of the road considered as a separate entity in any case that might arise between the State and the company. For instance, if we should proceed in a rate case against the former St. Paul and Duluth road, it would not be necessary to go into the cost of reproducing the whole Northern Pacific Railroad in the State of Minnesota, but only that portion of it formerly called the St. Paul and Duluth. Of course the case was dismissed without prejudice, and may be reopened at any time.

Q. (By Mr. LITCHMAN.) You spoke of reproducing for the sake of ascertaining the cost?—A. Certainly.

Q. Could you give any estimate of what the cost would be to reproduce that road?—A. Our district court found in one case that the cost of reproducing the Great Northern road—some 1,385 miles in Minnesota—would be an average of \$32,000 per mile. Out of this \$32,000 per mile, about one-third was the cost of the terminals, which the supreme court found to be exorbitant.

Q. (By Mr. PHILLIPS.) Would this law prevent the consolidation of the Northern Pacific and the Great Northern that is rumored to be on hand at the present time?—A. Yes, as far as the road in the State is concerned. That is just what the Pearsall decision meant.

Q. (By Mr. LITCHMAN.) Would it prevent the management buying and managing the interests through the ownership of a majority of the stock by the same parties?—A. I think not.

Q. That is practical consolidation, is it not?—A. I presume to all intents and purposes it is.

Q. (By Mr. PHILLIPS.) If it was joint ownership you could not prevent it?—A. I presume we could not prevent any citizen owning stock in competing railroads or anything else.

Q. (By Mr. LITCHMAN.) Is that not what is being attempted now?—A. I think that is the scheme.

Q. (By Mr. PHILLIPS.) You think that would effectually defeat the law?—A. Not completely so; they would maintain the 2 roads as separate organizations. Of course the community of interest in ownership would prevent, in the future, rate wars as in the past, and I think that is a good thing.

Q. (By Mr. LITCHMAN.) Now, elaborate that just a little.—A. About rate wars? Of course our State commission has had very little experience. We have been very free from those things as far as the State traffic is concerned, but we have noticed it on interstate business. My own observation is that rate wars help only those who are large shippers and who do not need the help of the roads in any way. The small shipper is generally not prepared and has not much to ship at the time so as to take advantage of it.

Q. (By Mr. PHILLIPS.) Has your commission any power to pass on a new issue of stock?—A. Yes. In 1887 an act was passed requiring that all stock issued by new railroad companies should be fully paid; that no increase of stock should be permitted without the consent of the railroad and warehouse commission. Since that time we have, as I recall now, passed upon 3 applications for permission to increase the capital stock, in all of which cases permission was granted.

Q. To the extent asked?—A. To the extent that was asked. A full hearing and complete showing of the necessity of such increase was, however, made before the commission. In fact, this report of 1897, which I shall leave with you, contains one of the findings in such a case.

We have also the long and short haul clause. Under that, as I recall it, we have had 2 applications for the suspension of it. The commission has the same authority to suspend the operation of the long and short haul clause as has the Interstate Commerce Commission. In these 2 cases the application was denied.

Q. If your commission should refuse to allow an increase of stock, what action could the railroads take, or could they take any?—A. I do not know as they could take any, except there would be a roundabout way, I presume, by incorporating some other company and changing it that way.

Q. (By Mr. FARQUHAR.) Is this regulation of stock under Minnesota charters?—A. It applies only to railroads incorporated in the State of Minnesota, and it does not apply to the Great Northern Company, which has been a chartered road from 1856, and it does not apply to the Northern Pacific; it only applies to a few of the roads that are incorporated under the general incorporation law.

Q. (By Mr. LITCHMAN.) Would your laws permit the operation in your State of a road chartered under the laws of another State?—A. Yes.

Q. If its location was entirely in your State?—A. I do not know about that. I am not a lawyer.

Q. (By Mr. PHILLIPS.) In what manner are the railroads taxed in your State? Has your commission anything to say in this regard?—A. In our State the rail-

roads pay a percentage upon the gross earnings in lieu of all other taxes. A new road pays 1 per cent on its gross earnings for the first 3 years; for the next 7 years it pays 2 per cent; after 10 years it pays 3 per cent on its gross earnings. The gross earnings, for purposes of taxation, are, in the first place, all earnings on local business, business within the State, and, secondly, a mileage proportion of earnings on interstate business. We have found no better way of ascertaining our proportion of interstate earnings than to divide it by the road mileage. It is probably not absolutely correct.

Q. Is there any special complaint from the railroads in regard to this taxation?—A. No.

Q. It is satisfactory?—A. It is satisfactory and promptly paid, costing the State very little. Our commission gets up the blanks upon which the companies make their returns. These are sent to the commission, and by the commission they are checked up and approved and sent to the State auditor and treasurer for collection.

Q. (By Mr. LITCHMAN.) Are you in a position to give us a tabulated statement of the amount realized from that tax covering a period of, say, 10 years?—A. I am not in a position now; I can get it.

Q. When your testimony is submitted to you for revision, will you supply such tabulation?—A. I will.

STATE OF MINNESOTA,
OFFICE OF THE RAILROAD AND WAREHOUSE COMMISSION,
St. Paul, May 4, 1901.

Statement showing amount of taxes paid by the railroads in Minnesota for 10 years, and miles of main line of railroad in Minnesota each year.

Year.	Taxes paid	Miles of main line.
1890.....	\$743,075.87	5,409
1891.....	882,472.96	5,527
1892.....	1,036,262.01	5,615
1893.....	923,864.43	5,863
1894.....	850,109.48	5,912
1895.....	1,009,224.40	5,990
1896.....	1,037,194.40	5,991
1897.....	1,127,950.24	6,086
1898.....	1,261,352.47	6,062
1899.....	1,444,503.82	6,388

A. K. TEISBERG, *Secretary.*

Q. (By Mr. FARQUHAR.) The commission would like to have a set of blanks.—A. Yes.

I will say that in 1896 the taxes in the State amounted to \$1,037,000; in 1895, to \$1,009,000; in 1899 they amounted to \$1,444,000—about; constantly increasing.

Q. (By Mr. LITCHMAN.) That tax is collected directly by the State?—A. Yes.

Q. Is there in addition any local taxation?—A. No local taxation. This percentage is in lieu of all other taxes.

Q. In your experience as a member of your commission have you found that, within reasonable bounds, the rate fixed is not of so much importance as that the rate shall be uniform to all patrons of the road?—A. Yes; that is the main point, in our opinion. I think perhaps in the State we are not very much troubled by secret rebates or discriminations of that kind. I think there is no special reason why one road or another road in our State should give any of its shippers any rebates for State business.

Q. Could not the same result be reached by special privileges?—A. Certainly it could; but I mean I can not see why under the circumstances a railroad should be tempted to do it; it gets the business anyway. On business between Chicago and the twin cities there is a great deal of competition, and I imagine that rebates and various other schemes are very often resorted to.

Q. It was testified here yesterday or the day before that sometimes the regulation of the road requires cars to be released in 15 days, but that sometimes the dates get confused and the 15 days lengthened out considerably with some shippers.—A. Yes. Speaking of the release of cars reminds me that, when we have a large crop of wheat, in the fall of the year my principal work is to run down to the railroad, or call them up by phone, and say: Can you furnish Mr. So and So cars at such and such a station? The grain is marketed, unfortunately, I think, in

the course of about 3 months, and when the crop is large, of course, it overtaxes the capacity of the railroads, and not only that, but it frequently overtaxes the capacity of the terminal elevators to receive and unload it promptly.

Q. (By Mr. PHILLIPS.) Have you any other mode of taxation except the one you allude to?—A. No. The gross-earnings tax is in lieu of all other taxes. They pay no local taxes and no assessments. Our legislature of late years, that is, in the last two sessions, has touched upon the propriety of raising the tax. I think there will be a proposition this session to raise the tax to 4 or 4½ per cent; the railroads will, of course, fight it.

Q. (By Mr. CONGER.) The highest rate is now 3 per cent?—A. Yes.

Q. Does your State make any difference between roads as to their earning capacity per mile?—A. The 3 per cent is regardless of the earnings per mile.

Q. The same on a poor road as on a better or more productive one?—A. I say 3 per cent on all roads; but I must correct that statement. The Chicago Great Western unearthed an old, forgotten charter—from 1854, I think. This charter provides for a gross earnings tax of only 2 per cent, and the State is bound by it.

Q. (By Mr. A. L. HARRIS.) Do the entire receipts from the roads on taxes you describe go into the general-revenue fund of the State?—A. Yes.

Q. And no part of it is distributed to the counties?—A. No; there has been some agitation in the legislature to do that, but so far it has not passed.

Q. (By Mr. PHILLIPS.) What effect had the voluntary reduction of the freight rate by Mr. Hill some years ago on the price of farm products, or does the reduction increase or decrease that price?—A. As long as that reduction in rate on wheat from the point of production to the market was confined to a certain small area, the amount of that reduction went to the producer; but last spring the commission succeeded, after considerable negotiation with the railroad companies doing business in the southwestern part of Minnesota, in having them adopt the same rates for the same distance as the Great Northern road had adopted in 1897 in the northern part of the State; and that again reduced, I presume, the rates from South Dakota correspondingly to Chicago—and from Iowa. So that now, I presume, the reduction in the grain rate no longer helps the producer, but rather the consumer. As long as you can confine a reduction on a commodity like grain to a certain small locality, then the producer gets the whole benefit of it; but the moment it spreads throughout the whole country the consumer gets the benefit.

Q. Now, what is your power as a commission over the regulation of elevators?—

A. The legislature in 1885 passed an act covering the terminal points of St. Paul, Minneapolis, and Duluth. This act was based largely upon the Illinois law with reference to public elevators at Chicago. I think we improved on that act by adding to it the weighing department, so that the State, through its employees, now not only inspects and puts a grade on the grain marketed at these terminal points, but it also weighs it out of the car into the elevator, or out of the elevator into the car or into the vessel. This law was intended to cover all elevators located at these terminal points, but it was soon found that at Minneapolis, more particularly, it was not as profitable to do business as a public licensed elevator. They were required to take out a license from the commission and furnish a bond; so they have evaded the law by not (as they claim) mixing the grain of different owners. In a public house of course the grain of different owners of the same grade may be mixed; in the private elevators at these terminal points that can not be done. So they themselves buy the grain of certain parties on the outside, or grain dealers have certain bins in certain elevators, and the grain is put into the private elevators. There is no prohibition of mixing in public elevators, but the grain of different grades must not be mixed. In Minneapolis there are something like 30 elevators, and out of this number there are only 6 licensed public elevators. At Duluth and Superior all of the large elevators are public licensed elevators, doing business under the laws of Minnesota. The grain comes into Duluth and is graded and put into bins with reference to its grade. The grain comes into Minneapolis and is also inspected and graded, and the commission merchants and grain dealers take their samples and bring it on 'change; the greater bulk of it is sold from sample. I believe the operation of the system in Minneapolis, the sample market, is in the interest rather of the producer. It is not altogether to the interest of the elevator man. He has, of course, some advantage in mixing, but I think it also gives an advantage to the farmer who has off-grade grain that could not go into a public elevator—gives him a chance to dispose of it. A farmer who perhaps raises gilt-edged grain gets a premium above the regular grade price for his best wheat, where if he sent it to Duluth he would simply get the grade price and no more. But when it comes to shipping out, Duluth grades are held in the world's markets much higher than the Minneapolis grades. In fact, I do not believe the Eastern buyers as a rule

will take Minneapolis grade, for the reason that they are mixed to the lowest possible point.

Q. (By Mr. LITCHMAN.) Is it pertinent here to ask who grades the grain in the public elevators?—A. The inspectors are appointed by the railroad and warehouse commission. The State railroad and warehouse commission in the first place appoints a chief grain inspector who has charge of all the inspection. He appoints a chief deputy at each of these terminal points and as many deputy inspectors as necessities require. This system, as I stated, was inaugurated in 1885. The commission, in 1889 appointed Mr. A. C. Clausen as chief grain inspector, and he had charge of that department as chief grain inspector until by an unfortunate turn in the political wheel the opposition party got into power and turned him out in 1899. During Mr. Clausen's administration, the department had practically been run on civil-service rules. When a new man was appointed in the inspection department he started in as a helper; he carried the brass rod and took the samples from the various parts of the car and brought them to the inspector, and kept at that for years, perhaps, until he had shown his ability to assume a higher position, when he was made subdeputy inspector; from that again he rose to the position of deputy inspector. During Mr. Clausen's administration—who was an expert grain man before he took charge of this business—the certificates issued by the inspection department on grain going out from Duluth by vessel to Buffalo or New York, were sold upon such certificate, and the grain trade at those points accepted the certificate without bothering about seeing the grain at all. Of course that was disturbed, at least for a time, by the change of administration in putting in new and inexperienced men from top to bottom almost. Many of the former inspectors were replaced by new men, some of whom had had experience, but at the same time the trade did not know whether they could rely as much on their judgment as on that of the former inspectors.

Q. Is this form of inspection applied at private as well as public elevators?—A. Yes; we inspect grain out of private as well as public elevators. We do exactly the same business for both, except that for public elevators we register the warehouse receipts.

Q. You grade the grain for the private elevators?—A. Yes. When the grain goes out of the private elevator, the rule is that it must be fully up to the average sample of the grain out of a public elevator. You see, in a public elevator at Duluth or Superior the best quality of the grade and the lowest quality of the grade goes into the same bin, which makes a good average, putting the best and the poorest and the middle in together; while at Minneapolis the best is probably bought by the local millers to mix with inferior. The same is true about the private elevator. Once in a while he will have to buy a good grade to build up his poor wheat so as to pass the grade. At the same time, No. 1 northern, of Minneapolis, is not considered as good as No. 1 northern from Duluth. Our registry system is very similar to that of Chicago, except we have always been very careful not to permit any outshipments of grain from the public elevator without the cancellation of the receipt.

Q. (By Mr. A. L. HARRIS.) In case the owner of the wheat is dissatisfied in regard to the grain, is there any recourse?—A. Yes.

Q. Please describe how that is taken.—A. In the first place, the inspector grades the wheat, and the sample is generally kept for the office. Then the commission man's representative will follow him right up and look at the car and take a sample; and if, in his judgment, the grain has not been graded high enough, he takes an appeal to the chief deputy inspector. He also brings a sample of the wheat, and the chief deputy inspector passes on the samples taken by both parties in interest and either sustains or changes the grade. If either party is dissatisfied with the determination of the chief deputy inspector, there is an appeal to the board of appeals. That body was created 2 years ago. It consists of 8 men, practical grain men, at Minneapolis, and 3 others at Duluth; and they have the final determination of the grade on any particular carload or quantity of grain brought before them. There is no appeal from the decision of the board of appeals. Prior to the establishment of the board of appeals the final appeal was to the railroad and warehouse commission. The railroad and warehouse commission was not, as a rule, composed of grain men or grain inspectors, and so we had to rely entirely on the judgment of the chief grain inspector or the local chief deputy, or such other grain men as we might get hold of at the time. I think the establishment of the board of appeals is in line with the action of the Illinois law. They also have a board of appeals there, I believe.

Q. Is the manager of a public warehouse allowed to buy grain?—A. Yes; there is no prohibition on that.

Q. As well as the private elevator?—A. Yes; there are no restrictions as to that.

Q. Has there been any complaint that he had an advantage over the outside buyer on account of his ability to know the quality of the grain that he has under his charge?—A. No; I do not think so. I have heard no complaints in that regard whatever.

Q. (By Mr. LITCHMAN.) This grader is in the employ of the State?—A. Yes; appointed by the railroad and warehouse commission. Now, in order to pay the expense of this service we levy a fee for inspection, which at the present time is 25 cents per carload, and another 25 cents per carload for weighing, and that creates sufficient revenue to pay the employees of the department. For inspecting and weighing out to vessels we charge 50 cents per 1,000 bushels.

Q. (By Mr. A. L. HARRIS.) What switching arrangements have you between the roads? Is that under the control of your commission?—A. Yes.

Q. Do you regulate the fee for switching?—A. The commission has never attempted to regulate it since 1888. The rate is not unreasonable and varies, of course, with the distance, from \$1.50 or \$2 a car perhaps up to \$5 for long distances. If a carload of grain is unloaded into an elevator upon the tracks of the company bringing it in, there is no charge for switching; but if it is hauled to a mill or an elevator on another road, there is a switching charge, which, of course, the shipper has to pay.

Q. Have you any control over the amounts fixed by the roads for demurrage?—A. Yes; we are supposed to have, but we have never exercised it, except by having conferences and discussing the matter with them and reducing it to a reasonable figure—I think \$2 after the first 24 hours. Of course, as a matter of fact, demurrage is not ordinarily charged except during the busy grain season when all the cars of the company are in service and demanded, and I think that perhaps the demurrage charge is too low.

Q. (By Mr. LITCHMAN.) It is \$2 per car?—A. Yes.

Q. Can you explain a little more fully the mixing of grain at terminal points to raise the grade? It is sometimes done, is it not?—A. Yes; I think it is. In the first place, this can only be done legally when the grain belongs to one owner. You can not mix grain of different grades belonging to different owners. They will buy a No. 2 wheat—a good No. 2—and then they will buy a good No. 1, or perhaps two cars of good No. 1 to one car of fair No. 2, and mix them together and possibly succeed in making the mixture No. 1. However, a great deal of this mixing is done for and on behalf of and under the instructions of millers for local consumption. The millers require, in order to show the best results, a certain proper mixture, which is a secret with them perhaps, and they instruct their men what to mix and how to mix it; and some of these private elevators are engaged entirely in mixing grain for the local millers. We frequently have trouble, of course, when grain goes from Minneapolis out of these mixing houses to Duluth, which happens very often in the spring of the year. At Duluth, as I stated before, under that system the average is perhaps a little higher on the same grade than the Minneapolis mixture makes it. So that when a carload of grain which in Minneapolis has been graded out as No. 1 gets to Duluth, it is very often called No. 2, or refused by the public elevator.

Q. In this mixing of grain is there any injustice done to the farmer?—A. I think not. I can not see where it is. As I stated before, the farmer who raises gilt-edged wheat will get a premium for his wheat, while the farmer who raises wet wheat or smutty wheat or wheat that is not warehousable can dispose of it at the sample market and get what it is worth. Furthermore, if in the judgment of the buyer the inspection department should make a mistake, the buyer can pay the price of No. 1, even if it is graded No. 2.

Q. Your special inspectors are not in any way under the employ or patronage of the elevator people?—A. No; they are strictly prohibited from receiving any compensation or anything in the shape of benefit.

Q. (By Mr. PHILLIPS.) There is a penalty?—A. Yes. They are under bond of \$5,000.

Q. (By Mr. LITCHMAN.) There is no condition of affairs under which the judgment of the elevator man in any way comes in to fix the grading?—A. No. There is a penalty provided for anyone who is convicted of attempting to influence the inspector, and I do not know of any case where it has been attempted.

Q. What is the salary of your inspector?—A. The salary of the chief grain inspector is \$3,000 per year, and the deputy inspector's salary is \$115 per month.

Q. Every month in the year?—A. Every month in the year. We can not get suitable men for the busy season and drop them in the dull season. We keep them the whole year.

Q. (By Mr. PHILLIPS.) How many are employed in the State?—A. We have one chief and three chief deputies. I have not the figures here. We have in the grain inspection and weighing department an average of 150 to 160 men.

Q. (By Mr. LITCHMAN.) What is the lowest paid employee?—A. The lowest paid salary is that of helper—\$62.50.

Q. That is also for 12 months?—A. That not being skilled labor, we frequently have to put on some extra men in the busy season and drop them off at the end of it, but a certain number are employed the whole year.

Q. Is there such a thing in that locality as an elevator combine?—A. You mean for fixing the price?

Q. Yes.—A. Well, I do not know.

Q. It probably does not come within your official knowledge, but speaking generally as to your information and belief.—A. I do not know. Probably the same influences are at work there as at Chicago and other grain markets.

Q. Have you any knowledge as to a consultation to fix the price of grain?—A. No; I have not.

Q. (By Mr. PHILLIPS.) If any outside buyer should go there and pay a better price at one elevator than was the usual custom along the line of that road, would he have the same facilities for shipping his grain?—A. Yes. I was going to say something on the country part of the question. I was going to make this general statement: That prior to the establishment of the Railroad and Warehouse Commission, in 1885 or 1887, the country elevator business was done almost exclusively by what we call line elevators; that is, a company having an office at Minneapolis or Duluth and a line of elevators on one or two roads out in the country. The farmer could not get a car to ship his own grain to the terminals. The railway companies threw all the obstacles possible in the way. In fact, it hardly ever happened that an independent buyer or a farmer could ship his own grain. But laws have been enacted in our State which have declared it a discrimination where the railroad company has room and refuses room to any party to build an independent elevator at its station.

Q. When were these laws passed?—A. That law was passed in 1887. In the first place, we passed a law in 1885 which declared that every applicant should have a site on the right of way on the payment of an annual rental of \$1. That was set aside by our supreme court on the ground that it did not provide for due compensation. So in 1887 the general railroad law gave the commission authority to proceed in the matter; and in 1893 the more specific act was passed which provides for condemning sites for elevators on the railroad right of way—proceeding in the same manner to condemn the sites as the railroad does to condemn for its right of way. That law has been declared constitutional by our State supreme court, and has not been appealed from.

Q. (By Mr. A. L. HARRIS.) It gave the elevators the right of eminent domain to that extent?—A. Yes. In the second place, the legislature of 1893 passed a law requiring railroads to build spur tracks or side tracks to elevators of a certain capacity, or mills located adjacent to the right of way if the railroad company did not have the room or had refused applicant room for an elevator at its way station. He could then build his elevator adjacent to the right of way and demand of the railroad company the construction of a spur track to it. If they could not agree upon the terms, then they are at liberty to appeal to the commission to fix the terms.

As a general thing, agreements have been reached when the applicant has shown his determination to get an elevator at a certain station. They generally find room on the side track for him. Quite recently, however, the commission had to pass upon the cost of a spur of track to a mill. When the commission fixed the amount that the applicant should pay for grading and constructing the road, the railroad company acquiesced in the decision. The former policy of the railroads of permitting only line elevators upon their road has been wholly reversed. There is hardly a station in Minnesota now but what has a farmers' cooperative elevator or some independent elevator of that character. Our law prohibits the pooling of the business of country elevators. Of course, as a matter of fact, I presume they generally pay the same prices, and the best man gets the grain. They can only compete as to grades, the prices being the same. One can grade a little more liberally than another, but the amount of business done at the local station where there is such competition depends very largely upon the man in charge of the elevator, how he stands in the community, and how his reputation is for honesty and fair dealing.

Q. (By Mr. LITCHMAN.) It depends considerably also upon the quality of grain he has to sell?—A. Yes.

Q. If he has a high grade of grain, he in his turn is independent? Is that a fact?—A. Yes. Then, again, the producer has this right, which has also been the

case quite extensively: He can demand a car on the side track of the loading track from the railroad company and have 24 hours in which to load it, without demurrage, and that makes the producer independent of the local elevator combine, if there is such a thing. If he feels that he can not get fair treatment from the local elevator, he can ship his grain and save handling charges. Handling charges at a country elevator are usually about two cents a bushel.

Q. (By Mr. PHILLIPS.) Would they charge such a shipper more than the others for a single car in shipping it?—A. The elevators?

Q. No; I mean the farmer. If he would load a single car in this 24 hours would he get the same freight rate to Chicago?—A. I presume he could to Chicago. I do not know. But all our grain goes either to St. Paul, Minneapolis, or Duluth.

Q. Would he get the same freight rates there?—A. The same freight rates there, of course. The law provides that one carload shall be shipped at the same rate as any number of carloads.

Q. (By Mr. LITCHMAN.) It is claimed before the commission that, while that theoretically is true, in practical operation the car is not available at the time it is needed.—A. Well, that may be true at certain times, but it is believed that it is not the fault of the railroad company. There are, as I stated before, certain times of the year when it is absolutely impossible for the railroad company to supply the demands. I have seen thousands of bushels of wheat dumped along the side track and at the station by the Red River Valley. That is the breadbasket of the world.

Q. (By Mr. PHILLIPS.) Dumped upon the ground?—A. Yes. The farmers out there have no granaries. They thrash from the shock—steam thrashers—and the teams haul no grain to the station. Now, this year it happened to be an extraordinary large yield. The elevators were all full; the terminals were all almost blocked, so the railroad company was helpless; they did all they could. My best information and belief is that the railroad companies, at least the majority of them, favor the independent shipper that way. They do not like to favor a curbstone dealer, a man who has no business whatever, who just stands on the street and gobbles up the farmer's wheat; but if the producer himself desires to ship his grain I believe the railroad company would stretch a point and give him the car in preference to some elevator man.

Q. (By Mr. LITCHMAN.) Now, about this card price sent out every day to the farmer. It is alleged that this is made up by the combination at Minneapolis. Have you any knowledge in relation to that?—A. As I understand it, at the close of the day—the of the business day—the quotations of the last sales are noted down, and the line elevators send that information out to their agents. If an independent elevator wants that quotation he will have to make his arrangements with the commission man in Minneapolis, St. Paul, or Duluth, and get the same either by wire or mail. I do not think there is any combination other than this: That they are probably backed by some concern, or something of that kind.

Q. Then does not that practically announce the fact that the price to the farmer is fixed at that daily session?—A. Yes.

Q. And the farmer practically is compelled to accept that?—A. Yes. The farmer the next day will probably get the price of the day before.

Q. Then it practically amounts to fixing for the farmer the price at which he must sell his grain?—A. You may call it that. At the same time, no grain buyer, I presume, could afford to pay any higher price than the market warranted.

Q. Well, if by manipulation of the market the price was beared down, it would be to the detriment of the farmer, would it not?—A. Probably.

Q. You have virtually answered the question whether the individual shipper of the grain gets this card price. He can only get it through the commission merchant at Minneapolis, I understood you to say.—A. Yes; I think that is the custom.

Q. Unless it is given to him by the local agent?—A. Yes; the local station agent may give it to him. In that case I presume he would have to make his arrangements with the Western Union.

Q. What percentage of the farmers are forced to sell grain within three or four months of thrashing? I mean forced in the sense that their pecuniary necessity may compel them to sell it.—A. Well, I hardly have information upon which to base an answer to that. The percentage is very much less now than it was some years ago.

Q. Have you any knowledge of any combination between the railroads and elevator companies?—A. No; I have not.

Q. Have you any knowledge of community of interest between them?—A. I have no definite knowledge. I have my suspicions once in a while.

Q. You have knowledge whether the same men are stockholders in both?—A. No; not to any great extent. My knowledge is rather limited.

Q. The community of interest could be brought about in that way?—A. Certainly.

Q. Your judgment is that the farmers' elevators receive the same courtesies from railroad companies as line elevators?—A. As far as my information goes; yes. They pay the same rates and receive the same treatment.

Q. Do you know of any rebates being given to elevator companies by railroad managements?—A. I do not.

Q. It has been alleged that such is the case.—A. I do not know of any case within my official career in the office—15 years. Of course I hear rumors once in a while, but I have never been able to verify them.

Q. Have you any information to express as to the effect of grain gambling upon the price paid to farmers?—A. No, I have not. It is a subject beyond my reach.

Q. (By Mr. PHILLIPS.) What had the Leiter deal in wheat to do—that is, how did it affect the people there, if in any way, and how was it viewed by the farmers, favorably or unfavorably?—A. It was viewed very favorably by the farmer who happened to have any grain to sell at that time. I know of one party who had three years' crops in his granary that sold for \$1.45 per bushel at the local station. Grain at that time should not have been worth over 85 cents.

Q. How would they have viewed it if there had been a bear movement instead of a bull movement?—A. Well, this farmer whom I referred to, who saved three years' crops, saved it on account of the low prices prevailing before; he could afford to do it, and it was a good speculation. Ordinarily I do not think it is a good speculation for a farmer to hold his grain. I have been so informed by farmers who are intelligent and farming on a large scale. They always make a practice of selling it at once.

Q. (By Mr. LITCHMAN.) Even if they buy futures?—A. Sometimes they buy futures.

Q. (By Mr. RIPLEY.) Is that practice very good?—A. It is practiced by certain large farmers only. I do not think it is practiced much by small farmers. Most of our farmers are small farmers.

Q. (By Mr. LITCHMAN.) They turn grain into cash and then buy futures?—A. Yes.

Q. Have you any suggestions to make as to national and State legislation, so far as your experience goes?—A. As far as State legislation is concerned, I think we are pretty well fixed in our State. I think we have good laws covering almost every conceivable point, and we have now obtained the decisions in the highest courts on several points sustaining us, clearing the atmosphere. We know where we are at. As far as national legislation is concerned, it seems to me that the Interstate Commerce Commission ought to be empowered to do about the same thing as the Minnesota commission; that is, upon complaint being made, have the right to regulate or reduce rates in certain instances. I do not believe that the Interstate Commerce Commission should be empowered to make all the rates by any means, but I do think that they ought to be empowered to adjust discriminations after proper hearings—discriminations as between localities and perhaps also as between commodities.

Q. Would you supplement that by the right of appeal to a court of appeals?—A. Undoubtedly there should be an appeal from the commission; otherwise I do not think it just and fair.

Q. (By Mr. PHILLIPS.) Would you be in favor of enlarging the powers of the Interstate Commerce Commission?—A. Only to that extent. I think also that there should be a compulsory system of uniform accounting and a Government supervision of railway accounts.

Q. You would be in favor of increasing the power of the Interstate Commerce Commission in regard to leasing railroads and the issuing of new stock, etc.?—A. Well, that of course is somewhat a new question now growing out of consolidations, and I am hardly prepared to express an opinion on it.

I might state, while I think of it, now that our law prohibits pooling—our State law—on the same terms as the interstate-commerce act. Our commission, in 1889, I think it was, unanimously declared itself opposed to any change of that pooling clause. I think, now, if the question were presented to them, in view of the recent practical consolidations, the commission would be in favor of legalized pooling. Personally I know I should be, but if this community of interest, consolidation in that way, goes on, of course there will soon be no necessity for legalized pooling.

Q. Your State has more power in regard to leasing roads, capitalization, or issue of new stock than the Interstate Commerce Commission, has it not?—A. Oh, yes; I do not think the Interstate Commerce Commission has any power as to leasing of roads or as to capital stock.

Q. You are not prepared to state whether you are willing to grant it an increase

of power—the same power your commission has in your State?—A. I think it is not of great importance in our State any longer now. If the matter of rates is to be settled on the cost of reproducing the railroad, the amount of stock and bonds cuts very little figure.

Q. (By Mr. A. L. HARRIS.) You say your law was framed after the old Illinois law. That is an old statute, is it?—A. The grain law, you mean?

Q. Yes.—A. Yes; framed on the Illinois statute.

Q. That is an old statute or new one?—A. An old one; I should presume it was in existence prior to 1885.

Q. Do you know what change has been made in the Illinois statute?—A. I think they have added a weighing department to their grain department. I am not sure; I have not kept track of it.

Q. Has the law been bettered in that respect?—A. Yes; if that has been added, I think it is an improvement to the law.

Q. Does the local shipper find the same opportunities at the terminal elevator that the general elevator buyer does at local points?—A. Yes, on most of the roads. I think the independent elevator man or the producer, the farmer himself, who wants to ship his grain, receives the same accommodation that the elevator man does. Of course a railroad company can do business more rapidly by doing the grain business through a well-kept elevator. If they should do it all by farmers loading cars, it would delay their cars very materially. But the fact that the farmer has the right and the railroad company is compelled to give him a car and does give him a car and furnishes a loading platform where he drives his team up and dumps the wheat right in—the fact that that right exists and is once in a while exercised makes the local elevator man treat the farmer more justly than he otherwise would.

Q. Are terminal elevators owned by private companies or by the railroads?—A. The terminal elevators, I think, are generally owned by the independent elevator companies. At West Superior, Wis., the Great Northern has its own elevator.

Q. But they are all under the same law?—A. All operating under the same terminal law.

Q. And under your control?—A. Yes. Through an arrangement with the Wisconsin authorities we do exactly the same kind of a grain business in Superior as we do in Duluth, and the elevators there are operating under the same regulations.

Q. (By Mr. PHILLIPS.) Have you anything else to present?—A. No.
(Testimony closed.)

WASHINGTON, D. C., February 5, 1901.

TESTIMONY OF PROF. HENRY C. ADAMS,

Statistician Interstate Commerce Commission.

The commission met at 2.06 p. m., Mr. Farquhar presiding. At that time Prof. Henry C. Adams, statistician of the Interstate Commerce Commission, was introduced as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. FARQUHAR.) Please give your name and address.—A. Henry C. Adams, Ann Arbor, Mich.

Q. What is your position with the Interstate Commerce Commission?—A. I am the statistician of the Interstate Commerce Commission.

Mr. FARQUHAR. Mr. Kennedy, of the subcommission on transportation, will lead the examination.

Mr. KENNEDY. I think Professor Adams has in mind the topics that he desires to discuss, and that it would be best if he be permitted to take his own course and select just such subjects as he thinks will be of value to the commission.

Mr. FARQUHAR. Then you can just make your statement in your own way.

The WITNESS. Mr. Chairman, I thought it might be interesting to the members of the commission to hear something about the method that the tax commission of the State of Michigan has adopted for arriving at the valuation of railway properties. This is an important question, especially in view of the theory that our courts have adopted that a reasonable rate must have either some direct or indirect relation to the valuation of such properties. This method that has been adopted in Michigan is a little peculiar. I know of no instance in the history of this matter where exactly this method has been followed. It is attracting

some attention, and I submit it this afternoon with the thought that some such method as this might possibly be desirable as a step toward arriving at the solution of that vexed question of railroad rates. The situation in Michigan in regard to taxation is a little peculiar. We have there what is known as a system of special corporation taxes, by which railroads and other properties of that class mentioned are subjected to a tax on gross earnings, the rate varying with the classification of the corporation. Now, the people of Michigan felt that the rate which these properties paid under the statute was not equal to the rate of taxation under the general property law, and the prime object of this investigation, which a special tax commission undertook, was to answer the question whether or not there was equal taxation between railways on the one hand and general property on the other.

Q. (By Mr. FARQUHAR.) Does this investigation cover interstate roads as well as State roads?—A. All roads lying within Michigan.

The plan adopted by the commission involved, first, an appraisal of the physical properties of the road, and, second, an appraisal of what was termed the value of the nonphysical elements. I shall first try to explain the rule of arriving at the physical valuation, and afterwards the rule of arriving at the nonphysical valuation of these properties.

Without discussing many rules that might perhaps have been adopted, the theory followed by the commission was to appraise first the physical properties of the road, on the theory of the cost of reproduction; to estimate carefully all of the elements that go into a railroad property; to proceed with the matter just as an engineer would proceed if he was to make an estimate for building a road, and how detailed that was I will try to show in a moment. Having gotten the physical value as to the cost of reproduction, it was then said by the commission that that cost should be reduced somewhat on an accepted percentage on account of deterioration. Some of the items, of course, could not deteriorate, and hence the present value of the road would be the same as the cost of reproduction. Other items, such as ties, such as rolling stock, would necessarily deteriorate, and there was a reduction in the valuation. So this report on physical valuation is under two columns. One is the cost of reproduction and the other is the present value, estimated or gotten at from the basis of the cost of reproduction.

Now, the commission adopted the classification of construction expenses prescribed by the Interstate Commerce Commission as the basis of its analysis. There are 31 general items in that classification. Each item or heading of this official classification has been worked out with great detail. The commission adopted this because it was the official classification, and it is the classification that the Interstate Commerce Commission insists upon when the roads report an increase of their road or analyse their current permanent improvements.

As I said, the commission's estimates of these properties, based on the official classification, are set forth in two columns. The first column gives the cost for each item of reproduction, and the second column gives the present value, so that, independent of stores and supplies, it shows the final footings. In the second column is the value of the physical properties as the property stands on the day of appraisal.

Now, the reliability of such an appraisal, of course, depends upon the accuracy of the theory of the cost of reproduction. I think that the theory of reproduction is correct, with one exception. That is possibly the matter of real estate, which I shall refer to in a moment. It relies, in the second place, upon the care with which the work is done, and in the case of Michigan the work was done independently of the roads. The political conditions were such that they permitted the payment of good compensation; and the services of men who themselves had built a considerable amount of road, and who had been engineers upon the road, were secured, and a specialist, you may say, was secured for every particle or portion of this work. Now, in the case of the grading, for example, the profiles of all the roads were secured, and I contend that the major portion of these roads were traveled over by agents of this commission, so that from personal observation they could tell about what the cost of the grading and embanking and all that would be.

In the case of rolling stock also another set of men were put upon the road, and the numbers of freight cars of certain classes were, of course, furnished by the road or by the railroad commissioner, and then a sufficient number of the cars in each class was personally investigated, and so they were able to set down a correct price for cars. So it was in the cost of interlockings, in the cost of ballast, in the cost of warehouses, in the cost of docks—it was a personal investigation by representatives of the tax commissioners. In the case of real estate estimates the commission did not rely entirely upon the appraisal of the local assess-

sors; indeed, they rather relied upon the services of expert real estate agents of the localities, and they went so far in important cases as to trace the deeds of abutting property to find out what the selling price was of abutting properties, of right of way, or of the term. So in that instance, so far as the valuation of the physical properties is concerned, it seems by this method that Michigan has gotten out a fairly correct and adequate valuation.

Q. (By Mr. KENNEDY). Have you had the judgment of any of the railroads as to the accuracy of this work?—A. Yes; we have had the judgment of the railroads as to the accuracy in some instances, but more especially as to the accuracy of the methods. I might say this work was only finished last week, and we have not had, therefore, test of the railroad opinion—the benefit of the railroad expert opinion upon it; but the manager of one of these roads stated that the State was in possession of a better analysis of its property than he possessed himself. At first, as was naturally the case, the railroads were not interested in this investigation; but, recognizing that it was carried on without any political interest, and that it probably would be carried on in an honest, open, and candid and scientific manner, they finally, I think in general, gave their—they at least gave the agents of the commission the privilege of appearing upon their property, and in the case of architects, for example, I remember that one of the important roads loaned the services of its architect on condition that he did not work upon the property of his own road.

There is one point of considerable importance: Is it possible to apply the theory of the cost of reproduction to real estate? I may perhaps interject here that this work was done under the direction of the head of the department of mechanical engineering of the University of Michigan. The other portion of the work was done under my own direction, which I will speak of in a moment. There was one point of difference of opinion between Mr. Cooley, who had charge of this work, and myself, namely, in regard to the propriety of applying the principle of the cost of reproduction to real estate. It seemed to me that in strict theory, at least, it was not proper to apply the principle of the cost of reproduction except to properties that can be reproduced, and reproduced in unlimited quantities, and of uniform cost. The true value of real estate, after all, is the opportunity that it gives for the location of an industry, and it is quite possible and conceivable that that value can not be properly arrived at on the theory of the cost of reproduction. But beyond that I should approve most heartily the work that has been done, and the theory of the cost of reproduction in arriving at the physical valuation.

Now, the above computation extends no further, you notice, than the value of the physical properties. It is well known that a successful corporation has a valuation frequently in excess of its physical properties, and what seemed to the commission, at least, to be the more difficult problem was to arrive at the value of the nonphysical properties of these corporations.

Q. Before you leave this table may I ask why these columns of terminals and electric plants are blank? (Referring to sample estimate.)—A. The terminal is blank because wherever there is a considerable terminal there is an extra sheet. For example, the Port Huron terminal proved to be so significant a feature that it was taken out of the main sheet, and there is a separate statement where it is a matter of importance. In the case of the Michigan Central, for example, the terminal value of about 5 miles in Detroit was between 7 and 8 millions of dollars, and that was one-third of the value of the road itself. That is the explanation of that fact. In the case of the absence of electric light, probably in that road there was no electric-light plant. Many of the roads are rather small.

Now, it was at this point, after the commission had decided to make a valuation of the physical properties, that the problem was submitted to me to give a rule for valuing what is commonly called the franchise of these corporations, and I provided here a copy, so you could follow, if you care to, the rule and the argument for the rule which was submitted and which was in the main approved by the commission.

I will read to you this letter, and make a few comments upon it as to what seems to me of importance [reading:]

METHOD OR RULE FOR COMPUTING FRANCHISE VALUE.

ANN ARBOR, MICH., October 4, 1900.

To the Board of State Tax Commissioners, Lansing, Mich.

GENTLEMEN: In reply to your request for a method of valuing the nonphysical element in railway properties, I submit the following:

First, it is understood that the object of the investigation instituted by the Michigan tax commissioners is to determine whether the properties imposed with specific taxes pay, upon their true value, a rate equal to the rate paid by property taxed under the general tax law. The suggestions here submitted pertain to railways organized as corporations, and whose chief business is that of transportation.

The significance of that last phrase is that in Michigan we have a large number of small railways which run to the mines of ore, and are logging roads, or adjuncts to manufacturing industries, whose value is not so much that they carry freight for the public as that they are an adjunct to manufacturing, mining, and lumbering industries. Now, those roads do not have this rule applied to them. The value of those roads, it is assumed, is reflected in the value of the manufacturing plant [reading:]

Second. It is understood that, as one step in this investigation, the commission has undertaken to appraise the physical property of railways (real estate included)—

The purpose of inserting that phrase is, as I have suggested, the difference of opinions that may arise as to whether the theory of the cost of reproduction can properly be applied to real estate. That was decided in the affirmative by the commission, and that was one of the given elements of the problem submitted to me. [reading:]—

and that the request made of me is to formulate a satisfactory rule for appraising the nonphysical or immaterial element in railway corporations.

Third. It is submitted that this nonphysical or immaterial element is not a simple commercial element, but includes, among other things, the following

1. It includes the franchise (a) to be a corporation, (b) to use public property and employ public authority for corporate ends.

In looking into the court's opinion or definition of franchise, it is made to cover a large number of diverse and sometimes contradictory ideas. One might say that the value of a franchise to be a corporation is what it costs a party for the charter, which perhaps in Illinois is \$3.50, but that, of course, is not what the commission is after in seeking for a rule for appraising the feature of intangible property [reading:]

2. It includes the possession of traffic not exposed to competition, as, for example, local traffic.

3. It includes the possession of traffic held by established connections, although exposed to competition, as, for example, through traffic that is secured because the line in question is a link in a through route.

That appears to me to be rather an important consideration. As an illustration, I imagine that some of the value of the Lake Shore Railway is due to the fact that it is a link in the through east and west line by means of which it secures a larger share of transcontinental freights. It carries the tea, for example—or it did until a short time ago—to the exclusion of the other rival roads. Whether it continues to do so I do not know. I imagine again—another illustration—that the Lake Shore and Michigan Southern road will be benefited by this purchase—by this combination, if it goes through, of the Vanderbilt systems with the Central Pacific—because, again, it will have drawn over its line a larger amount of transcontinental traffic than heretofore. So it is with any great system which, by means of its connections, enjoys certain through traffic; and that is one of the elements that goes to make its value, and that can only be included in the intangibles, if included at all [reading:]

4. It includes the benefit of economies made possible by increased density of traffic

It is a fundamental law of transportation that the more dense the traffic, other things being equal, the cheaper can the traffic be carried. The reduction in the cost per ton per mile follows the increase in the volume of traffic carried. Now, merely as an illustration to what an extent density of traffic can go, I have brought in here a map showing the extent to which the mail traffic of the United States has concentrated on a few lines. There are but a few roads indicated on that map [referring to map], yet on those few roads over 50 per cent of the mail matter of the United States is carried. The density of traffic is indicated by the width of the line. The widest line is between Philadelphia and New York.¹

Now, I imagine that there is no such corresponding density either in passenger or in freight traffic as in mail traffic, but the map is submitted merely to show what is meant by density of traffic, and to lead to the conclusion that the road with the most dense traffic is, other things being equal, the most valuable road, and that the advantage of this density of traffic, which decreases the operating expenses as compared with the gross income, must be classed among the intangibles of the corporation, and if valued at all must be valued under the head of intangible properties [reading:]

5. It includes a value on account of the organization and vitality of the industries served by the corporation, as well as of the organization and vitality of the industry which renders the service. This value, consequently, is, in part, of the nature of an unearned increment to the corporation.

¹The map referred to by the witness is in the book entitled "Railway Mail Pay.—Testimony taken by the Interstate Commerce Commission to investigate the postal service." Part II, p. 231.

Fourth. As corroborating the existence of this element of value in all successful corporate enterprises, reference may be made to the following facts.

1. Corporations almost universally are bonded for an amount in excess of the value of physical properties less the proceeds of the stock issued. If traffic or good will or franchises or organizations can be made security for the borrowing of money, is it not evident that they possess an established commercial value?

2. It is not uncommon for courts, in placing railway properties in the hands of receivers, to defend their action by the assertion that the step is necessary in order to prevent the disintegration of the property. Is it not a legitimate conclusion from this fact that the courts recognize organization as an element of value?

It was the case with the Northern Pacific, if I remember properly, in the petition for the receivership, which was to the effect that if the receivership was not granted the road would be disintegrated—that is, fall apart in its various sections, and could not be operated as a system easily—and the court recognized that argument, and the large number of receiverships in 1894 and 1895 made use of that phrase in their receivership petitions [reading]:

3. The universal recognition of the necessity of supplementing the general property tax by some special method of taxation in the case of railways is an acknowledgment of the fact that the general property tax by ordinary methods of assessment does not attach itself to the full value of corporate property. The general property tax worked well when the major portion of property was material and visible; it failed to work well when, through the development of corporate enterprises and credit relations, immaterial values came to be relatively significant.

I have a compilation of the laws of the States on the matter of taxation, and it is true in one way or another that all the States make, or most of the States make, an exception from the rule of the general property tax in the matter of railway properties, thus acknowledging that they must be approached by some different method [reading]:

Fifth. Inasmuch as nothing tangible or visible gives support to the value under consideration, it must be determined on the basis of information secured from the current accounts of the corporations. There are two accounts which may be used for this purpose, namely, the general balance sheet and the income account. In the balance sheet will be found a statement of assets and liabilities, giving cost of road and equipment on one side and the put value of stocks and bonds on the other. For reasons that need not here be stated, these items are not satisfactory for the purpose which this commission has in view. It may be assumed that the appraised value of the physical property of railways (including franchise element in the right of way) will not coincide with the balance-sheet statement of cost of road and equipment.

Now, there is no doubt but what the statement is correct. In the case of the Ann Arbor road, for example, the balance-sheet statement of the cost of the road and equipment is, if I remember rightly, \$14,500,000 of tangible, and the intangible value of the road will fall under \$7,000,000—not much over \$6,000,000. Now, on the other hand, if you should take the Lake Shore road as a general system—I am giving this merely on a guess, for we could not, of course, appraise that portion of the Lake Shore that lies outside of Michigan—take the Lake Shore road, and its intangible and tangible values arrived at by methods we have gotten out, would, I think, exceed its stocks and bonds. They have about \$95,000,000 of stocks and bonds. I think their aggregate valuation would go much higher. Of course that brings up the point that the value of roads may be appraised by the market rate on its stocks and bonds. Now, we endeavor to get at that in Michigan, to find out what the market rate of stocks and bonds was. I have here a statement, as closely as we could get at it, of the valuation of Michigan properties on that theory. Of all the railroads in Michigan there were only 4 of which there was a sufficient number of quotations of stocks and bonds so we could arrive at anything like a reasonable valuation. And another reason against that method of valuation for State purposes is that, even though you get that valuation, it is the valuation of the system; then there still remains the further question how to assign the value of the system to the State. For these three reasons that was abandoned and another method adopted [reading]:

The practice adopted by many States of appraising railway property on the basis of the market value of stocks and bonds has something to be said in its favor, but it is not satisfactory. This point, however, need not be argued at the present time, because this commission, by instituting an appraisal of the physical assets of the corporations, has committed itself to a rule inconsistent with the valuation of corporate liabilities.

In discarding the balance sheet as the basis of valuation, the commission is forced to accept for this purpose the income account, a conclusion which finds support in the established rules of corporation finance. The task of appraising railway properties, undertaken by this commission, is akin to, if not identical with, the revaluation of railway securities, should this become necessary for reorganization or for transfer. As stated by Mr. Greve, an authority upon this subject, the holder of railway properties "must accept as a basis for revaluation of his securities the earning power of the company as a carrier of traffic." This "earning power" is undoubtedly the basis of all valuation of corporate properties, and it is the income account from which this earning power can be determined.

Another reason for accepting the income account railways as a basis for the appraisal of immaterial values is that the rules of bookkeeping, so far as this account is concerned, are fairly uniform for all railways, and in the main rigidly followed. This is especially true so far as it is necessary to make use of the income account for the purpose of this commission. The degree of accuracy attained

In this account may be suggested by reference to the official classification of operating expenses adopted and followed by the principal railways of this country, a copy of which is herewith submitted. I also submit in this connection the form of income account prescribed by the Interstate Commerce Commission and followed by the majority of State commissions.

Now, I submit, Mr. Chairman, in this connection a copy of that official classification, the object being merely to substantiate the statement that, so far as the expenditures are concerned, the established rule is a rule that has been carefully worked up, and from my knowledge of the roads I may say that it is fairly well followed by the roads of the country. This particular account has received the approval of the convention of State railroad commissioners, and is made the basis of practically all State reports. It is accepted by the Auditors' Association, and willingly—indeed, of their own volition—has been put into force among the railroads. There doubtless are some inconsistencies in it, as there must be in any such analysis of expenditures, and they are of sufficient importance so that the executive committee of the National Association of Railway Accounting Officers is at present engaged in the revision and betterment of this account. I say this because it is so frequently asserted that railway accounts are of no advantage to any public commission, because they can be modified and cooked. To some extent that doubtless is true; but I think we are at liberty to say that, so far as operating expenses are concerned, the roads are loyal in their use—follow as strictly as possible the rule here laid down. There is some liberty granted in the use of this account which strict application of public supervision over accounts would not allow; but I think we may have some confidence in the operating-expense accounts of the railroads [reading]:

Sixth. The rules submitted for the appraisal of the immaterial values of railway properties, or what I prefer to term the capitalization of corporate organization and business opportunity, is simple, as follows:

1. Begin with gross earnings from operation, deduct therefrom the aggregate of operating expenses,¹ and the remainder may be termed the "income from operation." To this should be added "income of corporate investments," giving a sum which may be termed "total income," and which represents the amount at the disposal of the corporation for the support of its capital and for the determination of its annual surplus.

2. Deduct from the above amount—that is to say, "total income," as an annuity properly chargeable to capital—a certain per cent of the appraised value of the physical properties.

3. From this amount should be deducted rents paid for the lease of property operated and permanent improvements² charged directly to income. The remainder would represent the surplus from the gross earnings from the year's operations, and for the purpose of this investigation may be accepted as an annuity which, capitalized at a certain rate of interest, gives the true value of immaterial properties.

That is the form of computation. The report goes on next to say [reading]:

Seventh. To obviate the criticism that both gross and net earnings vary from year to year, it is suggested that in place of a single year's income account the average income account of a period of 10 years be accepted as the basis of computation. The reason for accepting a period of 10 years is that under existing commercial conditions it is likely that the corporation whose property is appraised would, during that period, pass through years of both prosperity and adversity.

Now, in one case I know of had we accepted the last 6 months' earnings on a certain road in Michigan and computed our intangible value from these earnings, we should have had some millions of intangible property, but if we took the average earnings for a period of years, the intangible property of the road was materially reduced. In two cases in connection with Michigan roads the reverse would have been the case. Now, it seems when we are getting at the real true value of property we ought not to take the accidental earnings of a particular year, but we ought to get the regular, orderly, steady year-by-year earnings. And finally this letter is closed [reading]:

Eighth. It will be observed that the above rule fails to appraise the speculative element in railway property. While this element doubtless affects the price of corporate stocks and corporate bonds, it is not entirely clear that it should influence appraisals for the purpose of taxation. Should, however, the commission desire to compute the present worth of property, as resting upon expectations in the future as well as upon earnings in the past, the pertinency of the above rule would not thereby be impaired. This is true, because the speculative value of properties must, from the nature of the case, be a modification of their value computed upon the basis of their earning capacity.

HENRY C. ADAMS.

¹The Michigan system of railway accounts prescribed by the railroad commissioner includes taxes in "operating expenses," and for the purpose of this analysis such inclusion may be accepted.

²Some improvements are charged to "operating expenses," but for the purpose of this analysis such a rule bears no significance.

I submit a blank sheet which gives details of this method of procedure:

Statement showing computation of the value of the nonphysical elements of the above-named road whose physical elements were, on November 1, 1900, officially appraised at \$——.

[Average annual statement for ——— years ending ———]

Items	Amount for entire system.	Per mile operated.	Amount apportioned to Michigan.
Number of miles operated.....			
Gross income from operation.....			
Operating expenses, exclusive of taxes.....			
Net income from operation.....			
Net income from investments.....			
Total available corporate income.....			
Annuity deducted for capital at 4 per cent of value of physical elements.....			
Remainder available for other purposes.....			
Further deductions			
1. Taxes on physical elements at 1 per cent of value.....			
2. Rentals on property not covered by appraisal.....			
3. Interest on current liabilities.....			
4. Permanent improvements charged to income.....			
Total further deduction.....			
Surplus.....			
Deficit.....			
Capitalization of surplus at 7 per cent, which results in a value of nonphysical elements such that the surplus yields a net income of 6 per cent thereon after payment of tax of 1 per cent thereon			

Remarks, ———.

There are quite a number of rather intricate problems possibly in connection with the use of this sheet, and I may just refer to one or two of them. In the first place I may review the theory. We begin with gross earnings from operation; subtract from that the operating expenses, exclusive of taxes. That leaves us the next item—net income from operation. We add to that the net income from investments; then we have the amount of money that the corporation has to dispose of. Now, in an ordinary income account, there would next be deducted the fixed charges; that is, interest on bonds, and after that the dividends on stock. But by this method of computation, in the place of interest upon bonds, there is deducted a certain rate per cent upon the appraised value of the physical property, which recognizes that the appraised value of physical property is a fixed capital in the concern, and that fixed capital ought to have a certain amount of income set aside for its support; and then beyond that, after two or three other deductions, if there be a surplus, the surplus is capitalized.

Q. (By Mr. LITCHMAN.) Is it pertinent to ask right here what relation the stock and bonds bear to this classification as stated by you?—A. We disregard the stock and bonds and substitute for stock and bonds in this operation account the appraised value of the physical property. That is what I mean by saying we get rid of the balance-sheet items. Now, a balance-sheet item means nothing.

Q. It could be cooked?—A. Well, yes; that is, it does not stand for anything in particular. They have on one side of the balance sheet the cost of the road and equipment. In the case of Ann Arbor, as I have pointed out, the cost of the road is \$14,500,000; we find upon investigation something over five millions of property, yet, on the other side of the balance sheet there are stock and bonds to the amount of fourteen million and a half. I am glad you asked the question, because that is a significant feature of this method of procedure. It is a means by which we get rid of what may be called the overcapitalization through overissue of stocks and bonds.

Q. You also arrive at the fact whether there has been an overcapitalization or an overissue of bonds?—A. Yes.

Q. That is to say, if the value by your method is less than the par value of stocks and bonds issued, the natural inference is there has been an overissue or

rather, an issue not justified by real value?—A. I think that is a just statement; yes.

Q. (By Mr. CLARKE.) And yet, how can the corporation, in dealing with its stockholders and bondholders, do otherwise than to accept the balance-sheet items as the basis of its computations in all its business arrangements?—A. I should not object to that in the least, but I think that comes entirely outside of the question which we are considering, of arriving at the true value of the property as an industry.

Q. It may be outside of it as far as the question of taxation is concerned, or a possible public regulation of rates; but, so far as concerns any possible winding up of the concern and distribution of its assets among creditors and among stockholders, they would have to proceed upon that basis, would they not, instead of this?—A. Undoubtedly, as representing their relative claims upon whatever value the property had, but if the concern is wound up it does not by any means follow that the value of that concern equals the par value of the stocks and bonds outstanding. The value of that concern would be arrived at in exactly the same way we are arriving at it here, on the basis of its earning capacity, and then in the distribution of that value, of course, it would be necessary to take into consideration the holders of outstanding stocks and bonds. And also it ought to be said, I think, as possibly giving some further light upon that point, that this physical appraisal does not necessarily cover the total value of the property. We allow that physical appraisal a certain rate per cent, so that what you might call the physical property in the concern will be supported out of the income. Then there is or is not excess. It may be there is such an excess, and when capitalized and added to the physical value the sum may exceed the par value of the stocks and bonds. It may be that it will not equal the stocks and bonds. But in any case it seems that the merit of this method of procedure is that it gets rid of making use of balance-sheet items.

Now, any scheme of appraisal must, of course, rest on something not arbitrary. It must be judgment. Another advantage in this method of procedure, as it appears to me, is that it allows of but one question of judgment—that is, the question of judgment centers in the proper rate per cent. The proper rate per cent, what we have stated, is 4 per cent, to which is added 1 per cent for taxation, assuming that the corporation pays the tax. That is the assumption upon which the investigation proceeds.

Q. (By Mr. LITCHMAN.) Taking no account of how the corporation eventually reimburses itself?—A. No; it takes no account of that. Of course, a corporation might perhaps be in no situation to recoup itself by raising its rates. Without trying to arrive at the proper rate per cent, we said that the investment which pays 4 per cent without taxation at the present time will command par. Therefore we took that 4 per cent. The reason why we took 1 per cent as representing the tax was peculiar to the conditions in Michigan. The average rate of taxation in Michigan is about \$14.75. The average appraisal of property is about 65 per cent of its par value. Therefore we reduced this to a par basis of 1 per cent.

It may be asked, Why not capitalize the net income to begin with and not undertake an appraisal of the physical properties? The chief reason for that lies again in the matter of rates per cent. That would have made it impossible to allow for the physical capital at one rate per cent and to capitalize at a higher rate per cent. The rule that we have adopted is to take 4 per cent for an annuity and to take 6 per cent for the capitalization, the reason being that the first income is a sure income. It is without risk, for we have decisions in our courts to the effect that no legislature or commission can reduce a rate to a point which will not pay. In some cases it is said to be the interest on bonds, but the idea is expressed more carefully by the recent Minnesota case—it is a State case, to be sure—a certain rate per cent upon physical valuation of the property. Now, then, you have a judicial bulwark, as it were, against a reduction of the rate of interest below 4 or 5 per cent, below the physical valuation of the property, and the cost of reproducing the property. When, however, a road presents a value in addition to this physical valuation, then that value does not, as it were, give a fixed income, because legislatures are at liberty to depress rates so as to deprive the corporation of a part of that value, for we must remember that railways, as it were, are between the upper and nether millstone. The State taxes them on one side and regulates rates on the other. Now, it seems, so far as this excess value is concerned, that there was some risk attending it, and in common equity it ought to be allowed a higher rate per cent than in the case of an investment that had no risk. So that one of the chief arguments for going through this expensive and difficult process of arriving at physical valuation is that it permits a separation. It permits the use of two rates per cent—a low rate per cent for

the amount assigned to the physical valuation and a higher rate per cent for that assigned to the nonphysical valuation.

Q. (By Mr. KENNEDY.) Is there any allowance for the depreciation of the property?—A. The allowance for the depreciation of the property is made when the cost of reproduction is greater than the present value. In such items as rails, ballast—all those items that do depreciate—the present value is always lower than the cost of reproduction. In engineering it is the same because there is no depreciation in those items. Now, this 4 per cent is the amount taken out of the earnings and set aside to the support of what you may call the necessary physical capital of the road. It takes the place in this income sheet of the interest on bonds in the given income and in part the dividends on stock. I say in part because it may be the money, it depends upon whether the interest on bonds consumes the net income or not. That would vary in different roads.

Q. (By Mr. FARRINGTON.) In case a railroad is found to have no net income at all over its running expenses, what would be the action of the State in collecting this tax?—A. Do you mean where there is no surplus after paying the operating expenses?

Q. What position does it leave the State in as to collecting the tax?—A. That is rather an intricate question in taxation. In a strict application of the theory it would seem to me that the State would not be at liberty to assume that the physical valuation of the property was its true valuation, and we ought to reduce its value below the cost of reproduction. At the same time that is not done in other properties. A man puts up a house in a place where he thinks he is going to rent it, and it turns out that people do not want to rent it. Now, in a sense, perhaps the local appraiser will let up on his taxes, but he does not very much, and he has to pay taxes whether it is a source of income to him or not. Now, for the same reason it would seem to me not to be equitable for any man to pay a tax upon any property that is not a source of income to him while it is not a source of income; and I should say that in the case that you state the appraisal ought to be reduced.

Q. As to that arbitrary annuity of 1 per cent, the roads are entirely different, no 2 alike. So would it be fair to take, for instance, the Ann Arbor or the Grand Haven or the Michigan Southern, and apply the 4 per cent theory arbitrarily to all 3 roads?—A. It is quite true that roads vary in their conditions, they vary in their prospects, and the speculative element undoubtedly makes their bonds fluctuate up and down. We have not thought it wise, however, to make a variation on this annuity, but we do make a variation in the rate of capitalization. Now, there are 3 cases of variation in the rate of capitalization. Let us take, for example, the union depot company of Detroit, the Fort Street Depot Company. That is a terminal corporation; its income is a contractual income; it is just as sure and certain as that the sun rises. Now, in that I apply the capitalization because it is sure. On the other hand there is a road, I think, up in the northern peninsula that is new; it has only been running about a year and a half; it has not come to that point where it is necessary to raise its operating expenses very high for deterioration. In 2 or 3 years you will find its operating expenses go up. Now, in that case I capitalize it at 10 per cent so as to reduce the value. There is another case of a road that has been a very prosperous road in the last 10 years; been running into a lumber camp. But the lumber is all cut off, and the last year you see it is gone. So if you take the past 10 years it is of high value, but its prospects are such that it is not going to be valuable in the future; and therefore I make a variation, but not in the deduction for the annuity.

Q. (By Mr. KENNEDY.) This investigation of yours is not entirely for the purpose of taxation. Is it not true that you design to ascertain whether passenger and freight rates are just?—A. Yes; provided a scheme of this kind could be put through by the Federal Government. I doubt if any State commission could make much use of a scheme of this kind or of any scheme to judge of the reasonableness of rates that they had to deal with; but I am confident that if the Federal Government should put through a scheme of this kind, so that the results would command the confidence of the courts, they would apply the principle of that State case up there in Minnesota—*Steenerson v. The Great Northern*. I think it is—in 1897, where the principle laid down was this: That a rate or scheme of rates which permitted a 5 per cent payment upon the reproductive cost of that road was reasonable. Now, you know in a great many cases the reasonableness of the rate finally comes down to whether or not the corporation can pay the interest on its bonds. The difficulty with that is that the bonds do not represent the real cost of the road or the real value of the road. If you could substitute in all that line of reasoning the true value of the road or its physical valuation, why, then, it seems to me you would have something that courts and commissions

could work upon. In that sense this scheme has a much broader application than the question of State taxation.

Q. But taxation was the only thing that was thought of in Michigan in setting up this commission?—A. Taxation was the only thing that was thought of there.

Q. (By Professor RIPLEY.) Do you recall any other case besides that of Steenson, in Minnesota, in which the reasonableness of rates depended upon the cost of reproduction of the property?—A. There is one Minnesota case in which that opinion was reaffirmed, but outside of that I do not know.

There is another advantage, it would seem to me, in a scheme of this kind—something of this kind being done by the Federal Government. Everyone who knows the difficulties that exist in connection with the State taxation of railroad property must welcome anything that looks toward uniformity. Now, I would take into that general subject the State taxation of interstate properties. The amount that railroads pay in taxation varies all the way from \$30 a mile up to \$900 a mile, and the schemes for getting at the thing are various; no two States have the same method of procedure. If the States are to continue, as probably they will, to tax these interstate properties, there ought to be some uniformity; and I imagine that if the Federal Government should establish and make a statement by proper investigation of the present value of railway property, especially of its physical elements, that the States would accept it and adjust their taxing scheme to it.

Q. (By Mr. LITCHMAN.) How long do you think it would take, approximately, to make such a valuation of so much of the Vanderbilt system as reaches from New York City to St. Louis?—A. It would depend upon whether there were any lawsuits involved. So far as the matter of collecting it is concerned, with properly paid men, I should think you could do that work in 2 months. I would say this was rather an expensive piece of work in Michigan on account of the shortness of the time that was permitted to do it. It had to be done inside of 4 months.

Q. (By Mr. KENNEDY.) It would not be so expensive another time, would it?—A. Oh, with this in existence and the proper officer in the railroad commissioner's office you can keep up depreciations and improvements from year to year.

Q. (By Mr. LITCHMAN.) Having made this examination as to the present value of any line of road or all the lines of the United States, and then supplementing that with the bookkeeping that you suggest in these tables that you have submitted, would it not be possible then to continue the knowledge of the exact physical conditions of such road or roads?—A. It certainly would if Congress will give the officers sufficient power to require the reports.

Q. And require uniformity in them?—A. There is now in the form, the annual form of report that the railways make to the Interstate Commerce Commission, a page calling for all this information. But in the reorganizations that have taken place the corporation that accepts the property does not care anything about the book accounts of the previous corporation, and it does not take them over and report to us. They do not know anything about it. Then again, a lot of building of roads is by contractors. A contractor builds a road and he keeps these accounts—he may or he may not—he may keep them in his vest pocket. When he turns the property over it is turned over to the railroad as so much money paid to the property, so that the road does not get these accounts; and I doubt very much if any of the Michigan roads at least have as perfect an analysis of their property as is now in the possession of the State of Michigan.

Q. The point I wanted to cover was how much value it would be to get an appraisal of the railroad properties of the United States under this system unless it was supplemented by some means of continuing that knowledge up to date?—A. I think that the machinery of the Interstate Commerce Commission is now ample to secure the continuance of that year by year, with one exception. The Interstate Commerce Commission has now no authority over the contractor. If a law were passed by Congress or by the States or in any way so that the people who build the roads under contracts should file reports under this rule, under this classification, then there would be no difficulty in keeping the thing up to date.

Q. (By Mr. CLARKE.) Do you think Congress has any constitutional warrant for making such a general appraisal?—A. Appraisal?

Q. Yes; or for passing a law ordering such an appraisal?—A. It is with great hesitation that I speak on a constitutional question, for I am not a constitutional lawyer. But it would seem to me that inasmuch as Congress has undoubtedly control over the rates charged by interstate roads, and in view of the fact that 99 per cent of the roads in this country are interstate roads, that Congress would also have the authority to authorize any step necessary to the establishment of or arriving at the through rate.

Q. You think that the rate of taxation is an important element in the matter of rates of transportation, so that Congress would therein find its warrant under the power to regulate commerce?—A. I should hardly put it in that way. I should not rest the right of Congress to do this upon the interest it may have indirectly in the question of taxation. I should put it directly upon the principle that Congress has control over the rate in interstate matters, and this is desirable for the purpose of judging what is or is not a reasonable rate.

Q. (By Mr. A. L. HARRIS.) Do you mean by that scheme to get the valuation by the Government and then give it to the States—prorate that valuation; or do you mean for the Government to assess the tax?—A. I had not thought of going so far as to reorganize the taxing system of the United States; no. My thought was this: That if the Federal Government should in an authoritative manner estimate the values of the interstate railway properties, that the States themselves then would accept that valuation as the basis of their own taxation and come to some understanding between themselves as to the apportionment of that value between them. I am ready to admit that that is a very difficult question, the question of properly apportioning the value—especially this intangible value—of a railroad to the various States through which the railroad runs. That is an exceedingly difficult question.

Q. Would it be satisfactory for the States to take it by the mileage within the States, prorate by the mileage within the States?—A. I think not. I should think that would do injustice in many cases. In Michigan, for example, it would permit Wisconsin to get more than she ought to for herself. I had not thought to go into that problem this afternoon, but I can suggest, I think, the difficulties in the pro-rata rule. Suppose there is a State, as Michigan, for example, and there is a road like the Lake Shore road, we will say, from Toledo on to Chicago, that runs along through the northern part of Ohio, through Indiana, and through Illinois, and it has a few branches sticking up into Michigan. Now, the question immediately arises: What is the value of those branches to the Lake Shore system; how much do they contribute to the Lake Shore system? They contribute not simply the earnings from freight on the few lines that are in Michigan, but they contribute a value to the Lake Shore system in view of the fact that all the freight that is collected by those branches in Michigan gets a long haul clear from, let us say, Elkhart on to Buffalo. It is common in railway finance for the main stem to support a branch which in and of itself does not seem to pay expenses, simply because it recoups itself for the loss there by what it earns on the long haul. Now, a per mileage assignment of this value as a basis of taxation does not seem to me to meet the equities of the case, for in that case Ohio would get more of the value for taxation and Michigan less than she ought to get.

Q. You can not find any constitutional provision at all to control it?—A. That undoubtedly is the right of a State; but still the subject being taken up by Congress, here is this information; and then the question of solving this awful, awful question of State taxation comes to be simple, and I think we may rely upon the fact that State legislatures are more or less reasonable and would do that thing.

Q. Is it not a fact that many of the States get much more from interstate railroads in the way of taxation than other States?—A. Yes.

Q. Although the road passes through the different States?—A. That is about the truth.

Q. Of course, I do not want to mention names as far as the States are concerned, but there has been one of the greatest troubles in getting at the true valuation for railroads in the past; and it seems to me a scheme like you have outlined, if it could be taken hold of by the General Government and then could be adjusted between the States, would be a relief not only to the States, but also to the railroads.—A. Undoubtedly; and the only other alternative is for the Federal Government to undertake the taxation of interstate roads. I do not know whether it has the right to attempt that. I do not know but what the States would object to that, because they are getting about \$40,000,000 of income.

Q. This appraisement was actually made, was it, or is it merely a scheme?—A. Oh, no; this is done. The report on the intangible matter has not been completed, but the other is done, and the State legislature will act upon it this session.

Q. Then the other question I was going to ask will not be pertinent, for the reason that I wanted to find out how the valuation under this plan compared with your present plan in reaching the value.—A. We do not value roads at all in Michigan now. The tax is a specific tax upon gross earnings, roads being classified at different rates for the different classes. And the purpose of this investigation was to find out whether, under the special taxing rule, they paid equally with other property. The result of the computation, I might say in general, is that the values do not mount as high as the advocates of the ad valorem scheme of

railway taxation claimed, but it does show that they are paying relatively less than other properties.

Q. (By Mr. CLARKE.) This appraisal, then, will not necessarily lead the legislature to do away with the present system of taxation?—A. No. It was in our constitution that the other system of taxation was required, but at the last election an amendment was offered to the people and voted overwhelmingly that the ad valorem method might be used, and the matter was adjusted at the last session of the legislature.

Q. Now, you have studied this scheme. What is your opinion as to which is the better of the 2 methods of railway taxation?—A. It seems to me that that question can only be answered in view of practical conditions, and in view of practical conditions in Michigan I should say it would be wise for Michigan to undertake the ad valorem scheme of taxation, because the people of this country are not yet ready to establish, as it seems to me they might well establish, a distinct scheme of corporate taxation.

Q. It would be an ad valorem scheme of appraisement rather than of taxation, I suppose, because the local tax rates would be based upon the general appraisal, would they not?—A. Yes. On the matter of tax rates there are quite a number of unsettled problems. Now, when I say that the general rate is about \$14.75 in Michigan—why, in some counties it is much higher and in others it is much lower. But, of course, the question immediately arises whether, in the attainment of equality of taxation between railway corporations and other property, railway corporations should be taxed uniformly at the average rate throughout the State or taxed on their property within districts at the rate existing in the district. That is a question that is not yet settled, so far as I know.

Q. (By Mr. A. L. HARRIS.) Is your present system looked upon as being constitutional beyond a question?—A. Taxation of gross earnings?

Q. The system you have now in Michigan—gross earnings.—A. No case has ever arisen to test it. Perhaps that is the proper way to put it. However, I hesitate to talk law now. I think there was a case there which resulted in showing that this method was legal, for in Michigan we do not tax on the gross earnings of the entire system, but, by the reports to the railroad commissioner, only the earnings within the State of Michigan are taxed, and for them you must first find the earnings on local freight, which is all credited to Michigan, and then, under the rule, a certain portion of interstate earnings would be credited to Michigan; so that it is the gross earnings within the State. And in that way I understand it is constitutional. I hesitate to follow that answer out, because I know nothing about law.

Q. (By Mr. KENNEDY.) When you finished reading your paper you said you had 2 or 3 observations to make.—A. That has all been presented in this discussion. I was going to submit 3 reasons why it seemed to me it might be well for Congress to undertake the valuation of railroad property: First, because it would greatly assist in the development of a uniform system of State taxation of interstate property; second, that it is essential for the intelligent application of the theory of reasonable freight and passenger rates; third, it would enable the roads to supply what now they can not supply from their accounts, and in that way an annual statement of their property under the prescribed classifications. That was what I had reference to.

Q. There are some other topics, I presume, which you have in mind, upon which to give information to the commission—pooling, combinations, and so on?—A. If the commission wishes to hear anything more, I should like to say a word upon the necessity of more perfect control by the Federal Government of the accounts of railways. It is fairly easy to get up general principles, but it is exceedingly difficult to apply those principles. It occurs to me that our Government is all the time suffering from a lack of administrative intelligence rather than from a lack of moral purpose or general principle. Now, a great deal has been done through the agency of the Interstate Commerce Commission to establish uniformity of railway accounts. When I came into the office of statistician there was no uniformity of accounts either among the railroads themselves, or, what was worse, among the State commissioners. We immediately got together the State commissioners, and they agreed to assist us in working out a uniform blank for reports. We got together the auditors or the chief accountants of the railways, and they also saw the desirability of uniform accounting, at least so far as operation was concerned, and they assisted also in working out a uniform system of accounts. That classification of operating expenses that I submitted to you necessitated, for example, that all the Pennsylvania system should modify their books. They got up a new set of books for the classification of operating expenses. So that at present we have a fair degree of uniformity, and that has been kept up

from year to year so that we are moving on little by little in that direction. And it also ought to be said that the twentieth section of the act to regulate commerce gives, so far as language at least can do, to the commission the right to prescribe the accounts. Now, notwithstanding all that and as much as has been done in that direction usually through the assistance of the railroad officials themselves, it is nevertheless true that we have never exercised any coercion upon the roads, at least to any great extent, and that it has been found very difficult to go further in the direction of uniformity of accounting than the operating accounts. It has seemed to quite a number of those with whom I have talked upon this subject that it might be advisable, recognizing the public character of the railway industry, as it is recognized in law and in practice in this country, to establish a bureau of statistics and accounts and establish something of the relation between that bureau and the railways that now exists between the Comptroller of the Currency's office and the banks. Again the question of administration comes in and that is the difficult point; but from the point of view of desirability, general desirability, there can be no question, it seems to me, if the Interstate Commerce Commission and the State commissions are to perform the duties imposed upon them, that they must have access at first hand to the books of the companies; for each of those commissioners is in a sense the director representing the public interest in those corporations, and they ought to have a voice in the administration of those properties in very much the same way. That is one of the suggestions, a mere suggestion—that I thought might be wise to have in the records of this commission, as a matter that was at least worthy of the serious attention of people who are investigating the subject of railway transportation.

I might add that at the St. Louis convention of State railroad commissioners—by rather a close vote, it is true—that the policy was approved, but it was not carried any further. There are a great many points of detail in connection with railway reports and railway accounts that I might refer to, but possibly that would go too far into the details of operating.

Q. (By Mr. FARQUHAR.) Can you state some of the objections of the railroads to the unrestricted inspection of their accounts as interstate commerce roads by the Interstate Commerce Commission officers?—A. I suppose the most common objection would be that they can not trust the public officials when they get hold of them. I suppose that is where the shoe pinches, and that is a pretty serious objection. And I suppose they feel, too, naturally, that they know more about their accounts than anybody else and it would be something of an invasion of their rights. They might also feel to some extent that this would lead to the diffusion of secrets of administration. I know that that was true in the case of the lake carriers when, in connection with the last census, an investigation of the lake traffic was undertaken, and on some of the boats they had accounts of expenses and experiments that they were making that they did not wish to make public, and we could easily understand why that was true. And then, too, it is also said by the railroad men that the same rule of accounting does not apply to all conditions. But in answer to that we must recognize that much of the difficulty in understanding public accounts arises from the great diversity in railway contracts, and the great advantage of uniformity of accounts is that after a person has gone to the trouble of studying in detail the accounting of one system, he has the accounts of the entire system in the United States at his disposal and he can understand them: whereas now, there being no guaranty of uniformity, a man can never tell, even though he is acquainted with a system of accounting, by looking at a total what that total means. The chief advantage, as I see it, in a uniform system of accounts, properly supervised, is that every item in the account is defined by statute or defined by an administrative rule of the body or the office, so that when they see a total they know, without going through all the mass of figures, what that total means.

Q. Does not your Interstate Commerce Commission now demand uniformity?—A. We do; we demand uniform reporting; and, of course, the law gives the right for us to ask for special information; but that is quite a different thing from a regular established system of inspectors who shall see that the books of the railways are kept in conformity to the principles laid down.

Q. (By Mr. CLARKE.) Has any bill been introduced in Congress to provide for this uniformity that you recommend?—A. I think not. It is found in the recommendations of the commission in several of their reports, but no bill, so far as I know, has been introduced.

Q. (By Mr. KENNEDY.) I would like to ask you, if you are through with that subject, whether you believe the question of pooling is as live a question to-day as it was a few years ago, and whether it has not become an obsolete question?—A. I hesitate very greatly to answer any question on pooling, for I have not fol-

lowed the arguments right up to date. But if you will allow me to speak generally on that subject, I should say that probably the present tendency toward contractual consolidation is in part due to the inability of the roads to pool. So much would seem to me to be correct. And of course the practical conclusion of that is, if that be true, that Government control over these great consolidations is just as important as increased Government control had Congress seen wise to legalize pools. Therefore, if I was going to suggest what the line of wide legislation might be, I should say that provision ought to be taken for special grades in the case of these great properties.

Q. (By Mr. A. L. HARRIS.) As the statistician of the Interstate Commerce Commission, do you think that it is advisable to have reports from express companies as well as other common carriers?—A. Yes; you will find that as a recommendation in the last seven reports, I think. Most certainly. The express companies ought to be subjected to the same scheme of reporting as the railways, and on that matter also I should say that the private companies that furnish cars to railroads and receive from railways a rental per mile—those companies also ought to be brought under the supervision, at least so far as reports are concerned, of the Interstate Commerce Commission.

Q. (By Mr. FARQUHAR.) To your knowledge are there many of these car trusts now?—A. Do you mean companies owning private cars?

Q. Yes; companies that own the cars.—A. So far as private cars are concerned, there are immense numbers of them; yes. I think the rental that is paid amounts into the millions for those private cars. We have a list of them in the office; it is a long list. And if any property is still, laying aside and not used, it is not usually the property of the private car companies.

Q. Are there any companies now that have built cars and have rented them to the roads, as they did to the Erie road several years ago?—A. You mean what is called the equipment trust obligation?

Q. Yes.—A. There is, but it is gradually disappearing. The better roads are owning their own cars or else they are renting from parties outside who own them, on a mileage basis. These equipment trust obligations—a company took over a car and used it as its property, and then at the end of the year it paid 6 per cent of the value of the car and 2 per cent for an annuity, just like buying a sewing machine on the installment plan.

Q. (By Mr. KENNEDY.) I would like to ask you if you have any views you would care to submit upon the question of the desirability of enlarging the powers of the Interstate Commerce Commission or of vitalizing the powers it was supposed to have had when it was first created?—A. Yes; I have some very strong views upon that matter.

Q. Will you oblige the Commission with them?—A. It seems to me that it is always foolish to create a commission and assign to it a certain task and then not give it the tools with which to perform that task.

Q. (By Mr. CLARKE.) In case the Government should take over the roads some time or other and own them, do you think the basis of appraisal that you have adopted in Michigan would be substantially correct for allowing to the present owners of the road their portions?—A. I am inclined to think that it would, and in answering that statement I am reminded of the condition of the charters for all the French lines and all the Belgian lines and also of the method that the Prussian Government followed at the time that it bought its roads. In the charters granted the great companies in France there is this provision: First, that at the expiration of the charter the road becomes the property of the State by the payment for the rolling stock without payment for the right of way or the connections; second, that if before the expiration of the charter the Government desires to take over the roads it can do so by the payment of an annuity for the unexpired term of the charter equal to the average net earnings of the 7 years preceding the date at which the road is taken. That means, then, that the valuation of the French roads are practically that the purchase or condemnation of them by the Government rests upon the basis of net earnings of the road for the 7 years previous to the time that the operation is carried through.

Prussia purchased her roads at the time of or shortly after the panic of 1873, when stocks were down, and she made a careful estimate of the earning capacity, which was accepted by the Prussian roads. Now, this scheme is entirely in harmony with those principles. It rests upon the fundamental truth that the value of property is, all things considered, what it will bring; that is, what income it will give. I see no other way of getting at it than some such way as this.

Q. (By Mr. KENNEDY.) Do you desire these to be returned to you? Could you furnish one and put it in the testimony at the proper place?—A. Yes; I could do that.

Q. (By Mr. A. L. HARRIS.) In furnishing a sample, give us one of the older roads if you can. The name of the road you gave me was the Boyne City and Southeastern Railroad?—A. That is a State road that does not make report to the Interstate Commerce Commission. That happened to be one of these logging roads.

(Testimony closed.)

WASHINGTON, D. C., February 6, 1901.

TESTIMONY OF MR. JOHN W. BRYANT,

Secretary Steamboat Captains and Owners' Exchange, New Orleans.

The commission met at 11.08 a. m., Mr. A. L. Harris presiding. At that time Mr. John W. Bryant, river reporter of the Daily States, and Secretary of the Steamboat Captains and Owners' Exchange, New Orleans, La., was introduced as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. KENNEDY.) Will you please give your name and address?—A. My name is John W. Bryant, New Orleans, La. I am the river reporter of the New Orleans Daily States and secretary of the Steamboat Captains and Owners' Exchange, New Orleans.

Q. Have you in your mind the order in which you would like to discuss the topics which you are aware the commission would like to get information from you upon?—A. Yes. I would like to make a little introduction first. I have this in mind to say: It has been perhaps boastfully asserted upon more than one occasion that while the traffic by railroad has been rapidly increasing, that by the river is correspondingly decreasing, and it is believed by some that the railroad has already practically displaced the steamboat; but neither of these propositions is correct. It is true that there has been a partial diversion of traffic from localities, while at other places there remains perhaps as much, and maybe more, traffic than ever before, and all this where the railroads parallel and cross the navigable streams. The annual report of the United States supervising inspectors shows that there are more steam vessels on the Mississippi River and tributaries to-day—last year and the year previous—than ever before. It has been pointed out that there is a loss of through traffic from such important points as St. Louis, the Ohio River, Memphis, and Vicksburg to New Orleans. But why? Not altogether because of the railroad or any decided preference for that means of transportation, but by reason of causes we are afraid the remedying of which is far removed. Of course the railroad commands business, and what it legitimately commands has never yet and never will seriously cripple the steamboat, but it is its illegitimate methods that are hurting the steamboat, the only rival they can never hope to control, the only investment that can never be absorbed or managed by trusts or syndicates. In face of a Federal law intended expressly to prohibit it, the railroad fixes and maintains unremunerative rates at river points while exacting maximum rates at intermediate points away from the river. In doing this it actually makes the producer at the interior noncompetitive points pay for losses resulting from its efforts to cripple and drive out its river competitor, an advantage and a policy which can never prevail on the river as long as the individual right exists to build and operate a steamboat.

Q. That is what you mean by illegitimate methods, is it?—A. Yes. The only remedy, however, for this injustice being suffered by a less favored community of interests is in the literal enforcement of the fourth section of the interstate-commerce law. Not fearing this law, because of their having always charged more for the longer than the shorter haul, some of the steamboat men have expressed a willingness to be included in the provisions of that law, provided, of course, it is strictly enforced to all carriers alike. But while this diversion has in part served its unnatural purpose, yet the steamboat survives, and will as long as there is a channel in which to run. Depressed as it now may be, it is a factor to remain always. But the struggle is not so much with the railroad as it is because of the conditions of navigation. There is a good and profitable business carried by the railroad which would go by the river instead were it not for the uncertainties and delays of navigation. The Government has contributed liberally, wisely, and properly for the improvement of navigation. Without it the steamboats might soon vanish from the face of the waters. The appropriations have been honestly and not wastefully spent, but it is a fact that

except in the territory covered by the Mississippi River Commission the results have not been what the steamboat men had hoped for or expected. Look at the Ohio River last year; except where there were lock and dam effects, navigation on that important river was entirely suspended for a season, with not a boat in service on that important waterway. There is the Missouri River. The steamboat men there will tell that they have been driven out of business, not because of the railroad, but by impediments to navigation, unmaintained channels, the snags and bridge piers, and the withdrawal of all insurance risks because of the too frequent losses on hulls and cargo. There is a river from St. Louis to Cairo. Let there be maintained a channel in that 250 miles of distance, of 9 or even 8 feet, and he would be prejudiced indeed who would then say the glory of the river had departed. And there are the tributaries, making up, as they do, the bulk of the traffic that is carried on the greater river. They become so difficult and impossible of navigation at times as to discourage the efforts of the most hopeful and persistent; and it is not alone the shoals and bars which hinder, but the greater perils of the snags, and of the faultily planned and located bridges that are allowed to be placed across these navigable streams, an obstruction the steamboat men think too indulgently and often allowed, in view of the Government's aid in behalf of these very interests they imperil. This uncertainty, delay, and danger of navigation justifies insurance risks all but prohibitive in effect, resulting in actual losses to the steamboats in service and the consequent additional loss of those in enforced idleness. This is the main cause of whatever decline there may be in the tonnage and commerce of the river, the restriction in operation, and discouragement of investment.

Q. Can you say how many bridges there are below St. Louis, for instance?—A. They are being built everywhere, especially across the tributary streams, where they do more harm. In the Ohio River the piers are not only a danger, but one bridge in particular is so low that during this last rise steamboats could not pass under and had to wait until the water fell. I suppose that the losses from the bridges on the Ohio River—and I do not think that the steamboat men would have any difficulty in proving it—have been enough on that river alone to pay for any bridges across it; and this not counting the loss of life, which has been great.

Now, in regard to statistics. It is an impossibility almost to furnish a full exhibit of statistics of the commerce on the Mississippi River, for the simple reason that nothing of the kind is kept. The railroads, of course, know every shipment that goes over their road. They have records sent to headquarters from every section; but the steamboat business is not kept up in that way. They have what are called "trip books," in which is entered the up and down freight of each trip, but further than that no record is kept; so there is no way of getting at the statistics on the Mississippi River except through some one who has the time and the opportunity of going to every boat, wherever she may be, and getting a copy of the shipments from these books. About a year and a half ago I was asked to do this service for the purposes of an article that was to appear in this volume I have before me on the riparian lands on the Mississippi River, that was being gotten up by Mr. Tompkins, and I undertook to do that work, but my time was limited, as were my opportunities, and there were some boats I could not get to; so in making it up I left these boats out and made no computations at all except on the copy I had. Some 12 or 15 years ago, while the river reporter on the New Orleans Times-Democrat, I prepared a statement of the commerce of the river coming into New Orleans for the 2 years just before the beginning of the construction of the Eads jetties and for the 2 years after their completion. I only did it for my own information. I had plenty of time. I was at the work a whole year, copying the manifests of the steamboats, and, in summing conclusions, I found that about one-third of the traffic of the river had been diverted through the development of the railroads. I gave that copy afterwards to the Mississippi River Commission, and it was published in their annual report, and I believe it was the first and, maybe, only time a statement of the kind had been published. In the last census report the commissioner stated that he could not get complete returns of the commerce on the waterways, but he thought that over half of the whole commerce of the United States at that time was carried on vessels. Some few years ago the railroad interests concerned in the building of a bridge across the river just above New Orleans had prepared, for their own use, statistics of the river. Of course, if there was any coloring to it, it was in favor of the railroad; and they put down the diversion of business at 34 per cent. Now, I have in this book some statistics, prepared last year. If the commission thinks it of value, I will copy it off before I leave.

Q. It is just a table, is it?—A. Yes. It is not long. It is a showing of the commerce of the river, the tonnage of the vessels, and their values. I think you

would like to know that. It is short. It is all condensed here. In the first place, it shows that in the system I am speaking of, the Lower Mississippi River, there are 6,228 miles of river, of which 5,695 miles are actually navigable—that is, from St. Louis to the Gulf, taking in the tributaries of the Mississippi River. Now, in the Census Report for this system the total tonnage of the commerce is shown as amounting to 6,401,303 tons. The statistics I have here show 7,693,998 tons, which is an increase over the Census Report of 1890.

Q. For the same period?—A. Well, yes. That was for the year in which the census was taken, and mine is for this last year. They both cover a year's business. I found that 189 steamboats passed over the river in that time, and their net tonnage was 62,314 tons. They made 6,212 trips, the gross tonnage amounting to 1,590,004 tons, and the value of those vessels, which I got from the owners themselves, was \$1,331,000. Of barges—that is, vessels without steam, mostly towed by steamers—there were 1,635, and they made 2,470 trips, and their value is \$2,003,000, showing a total of 1,824 vessels in the year, with a net tonnage of 1,471,128 tons, and a value of \$6,334,000. This exhibit does not include the vessels engaged in harbor work; it does not include ferries across the river, nor any of the railroad transfer boats, and it does not include any of the Government steamers. It only embraces vessels actually engaged in commerce. The total amount in tons carried on the river from Cairo to New Orleans was 4,708,355 tons, the value of which was \$94,605,762. The coastwise and foreign tonnage from New Orleans to the Gulf via the river amounted to 2,985,643 tons, of a total value of \$144,704,136, making a grand total of 7,693,998 tons, and a total value of \$239,309,898. The principal commodities carried on the river were 612,242 bales of cotton, 166,049 tons of cotton seed, 153,664 tons of sugar, and 444,539,180 feet of lumber and logs.

Q. What proportion of the total did these barges carry?—A. Leaving out the cotton, seed, sugar, and logs, I suppose the barges carried about two-thirds of it. Here is one item included in this total—66,615 tons of steel rails, or nearly 3,500 carloads. This was carried on barges, towed all the way from Pittsburg, 2,000 miles, down to New Orleans, and there loaded on railroad cars to be distributed along the Southern Pacific route, an argument in itself showing that transportation under almost any condition is cheaper by water than by rail, because if the railroads could have handled it and earned that freight money they would have done so; but they could not do it so cheaply, so they sent it by the river.

Q. Can you give an idea as to how much cheaper the barges can handle freight than by rail?—A. I can answer that best this way: The rate on bulk grain from St. Louis to New Orleans by rail at this time is 10 cents a hundred. The rate in barges, with all of the difficulties and uncertainties and delays of navigation, is 3½ cents. There is a line of barges that has just been inaugurated at St. Louis which promises a revolution in the towing line. They are whaleback barges, built of steel. They are of lighter draft, and instead of being towed abreast by a large, heavy, expensive towboat, they are to be towed tandem shape by a smaller, lighter, less expensive propeller boat. The manager of this new line asserted publicly that if assured of navigation between St. Louis and Cairo all the year, if there was not less than 8 feet there, bulk grain would be carried to New Orleans for 2 cents a bushel. Now, the bulk-corn export from New Orleans last month was nearly four and a half million bushels. At the present rates, by railroad, the freight on that four and a half million bushels of corn would be \$25,200. At the present rate, by river, it would amount to \$15,750, a saving in favor of the river of \$9,450. But with the reduction to 2 cents, which will come when the navigation is improved, the saving would then be \$16,200, which would make a difference of nearly two-thirds in rates between river and rail.

Q. What are your return cargoes on barges upriver?—A. The return cargo is imports, very largely. The import trade at New Orleans is increasing quite steadily. It also consists of sugar and lumber, but largely sugar. We have 2 large sugar refineries in New Orleans, one of them having a capacity of 8,000 barrels a day. When the river is open to St. Louis sugar is shipped in quantities.

Q. What is the difference between up and down rates?—A. There is very little difference. The competition is so sharp, not only with the railroad, but among the steamboats, that the rates are pretty uniform; they change but very little. The only change that takes place in river rates is mainly on account of the condition of navigation. When the river is low and there is trouble in getting over shoal places and time is lost, they try to get a little more; but when the river is full the rates are low.

Here is a good evidence of that, in a statement made before Congress by Mr. McRae, member from the Camden (Ark.) district, who, in speaking for the

improvement of the Ouchita River, said that when there is navigation the rate on cotton from Camden, 700 miles, to New Orleans, by river, is \$1.25 a bale. When the river is down and boats can not run and it goes by rail, which is 647.5 miles, it is \$3.10 a bale. The rate on flour is 35 cents a barrel by steamboat, 75 cents by railroad; the rate on boots and shoes, all water, from Boston to Camden, is 79 cents a hundred; by railroad, \$2.02 a hundred.

Q. (By Mr. LITCHMAN.) Do they have to break bulk on the railroad?—A. No; these rates are generally given by the carload. That is the general way of giving the rates.

Q. (By Professor RIPLEY.) Is the practice of classification coming into use on the river?—A. It is being generally adopted by steamboats, because they must follow railroad methods. If I remember correctly, at the time this question of the operation of the fourth section of the interstate-commerce law was being considered by the Interstate Commerce Committee, the railroads made the plea then for the nonenforcement of that section on the ground that the steamboats fixed the rates and they were at the mercy of the river. The steamboats know now that the condition under that action has been altogether changed, for it is the railroad which fixes the rate and the steamboats are altogether at the mercy of the railroad. Conditions have changed greatly, and for that reason the steamboats must follow the methods of business of the railroads. They have to take the railroad rates, whatever they are, with the insurance differential. Take cotton, for instance: The insurance differential on cotton is 25 cents a bale. The railroads have fixed the rate from Memphis to New Orleans at 85 cents. That is the present rate, but it has been 50 cents, and as low as 30 cents. Of course, the steamboats could not meet those rates. They can not even touch it now at 85 cents, because, having to allow the insurance of 25 cents a bale, it leaves the rate at 60 cents for a carriage of 800 miles; so they let that cotton alone.

Q. (By Mr. KENNEDY.) That is from what point?—A. Memphis. Natchez is also a railroad point. The rate there fixed by the railroad is 50 cents, so if a steamboat carries at that price and allows 25 cents for insurance, she gets but 25 cents; so she does not take a bale from there, either. Now, the difference between the railroad and steamboat is this: All the way along the river there is no place where cotton is over \$1 a bale, and from that it goes down to 50 cents. It is graded all the way, but the railroad, while taking cotton from Memphis at 85 cents, at points away from Memphis they receive anywhere from \$1.50 up to \$2 a bale. There is a point within 100 miles of New Orleans, off from the river, where they get \$2 a bale for cotton. The steamboat in line with that point on the river carries it for 50 cents.

Q. The railroads, then, are not observing the long and short haul clause of the the Interstate Commerce Commission?—A. No; that section was suspended by the commission. They allowed its suspension at river competitive points.

Q. (By Professor RIPLEY.) In the Louisville and Nashville case originally?—A. Yes. The Louisville and Nashville were the principal parties to it at first, but it has been extended to all railroads alike where they are in competition with the steamboats.

Q. What is proposed in view of the late decision of the United States Supreme Court practically negating the long and short haul clause of the interstate-commerce law?—A. That, inasmuch as the several State railroad and steamboat commissions, notably in Texas, Louisiana, and Mississippi, are endeavoring to establish a proper reasonable tariff at points within the State, why should the interstate carrier be excepted and not held amenable to any law? If the interstate-commerce law was intended to protect and promote commerce, why should a carrier in an effort to force or destroy a rival at a competitive point, be justified under that law in exacting disproportionate unreasonable rates all along the non-competitive points of its line? In other words, if a railroad seeks to destroy or cripple the steamboat, why not at its own cost, instead of at the expense of helpless communities entirely removed from such competition?

Q. (By Mr. CLARKE.) The cotton bale to which you refer, I suppose, is the ordinary cotton bale, and not the round bale?—A. Yes; the round bale amounts to very little so far on the river. Out of 78,000 bales exported from New Orleans in 1 day recently, there were only about 4,300 round bales.

Q. Do you know whether or not either the boats or the railroad companies make any discrimination in favor of the round bale?—A. I do not know much about it. I do not think they make a discrimination in favor of it, because they would rather handle the flat cotton; they can store it better and carry more of it than round cotton. I know that is the case, particularly with exports, because the steamship men have said they don't like to handle the round bales; they can't put as much cotton in a space as flat cotton; and I would not suppose by that that they would make any discrimination in favor of round cotton.

Q. Is it not a fact that the round bale contains practically double the weight of cotton that the oblong bale does?—A. No; it is quite the contrary. They reckon 2 round bales to 1 bale of flat cotton.

Q. Is it not a fact that the same space contains double the weight in the round bale as compared with the oblong bale?—A. Well, it takes 2 round bales to make 1 bale of flat cotton. I suppose it would not take so much space perhaps as the flat cotton, but flat cotton can be handled better, stored better on steamboats, where the freight is piled up. I suppose you have seen it. They carry cotton out on the guards 10 or 12 bales high—they almost hide the boat. They could not do that with the round cotton. They could not hold it in mass. It would be liable to tilt and capsize the cargo into the river.

Q. Do you know what the facts are concerning ocean-going vessels that freight at New Orleans?—A. I know very little about that.

Q. You are not aware, then, that they make a discrimination in favor of the round bale?—A. I do not know that at all. I only gave you the answer that one steamship agent in New Orleans made to me; that he would rather not have the round bales, because they can't be stored like the flat bales; they can't take as many round bales. That is, they can't store them as compactly in the same space as the flat bales. I suppose you have seen the difference in size between the compressed and the original bale. They will just screw that in a solid mass, almost. They can't do that with the round bale. There are vacant spaces in between they can't screw together at all, but the flat bales can be screwed into a compact mass.

Q. (By Mr. LITCHMAN.) That is double the weight, then, is it not; 2 round bales is equivalent in weight to a flat bale?—A. It is 1 flat bale to 2 round bales.

Q. Well, is not that a saving of space to that extent?—A. They can't store it so well. If you take a lot of boxes and pile them up in that corner there, you can make a solid mass of them, but you can not so pile up barrels.

Q. Do not 2 round bales of cotton weigh more than a square bale?—A. No; you have just the same weight. It is generally rated 2 round bales to 1 flat bale.

Q. There is nothing to gain, then, in the movement of cotton by the round-bale process?—A. Of course, the argument in favor of the round bale is that it is less liable to take fire, less susceptible of damage. The flat bale is very much exposed, and they put very cheap bagging about it, and not enough ties, and the cotton is more exposed to fire, damage, and waste.

Q. (By Mr. A. L. HARRIS.) Have the freight rates heretofore been regulated by space or weight on steamboats?—A. Well, they have not been regulated by weight, because, up to recently, the steamboats carried freight by package and by measurement. If it was a barrel of flour, or a barrel of beans, or a barrel of potatoes, it was carried at so much a dry barrel; molasses, vinegar, whisky, oils, at so much a wet barrel, and boxed goods at so much a box. Large cases and crates and casks were measured and carried by the foot. But now, since the adoption of the railroad methods, they are carrying it all by weight.

Q. (By Mr. KENNEDY.) Have there been any attempts at regulation of rates on the river, or is it competition altogether?—A. No; no attempt at regulation, because it is simply an impossibility. Take New Orleans, for instance; there are 30 steamboats that are owned and operated out from New Orleans. There are only 3 lines there, one of these lines owns 3 boats, which have nothing to do with any of the other boats. Then there is another line which operates boats in Red River, owning 6 or 7 steamers, and they have nothing to do, practically, with the other boats. And there is another line which owns 4 boats. That makes 3 lines owning 18 boats. The other 17 are individually owned and operated, with no connection with the other lines in any manner, shape, or form, so there is no attempt at regulation there, and there can not be. If all those boats would go into 1 line, they would have just the same experience over again, as in other cases where attempts were made to control a trade—somebody outside having a boat would think it a good place for him to get in, and the combination would be off.

Q. No attempts at combination?—A. There was an attempt made some years ago by steamboat men to get all the steamboats from Memphis to New Orleans to consolidate, but it was given up. They could not get them to agree to it at all—it was just an impossibility. It was like the remark said to have been made by Commodore Vanderbilt to the president of a great steamboat line, who went to New York to get Mr. Vanderbilt interested in the line. He asked just one question: "Do you own the track?" "No." That ended the negotiation. That is the condition. Nobody owns the river, nor the trades, and I suppose never will.

Q. Well, are any lines owned by railroads, or operated by them or for them?—A. No; there is no railroad ownership that I know of. The only investment I know of the railroads having made was in the purchase of an interest in a line of

boats out from St. Louis a few years ago; but the line is no longer in existence, and that ownership was not publicly known.

Q. (By Mr. A. L. HARRIS.) That is one line of transportation that is owned and controlled by the Government?—A. Yes; in the interest of the people.

Q. (By Mr. KENNEDY.) Is there a surplus of boats on the river at the present time?—A. No. As I say, there is too much trouble and loss in navigation to encourage investments in that kind of property. There was the Anchor Line, running from St. Louis to New Orleans—about the finest line of steamboats we ever had on the Mississippi River. One year every one of their boats—and they were very large and expensive boats—was idle for 7 months. They did not turn a wheel—not from want of patronage, but because of interrupted navigation. Such enforced idleness would destroy any business. There are a great many boats on the Ohio River, and more tonnage is carried on that river than all the other rivers in the Mississippi Valley together. There was a time quite recently that there was not a single steamboat running because of interrupted navigation. There was 5 feet 7 inches in the lock and dam system of the river, and only 1 foot 3 inches of water at other places in the river.

Q. Was there ever a time when there was a surplus of boats in traffic season, when the water was at proper depth?—A. Well, just after the war, and for some time after, there was a surplus of boats; but there is not now. Of course there are new boats building all the time. When boats are lost or placed out of service they are replaced.

Q. Can you tell us something about the cost of boats, the size, and insurance rates?—A. The cost of a boat varies. It depends a good deal, in the first place, on the ideas of the man building it. Some men build boats more costly than others, in different ways. Then it depends a good deal on the trade it is built for. But the cost runs anywhere from \$20,000 up to \$100,000. There is no fixing upon any particular price. It depends on conditions.

Now, the insurance that steamboat men speak of as being so prohibitory in effect, is that on hulls, which runs anywhere from 8 to 18 per cent. It is as high in some tributary trades as 18 per cent, and it is kept at that figure for the reason that the navigation is considered dangerous. There are no rocks in hardly any of the streams, but it is the snags that accumulate there all the time. They are not always removed properly. The Government appropriates the money for that work, but we do not think the service is as efficiently rendered as it might be. The trouble is they generally commence operations too late. They wait until the river gets too low, and oftentimes before much work can be done the snagboats have to quit because of the low water. And sometimes the snags removed are deposited along the banks. The next rise picks them up, and they get back into the channels and cause destruction. And then another element in the insurance rates is the bridges. I have never heard a steamboat man yet object to bridges. They know bridges must be built across the rivers and they do not oppose them, but they do object to the manner in which they are often built and located and made a menace to life and property. There is no question about it at all. I do not know any steamboat men who would willfully tie up and say they could not get by the piers at times, unless there was a danger; and I do not think they would run into a bridge just simply to prove the bridge dangerous. We have the delays in passing these bridges, and we have accidents and losses, and we believe the Government should be a little more considerate of the river interests and less indulgent of those of the railroad, and not disregard entirely the interest of navigation or impair it. There is hardly a bridge proposed that the steamboat men do not have to go and fight for their interests. And then they are put down as kickers, as trying to oppose the railroads crossing the rivers.

Q. Are there any of the fine passenger boats on the Mississippi River, like those before the war or just after the war?—A. Well, the methods of business on the river have changed. People who live on the river now, or travel on the river, don't see those great fine boats passing as before. Many think it is because there is no longer the business. In the days of those greater, finer steamboats, the bulk of the traffic was carried from St. Louis to New Orleans, and from there distributed back up to local points along the river, but now the bulk of the traffic which goes from St. Louis is distributed at these points direct. A boat now carrying 1,600 to 1,800 tons of freight will put out 1,200 tons of it before she gets to New Orleans, going into New Orleans probably with a third of a load. But the greatest change is in this: The railroads will carry freight, for instance, to Memphis, to Vicksburg, to Natchez, and Baton Rouge, and at each of those places are established local lines of packets, which carry the freight up and down from those places, so that instead of the through traffic as before, it has become largely local. The traffic is on the river just the same, but it has changed altogether in distribution. Before this

time I speak of there were none of these local packets at all. Vicksburg did not operate boats up and down the river, nor did Memphis, except those running to the White and Arkansas rivers. Now, at Natchez there are two lines of steamboats where there was none before. One line runs from Natchez up to Vicksburg, and the other runs from Natchez to Bayou Sara, and instead of the through boats handling that traffic and travel, it is largely done by local boats.

Q. (By Mr. FARQUHAR.) Have you any line of passengers from St. Louis to New Orleans?—A. There are only two boats running through, but they lose so much time on their trips they do not carry many passengers. The same is to be said about the Cincinnati and New Orleans boats.

Q. Is the Anchor Line still in existence?—A. No.

Q. What facilities have you in New Orleans there for the transfer of grain from barges to ocean-going ships?—A. Well, we have them nearly perfect. We have 2 systems there. For instance, there is the Stuyvesant wharf. It was built by the Illinois Central Railroad. It has a very large modern elevator, and another is building, to cost a million dollars. The Texas and Pacific road, across the river, nearly opposite the Stuyvesant wharf, has a large elevator, and is building an additional one; for the bulk grain business of New Orleans is increasing more rapidly than at any port in the United States. In fact we are the second port now in import and export values. There is also a large elevator at Southport. At Chalmette there is a very large elevator; and then we have barges, that is, hulls, with elevators—movable elevators. We have both methods and they are very complete. There is never any delay there at all in the transfer of grain.

Q. Is there any complaint about the condition of grain coming from whaleback barges?—A. No.

Q. Was there any complaint under the old barges?—A. No. There has been some talk away from home of the grain not being delivered in good condition, but that has been exploded officially and positively by all authorities connected with the export of grain. We had a case there some years ago. A ship loaded with bulk grain, in passing out of the mouth of the river, got aground and was detained there some time, and it was during the hot weather. It was thought then that that was about as good a test of the grain's condition as could be had. The ship had to return to be docked and repaired and was unloaded. When the grain was taken out it was found in just the same sound condition as when it went in. There is nothing in that at all. There is no damage to grain handled in our climate.

Q. Is flour carried down to New Orleans and shipped to foreign countries?—A. Yes. Flour exports are increasing.

Q. Do you know what countries, principally, breadstuffs go to from New Orleans?—A. Most everywhere.

Q. Have you any Central American trade from there?—A. Yes.

Q. Where does the flour go to, the West Indies and Central America?—A. Central America and Havana get the bulk of it. A good deal goes to Europe.

Q. (By Mr. KENNEDY.) Did you state what influences determine the minimum rates—the lowest rates on the river?—A. That is the only rate that prevails now—minimum rate—and it is just as low as it can be.

Q. You said that was forced by the railroads?—A. Yes; that has been forced by the railroads, because we either had to take it at the railroad rate, or as near to it as we could get, or else not get the freight. When a boat makes a low rate to any point that rate affects much of the distance that boat goes over. We can not charge 25 cents on a barrel of flour to one point, for instance, where it has a railroad, and then get 40 or 50 cents to another nonrailroad point. We can not do it; the conditions will not allow it. We would like to do it. If we could do as a railroad does, we would not then care if there was or was not an interstate-commerce law.

Q. Is the navigable season more irregular and shorter than it was 25 or 30 years ago?—A. Yes; and we think that is due principally to the denuding of the forests. The water now comes down in the shape of freshets, and it passes off quicker. It forms in less time and passes off quicker. And then another cause of that down in the lower part of the river is the levee system. Before the system was what it is now there were large basins, and the river would overflow and fill up all those great swamps, and the water would lie there and gradually drain back into the river, and it would prolong the rise. But now that has all been leveed either by the railroads or by the people themselves, and all that water is confined in the river, so it is in the same condition in the lower end of the river as in the upper end where the rises come from. Our freshets come mainly from the Ohio River. We are never troubled with water from the Missouri and the Upper Mississippi; they are not considered by us at all. Our floods come from the Ohio

River, but the upper part of this river has been so filled up by corporations making more building room that the river has become very narrow and the water forms and runs out very quickly. Sometimes a big rise at Pittsburg will last hardly long enough to get out two runs of coal, it passes off so quickly, while years ago before these changes had taken place there would be water for one or two months.

Q. Can you illustrate what you say about the great corporations narrowing the Upper Ohio?—A. That has been a subject before Congress and legislation was enacted to stop it, and I think it is pretty well stopped. But they did take up a great deal from the river, and it was a subject of much complaint by the steamboat men because it was making the river too narrow to handle their business in. You see they make up great coal tows there to go down the Mississippi River. We had a coal tow go down the Mississippi River some years ago, made up of 54 boats, of over 50,000 tons of coal. There must be room in which to handle a tow of that kind. Coal is brought from Pittsburg, 2,000 miles, down to New Orleans for 75 cents a ton—that is about the highest they ever get. One of the coal operators and owners of those tow boats said that if assured of navigation, and were it not for the bridge piers, he would contract to deliver coal for 60 cents a ton, and make money out of it.

Q. Does any coal go by rail?—A. No; not from Pittsburg to New Orleans. It can be handled much more cheaply by boat than by rail. They have coal dumps which dump from the mine into the boats, and the boats carry anywhere from 900 to 1,000 tons. The tows are made up very quickly, and when there is plenty of water they go through rapidly.

Q. (By Mr. CLARKE.) Does that coal business go on throughout the year?—A. No; they only ship when there is a rise in the Upper Ohio at Pittsburg. The shipments are nearly all from Pittsburg. We sometimes run out of coal in New Orleans. Our shipping interests are increasing so very greatly and there are so many more steamships coming there now than ever before, that this last season we had to get nearly 400,000 tons, part rail and part water, from Alabama. The Pittsburg supply gave out; there was not water enough for the runs. The coal was in Pittsburg, loaded on the boats, but there was not the water for delivery, so we had to draw upon Alabama, and the difference amounted to nearly 400,000 tons. You see coal consumption has been very largely increased on account of the war with the Boers. Many steamships have come to New Orleans for horses and mules, and they take all the coal they can carry, perhaps 4,000 or 5,000 tons to a ship—not less than 3,000 tons anyhow.

Q. Bituminous or anthracite?—A. It is what we call soft coal; bituminous.

Q. (By Mr. KENNEDY.) Speaking about the vessels used in the Boer trade, have you any knowledge of the vessels of other countries supplanting the vessels of Great Britain in the trade at New Orleans as the result of transports going into that South African business?—A. The English vessels have not been supplanted. They have drawn out that much—from the foreign trade. It has crowded others coming there that much more. The English tonnage is increasing all the time at New Orleans, more rapidly than that of any other country, and there comes again the navigation question. In the Eads jetties, at the mouth of the river, there has not been a sufficiency of water for the largest steamers that have been built for the New Orleans trade recently, and there are anywhere from 40 to 45 vessels that have to go out with less than a full cargo on account of lack of water. They go short sometimes as much as 3,000 tons, because there is not enough water for their full carrying capacity. Under the contract which expired a few days ago there was only 26 feet of water required at the jetties, and these ships could load to 28, 29, and 30 feet. Now we are to get an appropriation from Congress to open up another pass and give 35 feet of water; when that is done not only will a larger number of ships come there, but the ocean rates will be materially lowered.

Q. (By Mr. LITCHMAN.) Have you thought out what effect it has in lowering the water in the upper part of the river?—A. The jetties?

Q. The depth of that water at the mouth of the river?—A. No, it has had no effect at all, because there are three passes at the mouth of the river, and the effect of the jetties has not been to draw off the water any sooner. All the river section below Vicksburg is a basin. Now, awhile ago I spoke about how soon the freshets passed out from the Ohio River. For 3 or 4 years I kept a record of the rise and fall of the river at New Orleans. I took the time when it would get even with the edge of the wharf and went above it until it fell, and the longest period was 107 days in 1894.

Q. The difference between 26 and 35 feet, 9 feet more of fall, it seems to me would have an appreciable effect?—A. No, it would not drain off the water from the river, for this distance of several hundred miles, more than before.

Q. (By Mr. FARQUHAR.) What is the relation of the three bayous there to the main level of the gulf—pretty near the same, are they?—A. They are the same, yes. There was recently a survey made of the Southwest Pass. There have been 5 other surveys by the Government in the last 60 years, and 20 years ago the South Pass was deepened from 9 feet to 26 feet, and yet the observations were that there had been practically no change in the mouth of the river. The conditions were just about the same at the mouth of the river for 60 years, and these surveys showed it.

Q. (By Mr. CLARKE.) Will the jetty system be employed for opening the new pass?—A. Yes.

Q. It is a success then?—A. Yes, only the engineers propose to reverse the proposition. Mr. Eads's proposition was that the jetties would be self-maintaining; they would maintain the channels themselves with the scour that they produced; but he also used a dredge as an auxiliary. Now, the present plan of the engineers is to depend almost entirely upon the dredges and use the jetties as an auxiliary; that is, they are going to deepen the channel with the dredges and use the jetties mainly as a protection to the channel, which is open and exposed at the mouth of the river. The wind blows from all directions and sand is carried by the waves, so these jetties are intended to keep the sand from being blown over into the channel, as well as to serve their other legitimate purposes.

Q. Has the draft of ocean-going vessels been increased very much since the construction of those jetties?—A. Oh, yes. Why, when Mr. Eads made his contract with the Government the conditions were that he was to be paid so many hundreds of thousands of dollars when he obtained 20 feet, so many at 22 feet, and so many at 30 feet; but when he got to 26 feet he thought he had better stop. He thought that depth was sufficient. By act of Congress the President appointed a special board of engineers to examine and report as to that, and in their report they said that they thought 26 feet was sufficient for all time. Well, it did appear so then, but it is entirely insufficient now, because, as I say, we have vessels that can load to 32 feet. New York Harbor, you know, got an appropriation lately to increase the depths from 35 to 40 feet, because it is thought 35 feet is insufficient. At the port of Liverpool some \$8,000,000 or \$10,000,000 were spent on the dock system, and they are now spending \$9,000,000 more to deepen the harbor so as to make room for the larger vessels. I read a few days ago that a contract had been let to build a vessel for the North German Lloyd Line, 1,000 feet long, to draw 35 feet of water. At the time of the jetties about the longest vessel we had coming in there was 350 feet. We have vessels coming now 500 feet long. It is the great increase in the carrying capacity of the vessels that has cheapened transportation so much.

Q. Has there been any improvement made in the construction of the jetties?—A. No; there has been no change made. Eads simply contracted with the Government to maintain 26 feet of water. The Government had nothing to do with the means adopted. The pass was turned over to him. He owned the lands and the plant, and the Government allowed him \$100,000 a year for maintenance, and he had to keep up the depth out of that \$100,000. But the Government had nothing to do with the work any more than to send an engineer officer down there to make soundings and report, so that payments could be made.

Q. How are the new jetties being constructed and maintained?—A. The new jetties will be constructed under direction of the Government engineers.

Q. Not by contract?—A. The work will probably be done by contract, but under the Government's supervision and control.

Q. (By Mr. KENNEDY.) Can you tell us about the character of the labor employed on the Mississippi boats and the wages paid?—A. Yes; the officers of the boat are all white, but the labor is all negro. There are very few white men employed as roustabouts, because they can not stand the work. The banks are high in low water and the weather is pretty hot, and it is just about the hardest work there is to get the cargo on and off a steamboat, and about the only laborer we find that can stand it is the negro, and we have to pay very high for it. On the upper rivers, where the traffic is altogether different from what it is on the lower river, they have mixed crews; some of the boats have half white and half negro, and some have all white crews—a very few. But the most of them have all negro crews and pay anywhere from \$30 to \$40. But down with us, in the packet trades, we have a different kind of freight to handle and we have higher banks to put it on. The conditions are different. We pay anywhere from \$40 to \$110 a month for labor. We call them roustabouts. They call them deck hands on the upper river boats. And there was one instance where they were paid at the rate of \$125 a month. The boats are only out from 8 to 6 days on a trip, and they are paid at that rate.

Q. (By Mr. CLARKE.) Is board furnished in addition to that?—A. Yes.

Q. (By Mr. KENNEDY.) How much work in a year would that labor have?—A. The labor does not work steady; they are all the time changing about. A boat will never have the same crew any 2 trips in succession. The roustabout is a very peculiar individual. He does not care about saving money or having a home, and does not care much about a family; he has no moral obligations, hardly, of any kind. All he cares about is playing craps. When paid off, out of a crew of 30 or 40 to 50 men, why, perhaps 5 or 6 men will have all the money of the whole crew—win it after they are paid off. They are generally paid just before they get into port, and perhaps a majority of them will leave the boat without a dollar in their pockets. They are very improvident; they like to change about and go on one boat one time and then another the next time, and maybe the next time they will go up the river several hundred miles into another trade; so that they are all the time changing crews. It is very seldom they have the same men any 2 trips in succession.

Q. (By Mr. CLARKE.) What is craps?—A. It is a game of dice. I must say that while I have seen it played and heard a great deal of it I do not know anything about it. They throw three dice and call certain numbers.

Q. It is a gambling game?—A. Yes.

Q. Is it prohibited by law?—A. It is prohibited in Louisiana; like a good many other laws, though, not very strictly followed. The steamboat men would like to break it up, because it is demoralizing. They would rather have men of better condition, financially and otherwise, than they are. But the steamboats can not get along without them, and they want the very best of them, because it is only the very best of men that can stand that kind of labor. You do not find any old men or any weak men among them; they are all strong, vigorous young fellows, and they have got to be to stand the work. The steamboat men would rather see them better off, and would help them if they could. The steamboats provide messrooms to eat in, and tin pans and knives and forks and cups; but the men would much rather have the food brought out in a dish pan and put on deck and take it in their hands and eat it. That satisfies them better. They do not care for a table or a service or anything of that kind. There are places provided for them to sleep in, but they never go there, because they want to hide from the mate when they make a landing and dodge the work. They will hide amongst the freight. And if it is cold weather or rainy they will go right down underneath the boilers and sleep there in preference, where a white man would burn up. That suits them better than sleeping quarters. As I say, they are very peculiar individuals, but they are the very best labor there is, and we could not get along without them, and when they come high, well, we take them just the same; we have got to have them.

Q. (By Mr. KENNEDY.) Are there any exceptions to this rule of conduct that you speak about respecting them, where men are saving and acquire property from that kind of labor?—A. There are many among the negro population of New Orleans who are saving. Negroes are employed everywhere in New Orleans. I do not believe there is a branch of business that negroes are not employed in. And there are many negroes who own their own homes, educate their children, and live a good and comfortable life. But there are many just like these roustabouts. It does not cost them anything for education, because the white people pay for it—furnish the schoolhouses—just the same as for the whites. There is no difference in the instruction or in the cost of it, and the teachers are paid by the white people. They have to pass the same examinations as the white people do.

Q. (By Mr. LITCHMAN.) Are the teachers for those colored schools white or colored?—A. Both. There is a deal of trouble, though, to get colored teachers, because they will not study up for the examinations. We try to get the best, but have to take an inferior grade because they will not try to excel.

Q. (By Mr. KENNEDY.) Have the roustabouts families?—A. Some of them; but they mostly go to what we call barrel houses, where they sell liquor and have dance halls and crap games, and where the commonest kind of women frequent. That is their place. When a steamboat wants a crew the officers often go to the barrel houses to find them.

Q. Have any attempts been made to organize them into a union?—A. Oh, yes; they have organizations, but they does not amount to much because they do not hold to them very well.

Q. Does it have anything to do with fixing the rate of wages—the union?—A. It has a great deal to do with it. The negroes stand together very well, though, without these organizations. When a steamboat is ready to ship a crew the mate has shipping tickets, and he goes out to the end of the stage and some negro will

ask, "What are you paying?" "Fifty dollars." Well, if they have made up their mind that they want \$60, some of them call out \$60 and they will all say \$60, and will not ship unless it is promised. While they may have their organizations, they do not amount to as much as their combinations right on the spot. I do not know whether they prearrange them or not, but they are in effect just the same, and that is the way they do it. But their labor unions have given the steamboats little trouble. There is very little clash between the steamboats and the negroes. The steamboats, of course, have to pay such high wages at times, and think they are being imposed on, but they pay.

Q. Have the Italians taken to that work?—A. We did try them. Two boats hired Italians, but had to give them up. The Italian is a peculiar laborer also. The Italians could not understand English. They had an interpreter through whom the mate gave the orders, and they were liable to pick up any package on the boat and run ashore with it whether it belonged there or not, and there was a great deal of trouble on that account. And they were not strong enough. They are small men, not equal to the work, and after 2 or 3 trips they were discharged, and the steamboats went back to negro roustabouts and paid higher wages. They had paid the Italians \$60—\$2 a day—and board. Had they proved good labor I suppose they would have been hired altogether, but they would not answer. There were only 2 boats hiring the Italians.

Q. (By Mr. F. R. QUHAR.) In the general stevedore work on the docks in New Orleans do you use Italians?—A. No; there is very little of Italian labor except on the fruit ships. That is altogether Italian labor. The Italian contractor unloads fruit vessels, and he employs none but Italian labor. The other labor has been, up to recently, mostly white, but now the negro is making inroads into that employment. They work cheaper and are gradually displacing the white stevedores. Still there is a large number of white men employed in loading cotton and unloading the cargoes. But that is altogether different labor there from what we have on the river. That is steady labor; they work in the same gangs; they do not change at all; they form a very close corporation.

Q. What view have your commercial men in New Orleans taken of the opening of the Nicaragua Canal?—A. We think New Orleans will be helped immediately and more largely than any other city in the United States, so we are very anxious for its construction.

Q. What preparations have you for building boats at New Orleans?—A. The Navy is establishing a large dock there. That will lead to the establishment of a shipyard. We have built vessels there from time to time in all these years, occasionally building a steamboat, but there has not been much encouragement for that kind of work, because it seems that they can build better on the Ohio River than anywhere else. I do not know exactly why, but it is so. They hardly ever build a steamboat in New Orleans; generally go to the Ohio River for it.

Q. Where are all your Mississippi and Missouri boats usually built?—A. They are built, almost all of them, on the Ohio River. Shipyards have been established there ever since the first steamboat was built. We occasionally build little boats along on the tributaries.

Q. (By Mr. KENNEDY.) Have you a fruit trust at New Orleans that sends fruit by boats to different ports?—A. Yes; some people call it a trust. It is a company called the United Fruit Company; came there in the last year and bought out all the other companies in New Orleans and put them under this one management. There were a number of companies there. I think there were 13 different companies, all operating independently of each other and all owning vessels; but now they are all consolidated. Men that were most largely concerned in those companies seem to be out of them altogether. They are engaged in other business; they do not import fruit; they do not own any steamships.

Q. Does this trust control the banana and other foreign fruit trade of the United States?—A. They control all that trade in New Orleans.

Q. And really all the trade in the United States, too?—A. I do not know so much about that.

Q. (By Professor RIPLEY.) They not only raise the fruit but transport it—that is, they own the steamships?—A. Yes; they have bought fruit plantations on the other side. They own the product and the ships that carry it.

Q. Do they ship directly themselves to interior points in the United States?—A. Yes.

Q. Do they own cars?—A. No; they do not own cars; they deal directly with the railroads.

Q. Do you know anything about the rates?—A. No.

Q. Whether they get special rates?—A. No; I do not. There are 3 railroads engaged in the fruit business, the Northeastern, which owns a fruit wharf; the

Louisville and Nashville, and the Illinois Central have their fruit wharves. They all handle fruit rapidly and economically in New Orleans. A ship comes in there at any time, and whether it is 9 o'clock in the morning or 9 o'clock at night, she is unloaded at once and within a few hours the fruit is all on its way from New Orleans; it never lies there at all. The ripe fruit that will not bear transportation is sold in the city.

Q. (By Mr. FARQUHAR.) Has this combination raised prices to the consumer?—A. Well, I do not know that; they claim they have not. I believe they claim that the object was to lessen expenses and make their profit therefrom.

Q. There has not been complaint against the prices then?—A. No; not by small dealers, because they buy bananas at retail just as cheap now as they did before.

Q. (By Mr. A. L. HARRIS.) Have you any regular line of vessels plying between New Orleans and foreign ports?—A. That are owned in New Orleans?

Q. No.—A. They are all foreign lines.

Q. To what ports?—A. To every port in the world. We have 14 different lines of steamships that come to New Orleans, regularly consigned to agents, all the year round—every trip they make. Two of the lines which are located in New Orleans are the two largest lines owned in America—the Leyland-West India Line and the Elder-Dempster Line.

Q. (By Professor RIPLEY.) Is that the same Leyland line which runs from Boston?—A. And New York; yes. I do not know very much about the steamship traffic. We ship to Cuba, but those shipments are carried by the Southern Pacific Line, an American-owned line. There are no foreign steamers engaged, of course, in the coastwise trade.

Q. (By Mr. A. L. HARRIS.) You have tramp steamers, I suppose, call at your port?—A. Yes; and they come consigned to the regular agents of the lines to which they belong.

Q. Of course they do not run regularly?—A. No; they may make a few trips, but they go everywhere. They are liable to come from Belfast to New Orleans, and then maybe from New Orleans to South America, and then from South America to New York, maybe from New York to Australia. There is no telling where they go.

Q. You have no American line?—A. No; not in the foreign business. There are American lines, but they are in the coastwise trade, like the Southern Pacific and these fruit lines; and then the New York Cromwell Line. We have, I suppose, not less than 1,400 steamships coming to New Orleans in a year.

Q. You were speaking a moment ago about having no river statistics. Would you advise the Interstate Commerce Commission's taking up that feature and compiling statistics of the river trade?—A. I think it would be a mighty good thing for the river interests if it were done, because there is a growing impression that the traffic on the river is leaving it, that the rivers are hardly worth improving any more; and if they were to get up these statistics, then, and only by that means, would it be known just how much commerce there is on the river. Its value and the extent of it is not known. There are no full statistics furnished to Congress. The United States engineers who are assigned to different districts make an attempt every year to gather this information. They send out blanks to different steamboat lines and to the different owners of steamboats, and where the owners manifest a proper interest in it they fill out those blanks and send them back, showing the number of trips made, where to, and the number of passengers and tons carried, the draft of their boats, and the size. But there are a good many of those blanks that are never returned; they do not always reach them, because maybe the boat has left her former trade and gone elsewhere. So that the engineers try to get a correct exhibit of the commerce of the river; and it is to their interest to do so, because it is the information mainly upon which they recommend improvements to Congress. These are about the only statistics that are gotten up, and they are incomplete. The commissioner of the census in his report said it was impossible for him to get full returns of the traffic on the river, but he guessed that over 50 per cent of it was by water. And that is the way with this effort of my own. I spent about 2 months on this work where I should have taken 4 or 5 months, in order to go to every steamboat and get the information from her books.

Q. It would be much better for the Government to gather the statistics than for a private individual?—A. Oh, yes; it would.

Q. They would respond to it better?—A. They would respond to it because they would like to have it known; yes. They would think it to their disadvantage to have it believed that the steamboat is not to be considered any more. They did not refuse to give information to the census commissioner about their traffic and their earnings and their profits and everything of that kind. All that information would be given again.

Q. Are the vessels doing the foreign trade fast vessels?—A. No, they are not fast like the New York vessels, because they do more freight business. There is a passenger travel from New Orleans, on these foreign steamers, to Europe, but it is only with two or three lines. The others do not care about passenger travel at all.

Q. What is the usual speed of the freight vessels?—A. I think it takes them anywhere from 14 to 18 days to cross the ocean.

Q. How many knots; or do you go by days?—A. I suppose anywhere from 10 to 14 knots; but they care more for the freight; they do not solicit passengers at all. Now, these great ocean steamers, for instance, like the *Deutschland*, do not care for freight; would rather carry fuel. Her passage receipts have amounted to as much as \$240,000 on a trip. This great 1,000-foot vessel they are building, the owners declare, will carry but little freight. They are making her an exclusively passenger vessel, because there is so much more money in the passenger traffic.

Q. Where does that vessel trade?—A. From New York to Hamburg.

Q. That would not apply to any of the vessels that trade at New Orleans?—A. No, because there is very little passenger traffic out of New Orleans, except the Cromwell line between New Orleans and New York. They do a very large passenger business. There are many of our people who like this voyage across the Gulf, and those vessels always go crowded in the summer season. Now, we have another line from New York to New Orleans, owned by the Southern Pacific Company, which is exclusively freight. The Cromwell line is passenger and freight. They have very fine vessels and do a large business.

Q. Is New Orleans interested in the subsidy bill?—A. There is a division of sentiment there, but I believe the large majority are opposed to that bill.

Q. On what ground?—A. On general opposition to the Government giving subsidies. There were a great many people who thought it was a mistake of the Government when they gave sugar bounty. It proved to be a mistake afterwards.

Q. Is it generally believed there that the subsidy as proposed to be applied would not benefit New Orleans traffic?—A. I do not know that traffic would be benefited very much in that way. We are doing a very great business now and it is increasing rapidly, as I say. Our exports and imports last year increased nearly \$25,000,000. Of course, we would like to see American shipping and American-owned vessels; we would have a pride in them; but we are not entirely satisfied that it is going to be accomplished in the bill now under consideration. Some of us think that may be a few lines would get the benefit out of it and others would not get anything. We have the statement of Mr. Hill, the president of the Great Northern Railroad, which he made public in Chicago, and he is a steamship owner himself. He says that a few vessels will get the benefit of that subsidy bill, but the large majority of them will not get any benefit from it whatever.

Q. If it were believed that most of the freight carriers across the Atlantic, trading at New Orleans, would get a proper share of the benefit of that, would that be likely to change the opinion of the people there concerning the subsidy bill?—A. Nearly all of the vessels crossing the ocean now are foreign owned; there are few American vessels. There may be a ship here and there, but there is no foreign American line of steamships in New Orleans. Of course if that was changed under this bill and they became all American-owned ships, the people of New Orleans would feel a great gratification in it. They are patriotic people there like they are everywhere else, but perhaps they are not as enthusiastic or as unanimously in favor of a ship-subsidy bill as in some other sections.

Q. Do you think they have an ambition to become owners of ocean-going vessels to any great extent?—A. They would like to see all these vessels American owned, yes; they would rather have that commerce carried under an American than under a foreign flag, but they do not know that it will be accomplished under this measure; there is some doubt about it. There are others quite active in supporting it, however. One of the most prominent of the steamship agents, Captain Miller, who has been in New Orleans many years, was president of the convention at Brunswick, Ga., a few days ago. He is very active in his support of the ship subsidy. There are others not taking part in it. Some of our commercial exchanges have indorsed it; others have taken no action at all. There has been no general concerted effort made to get an expression of the opinion of the people of New Orleans on that measure, so it is hard to say what they would recommend. They might be found largely in favor of it if an effort were made to ascertain the opinions of the people. But we talk very little about it there because we are going on well with what we have.

Q. You hardly feel the need of it so far as your traffic is concerned?—A. We do not think it would make any difference in the traffic. I do not think it would make freights any cheaper, because they are cheap now. The only thing that would make cheaper freights out of New Orleans would be more water at the mouth of the river. We do not think the subsidy would make them any cheaper.

Q. There is never any objection on the part of any of your people to liberal Government appropriations for the improvement of the Mississippi, I suppose?—A. No. As I said before, we would not object to the ship-subsidy bill if it would bring the benefits that it is claimed it will. We do not object because we want all the money for other purposes.

Q. Where do these foreign vessels touching at New Orleans get their crews?—A. They bring them; they are foreign crews. We have a law in Louisiana which prohibits the employment of crews in the ports. Their crews have nothing to do with the loading and unloading. That is done by home labor altogether.

Mr. A. L. HARRIS. Any further questions?

Mr. BRYANT. On behalf of the commission, permit me to thank you for your attendance and your very valuable information in regard to transportation on the Mississippi River.

(Testimony closed.)

WASHINGTON, D. C., February 8, 1901.

TESTIMONY OF MR. WILLIAM PENJE,

Secretary of the Lake Seamen's Union.

The commission met pursuant to recess at 2.04 p. m., Mr. Farquhar presiding. At 3.23 p. m. Mr. William Penje, of Chicago, Ill., secretary of the Lake Seamen's Union, was introduced as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. FARQUHAR.) You will give your name and home address and official position in the Seamen's Union.—A. William Penje; secretary of the Lake Seamen's Union; 123 North Desplaines street, Chicago, Ill.

Q. Yours is an organization confined to sailors on the lakes, is it?—A. Yes; and seamen on the lakes.

Q. How large a union is it?—A. It numbers about 3,000.

Q. What proportion of the seamen on the lakes are in your union?—A. There is more than a third, I should think. I think there are about 8,000 on the lakes, and we have about 3,000 in the organization.

Q. How many local unions are there?—A. There are at present in the winter time just four. During the summer we establish more.

Q. Where are those local unions?—A. All around the chain of lakes and going up the west shore of Lake Michigan—Racine, Milwaukee, Sheboygan, Manitowoc, Ashland, Duluth, Tonawanda, Erie, Ashtabula, and Toledo. The four winter unions are in Milwaukee, Buffalo, Cleveland, and Chicago.

Q. What becomes of the other unions in the winter time; do they go out of existence?—A. The offices are simply closed up and the men generally disappear. They go to other work through the winter. In those cases, as a general thing, the seamen look out for other employment and leave those ports during the winter, but they come back in the spring. There is no occasion really to keep those offices and places open.

Q. Do they keep cards in the union—working cards?—A. No; we have no working cards. We just have official receipts for dues paid.

Q. So that when they come back to those places again they come into the union without any difficulty?—A. Oh, yes; they pay their dues during the winter just the same. A good many of them pay them up in the fall of the year, and a number of them send their money by mail through the winter. Some pay up in the spring.

Q. Have you any benefit features connected with your union?—A. Yes; we have a death benefit and a shipwreck benefit.

Q. Will you describe those?—A. The death benefit is payable to a 6 months' member in good standing at the time of his death. The shipwreck benefit is paid to a member who has been shipwrecked, and is \$30. The death benefit is \$75.

Q. I forgot to ask you the amount of dues in the local?—A. They are 50 cents a month.

Q. (By Mr. FARQUHAR.) What is the initiation fee?—A. The initiation fee now is \$3.

Q. Are you connected with the American Federation of Labor?—A. Yes; we

are connected with the American Federation of Labor through the International Seamen's Union.

Q. The International Seamen's Union, is that an organization composed of lake seamen or does it take in ocean seamen?—A. It is composed of seamen on the Atlantic and the Pacific and on the lakes.

Q. Does your local union pay a per capita tax to that organization?—A. The Lake Seamen's Union pays a per capita tax.

Q. How much of a tax is that?—A. That is 3 cents per month per member.

Q. Out of the 50 cents dues?—A. Yes.

Q. Have you a strike fund?—A. No; we have just one general treasury for all purposes. Our association has only one treasury, and it is situated in Chicago, its headquarters. There is only one treasury for all purposes.

Q. (By Mr. KENNEDY.) Does your union fix scales of wages?—A. Yes.

Q. In conjunction with the employers?—A. We have up to the present not been recognized by the employers in general, although for years we had been recognized by the schooner owners, but not as an organization—as individual vessel owners. The Lake Carriers' Association, which is really the organization of the vessel owners on the lakes, has never recognized us.

Q. Then they fix the wages, and your union has no voice in naming the wages?—A. No.

Q. Has it any influence in—A. (Interrupting.) Oh, it has undoubtedly some influence.

Q. In fixing wages, I mean.—A. In fixing wages. If they fixed the wages too low, the men probably would not sail for them.

Q. Can you tell us something by way of comparison of the skill of the sailor on the lakes at the present time with 10 years ago?—A. The men are not nearly of the same skill that they were 10 years ago. The class of men that sailed 10 years ago have left the lakes and quit sailing for other different occupations, not being able to get married and support a family. They generally go into some other calling—such, for instance, as bridge building or architectural iron work, or become gripmen on street railroads. Others again have gone to farming; some do painting.

Q. Does this class of skill leave the lakes because these industries, like structural ironwork, are something of recent origin, or is it on account of harder conditions on the lakes?—A. Partly on account of harder conditions on the lakes, partly on account of the invasion of the steamboats, and partly because of wages going down.

Q. You have in mind then the men on the sailing vessels that you are speaking about?—A. Yes; they are the skilled men—the skilled seamen.

Q. What are the wages paid to skilled seamen on sailing vessels on the lakes to-day?—A. They started out at \$1.50 last spring and wound up with \$2.75. Those wages the Seamen's Union has control of, and the vessel owners have absolutely no say in that. The seamen hold their meetings and pass resolutions to raise the wages, dating back from a certain date, and those vessels that could not pay them, of course, would not get any men as a general thing. The men would keep in employment, and the wages would take effect all right as a general thing.

Q. Are you familiar with the rates of wages of 10 years ago?—A. Yes. The wages 10 years ago were somewhat better; say in the year 1890, the wages wound up at \$1.50 a day in the fall.

Q. What were they 4 years ago or 5 years ago?—A. Five years ago—in 1895—they wound up at \$2.50 or \$2 a day—about that.

Q. Better wages than those of to-day?—A. No; about the same.

Q. About the same?—A. At the close of navigation they were earning those wages, starting out in the spring with \$1.50. The wages at the close of navigation were \$2 and \$2.50.

Q. Do not good times and hard times have any influence in the pay of seamen on the lakes?—A. Oh, yes. For instance, a year ago last fall the wages in schooners on Lake Michigan were \$3 a day. There was practically half a dollar a day paid more for that season than this one, being a very good season for light vessels—schooners.

Q. Do you care to say anything about the nationality of the men employed on our sailing vessels on the lakes?—A. The majority of the men employed on the sailing vessels are Scandinavians.

Q. About what percentage of them are Scandinavians?—A. Of those employed on the schooners—about 60 per cent.

Q. What are the others?—A. They are divided up into other nationalities—some Americans, some Irish, some English, and some German.

Q. About what percentage were Americans?—A. I should say about 10 per cent.
 Q. Can you say why there was such a large percentage of Scandinavians and other foreigners and such a small percentage of Americans in the trade on the lakes?—A. That is due a great deal to the hardships. The Scandinavian race, as a general thing, take to the water. Most all Scandinavians are seamen and are used to the sea, more or less. Scandinavia is not an agricultural country, but a fishing and sailing country, and they are a hardy lot of people. The work on the sailing vessels being of the hardest kind, why they were most adapted to it, and stayed with it to a greater extent than other nationalities did.

Q. Had they come to America purposely to go into the seafaring business?—A. Yes. Many of them heard of the wages paid on our lakes in these good years and, of course, they would come over. The larger portion, of course, came over in the Scandinavian vessels to the United States and left them for some reason or other and drifted up to the lakes. The vessel owners always have agents down on salt water, and in that way induce a number to come up to the lakes.

Q. Do many of that nationality go into the United States Navy?—A. Yes; quite a number.

Q. Are the wages paid by the Government and the conditions in the Navy attractive to them?—A. Yes.

Q. How does the present number on the lakes compare with 10 years ago?—A. There were a good many more then according to the tonnage than there are now. The tonnage was different. There are a good many more seamen employed on the lakes now, but the difference of 10 years ago and to-day is principally in the skill of the men employed.

Q. (By Mr. FARQUHAR.) You mean the difference between the sail and the steam tonnage?—A. I mean that the tonnage on the lakes has increased considerably during the 10 years, but the manning of that tonnage has decreased. There is not an equal number of seamen employed now in any capacity on the lakes that there was ten years ago.

Q. (By Mr. KENNEDY.) That is on account of the steam vessels coming in?—A. Yes; that has shortened down the crews in every respect.

Q. Do you desire to speak about the manner of employment of the men in the sailing vessels on the lake?—A. Yes. In the old line schooners there was never any signing of articles. Captain and men met, and they would engage for the going wages for a certain trip, come back, get their pay, and leave the vessel. On the steamers of to-day the men are hired by the month, subject, of course, to discharge at any time.

Q. About how many months' employment in the year will the sailors have—seamen, as you call them?—A. Between 7 and 8 months.

Q. How much money can a seaman make during that time?—A. That depends on what capacity he would be in. There are different capacities. In manning a schooner he would make about \$300 for the season.

Q. You might speak of all the different capacities and the wages.—A. The wages on the lakes last summer were for wheelmen and watchmen \$45 per month. That was an increase of about \$10 over the previous year. The wages of the deck hand have increased from an average of \$15 to an average of about \$20 per month. The deck hand has really taken the place of the sailor, and the wheelmen and watchmen are really petty officers. Comparing the deck hand's condition with the sailor's of 10 years ago it has retrograded tremendously. A self-respecting person would not make a passage, or a self-respecting sailor would not under any consideration make a passage as a deck hand on one of these steamers of to-day. They are so abused, they are used so hard, and their wages are so low that it is only the worst class of people, that are hard up and stranded in seaports, that take those places. That is the man that is really taking the place of the sailor of 10 years ago. He is not skilled. He may be a shoemaker or a tailor, or any other sort of tradesman; so long as he is stranded in a seaport and nearly starved he is plenty good enough. They would take him aboard, work him all kinds of hours, and at an average rate of \$15 or \$20 a month by the season. Of course they never stay at it, they simply go and hire out to the boat, and when they find the conditions there—they are even too hard for them, and they generally get off at the next place. They strike, forfeiting their wages in most cases.

Q. (By Mr. KENNEDY.) Are any of the members of your union employed on these steam vessels?—A. Yes, quite a number; but the majority of them are wheelmen and watchmen.

Q. Any deck hands?—A. Deck hands, we usually do not take in. In some places the conditions of deck hands are better than this. For instance, on the line boats—the Western Line, the Erie Line, and the Anchor Line. As a general

thing in many instances they go to the poorhouse in Buffalo and get their crews, fill their crews of deck hands out of those places. If they can bring them back to Buffalo, in most cases they are so broken up by hard usage that they have to go back to the poorhouse. They make a trip a week, and at \$20 a month of course they could not have much money.

Q. Most of the members of your union are employed, I understand, on the sailing vessels?—A. No; the majority is employed on steamers, as wheelmen and watchmen.

Q. Are you endeavoring all the time to organize these deck hands?—A. No; we do not try very hard to organize these men, though at the same time we see it is the only way to better their condition and lift them up. There is no help from legislation; organization is the only thing that we can see that will better their condition and get a better class of men on those boats. If we could organize them thoroughly and get them reasonable hours of labor at first, and probably a little more wages, that would improve the personnel of them, and be the means of securing young fellows wanting to go to sea from the farm, for instance. If it was respectable they would follow the sea for a little time and get interested in a seafaring life and get advanced to watchmen and to wheelmen, for instance.

Q. Do you regulate the hours of working on the vessels?—A. Where we have had control we have regulated the hours of work.

Q. What is the number of hours?—A. Twelve hours.

Q. Twelve hours a day?—A. Yes; overtime for extra work at loading.

Q. How many hours a day do these seamen work who are not in the union?—A. That would be on the steamers, because all the men on the schooners are in the union, practically all.

Q. The unorganized deck hands, how many hours do they work? You say where you control they work 12 hours.—A. I mean the schooner when I say "controlled." We have organized the men on the steamboats, but it was only done last summer, and we have really not got control there yet. Those men work as much as 30 hours at a stretch; work 24 hours at all kinds of labor on the deck, and then take and steer 6 hours after that. There are many instances of that kind.

Q. Then how many hours rest?—A. No rest in this 30 hours. Then 6 hours' rest, and again 6 hours at the wheel. Take a boat going from Buffalo with coal, going into Milwaukee to unload. She gets in there in the morning, gets unloaded that day and leaves for Chicago, a run of about 5 or 6 hours. Then, when she gets to Chicago, they have, of course, to make ready for loading. All this time all hands are on deck, and there is no getting below until the boat is loaded and out on the lake. Then the man first at the wheel—say they loaded at 6 o'clock in the evening—would be on from 6 to 12. After being up 24 hours he takes the wheel and steers 6 hours consecutively.

Q. (By Mr. FARQUHAR.) Then, what is his rest after that; from 12 to 6 in the morning?—A. Yes.

Q. Then does he take the full time again?—A. No; he is out on the lake, and gets watch and watch—6 hours on and 6 hours off.

Q. (By Mr. KENNEDY.) He works 12 hours a day then?—A. Works 12 hours a day.

Q. (By Mr. LITCHMAN.) Is that what you meant by 12 hours a day on schooners?—A. Yes; that is 12 hours a day on schooners. Whilst loading in most of the lake ports, on the schooners they work the longshoreman's day, which in most cases is 10 and 11 hours. Then, of course, the sailor before he gets to work in the morning has to move the vessel and make the vessel fast, pump her out if she leaks any, and at the noon hour the same way; and after they quit at 6 o'clock and the longshoreman gets through, the sailor makes the vessel fast again and pumps her out.

Q. (By Mr. FARQUHAR.) Is he supposed to help in the discharge of cargo?—A. On these schooners he loads the vessel. He does all the shifting of cargo in many places.

Q. (By Mr. KENNEDY.) Do you desire to say anything about the necessity for regulations regarding the efficiency of crews and the manning of the vessels?—A. Yes; that is one of the main things I want to speak about. As I said, the deck hand has taken the place of the seaman of 10 years ago. His conditions are such that there are practically no seamen in that branch of the service. He is the poor fellow who gets out of work in some other line, and adopts it as a make-shift and never follows it long enough to make a seaman of him.

Q. I would like to understand what you mean by seaman? You mean a man who would be an efficient sailor on a sailing vessel?—A. No, not necessarily a sailing vessel. I mean an efficient seaman, a man who could do his work well, know enough to launch and row a boat, swing the vessel around, fire drill, etc.

Of course the standard of the Navy, which used to be taken to judge the skill of seamen, is getting pretty strong now; that is, for the present-day seaman. It was all right for the men on the lakes 10 years ago. Then about 90 per cent of the men sailing could pass that examination as to their skill; but at present, of course, there are not as many, that is, taking all the men, steamboat as well as sail, on the lakes to-day. I do not suppose there are over 2,000 men on the lakes that could pass that examination.

Q. (By Mr. KENNEDY.) Is it your desire that they should be able to surpass that standard or to come up to the standard set by the United States Navy?—A. No; it is our desire to get some legislation providing that a vessel of so many tons burden shall carry so many efficient seamen, and then give the seamen a certificate of efficiency, which every other country does at the present time.

Q. Gives a certificate from a government commission or official?—A. A government official in connection, say, with the custom-house. These customs-house officials are in very near every lake port, and it is done in other countries without very much inconvenience. It is very necessary that it be done on the lakes.

Q. How would a government official become possessed of the knowledge that a man was an efficient seaman and be able to give him such a certificate?—A. In the first place, in starting that sort of an office, he would have largely to take the word of the man or else give him an examination in seamanship before issuing the certificate. After that when a new man came into the office he could give him a certificate showing he commenced sailing such a date, and after a year or so of service raise him a notch. If he starts in as a landsman, a year or so of service, if he is any ways bright, makes him an ordinary seaman; another year or two makes him an able seaman. That is the way they are regulated in Germany and also in Great Britain.

Q. Would a certificate of membership in your union be sufficient certificate in regard to the man's efficiency?—A. From our point of view it certainly would, but I do not know what the vessel owner would say about that.

Q. Are all the members of your union what you call efficient seamen?—A. They are examined in seamanship and given a certificate of the capacity in which they can serve.

Q. Examined by whom?—A. By the officer in charge generally of the office where the man joins.

Q. Officer of the union?—A. Yes.

Q. Have you anything to say about overloading of vessels on the lakes?—A. It is a well-known fact among the sailors that it occurs very frequently, and no doubt disasters have taken place through that practice.

Q. You say "no doubt." Do you know whether that is the case or not?—A. Yes, I do know; in fact every sailor on the lakes knows it. While I could not mention any special case, I have a little clipping here on this subject (reading):

"Capt. Henry Leisk, master of the steamer *P. J. Ralph* has written a letter charging that there is reckless overloading in the iron-ore trade. The letter says:

"I want to sound a note of warning to vessel owners, cargo owners, and insurers that if the overloading of small vessels with iron ore continues as at present (and I must say here that in 9 cases out of 10 the master is not to blame), when the fall storms set in the record of disasters, accompanied by loss of life and property, will far exceed any previous year."

"Captain Leisk is explicit, and mentions the Mesaba and Northern docks at Duluth. He continues: 'A master of a vessel who asks for a car or two of ore, or a part of a packet, which is invariably necessary to put his vessel in trim, and consequently put her in a seaworthy condition, he is branded as a fool. He is generally given to understand that he must either take a full packet or go with what he has got. This means that he must either go to sea with his vessel out of trim, or else go 100 tons short of his load, or 100 tons more or less over and above what his vessel can safely carry. This has been my experience with the *Ralph* on two occasions when loading at the Mesaba and Northern docks at Duluth. June 23, when I found my vessel several inches deeper forward than I had intended she should be, I told the person in charge of the packet that I could take no more, but he insisted on my taking the remaining portion, and he threatened to run it on the deck of the vessel. I then ordered the lines cast off, and the vessel pushed off from the dock. Then you should have heard the tirade of abuse which was showered on my head.

"About an hour later they heavily loaded the schooner *Interlaken*. When her captain protested against being overloaded, he was told to throw it overboard when he got outside. Then, during the night, they dumped 120 tons into the forward hatch of the barge *Harold*, and left her 2 feet by the head, and with 146 tons of ore on board in excess of any previous load.

“About a week ago Mr. Treveranus boasted of his dock as breaking all former records of oreloading. Did he mention the conditions in which these vessels left the dock, and whether the masters were seaworthy or not?”

Q. Is not the complaint in regard to overloading principally as to the vessels in the ore trade?—A. Principally, because the cargo of ore is so much heavier than other cargoes. A good many vessels fill up with other cargoes and are not overloaded. This is the smaller class of vessels he speaks of not loading down to 18 feet, because those which can load to 18 feet or more could not load any deeper if they wanted to because of the depth of water in the river.

Q. Do they violate any law in overloading vessels?—A. There is no law at present in regard to overloading vessels.

Q. (By Mr. FARQUHAR.) Is there not a free-board law on the lakes, a United States law on free board?—A. Not that I am aware of.

Q. Don't the insurance companies insure under a free-board law of the United States?—A. The insurance companies do, but I do not think it is a United States law.

Q. (By Mr. KENNEDY.) Have you recommended any law upon this subject?—A. We have not recommended any on overloading. We have done no more than to protest sometimes. We have done that quite often. It is such a hard matter to get anyone to take up any legislation like that.

Q. (By Mr. FARQUHAR.) Can you get the cooperation of the insurance companies in a case of that kind?—A. The competition among insurance companies is so keen on the lakes they are glad enough to get the risk and say nothing.

Q. (By Mr. A. L. HARRIS.) Who owns these ore boats?—A. They are owned by different parties all along the lakes.

Q. They are not owned by any large companies, steel companies?—A. Yes; oh, yes; some of them are, but the boats which the large steel companies own are the large class of boats.

Q. (By Mr. KENNEDY.) Do they overload these boats?—A. No; they could not overload them because they can not load them down more than there is water in the rivers where they have to cross.

Q. It is the small boats then?—A. The smaller class of boats is where the overloading takes place—those drawing no more than 16 feet.

Q. They are undermanned, too?—A. Yes; they are undermanned. I have here several specific cases of different classes of boats, which show the manning of these vessels. Here is the barge *Australia*, belonging to the Corrigan Steamship Company, of Cleveland. She has 1 mate, 4 deck hands, 2 wheelmen, 1 engineer, 1 cook, 1 lifeboat. Now, on that boat there are only 3 seamen outside of the captain—that is, competent men. They paid these 4 deck hands \$25 per month last season, and the season before that they paid them \$20.

Q. How many seamen should there be?—A. There should be at least that many competent men. The crew as it stands now is 10 men. That is a very small crew of competent men.

Q. There are only 3 competent men?—A. Only 4 outside of the captain. This tow barge is 3,745 gross tons. She is one of the largest. It will carry about 6,000 tons of ore.

Q. I would like to ask what the crew of that barge could have done with that vessel if it had broken loose from its tow?—A. It would have depended on the 3 men to make the canvas on that boat, hoist the sail, and while doing that and getting anchors ready they would be in close quarters. It is practically impossible for 3 men to do that because in case of a break adrift, the 4 deck hands would be practically useless, even if they could do a little plain everyday work in fine weather. When a tow barge breaks adrift it is usually bad weather. These men then become useless because they are not seamen, and most men generally get seasick at their first experience in bad weather.

Q. Then that number is totally inadequate to man that vessel in an emergency of that kind?—A. It is absolutely.

Q. (By Mr. FARQUHAR.) How is it in fair weather?—A. They manage to get along by working the deck hands all hours and giving watch and watch out in the lake, but in the port they have to be on deck from the time they get in until they get out again.

Q. You would say that a boat with that number is shorthanded, anyway, fair weather or foul?—A. It is shorthanded, undoubtedly.

Q. (By Mr. KENNEDY.) Is it customary to stay 6 hours at wheel in any other part of the world?—A. Not customary in any place I know of.

Q. What is the custom elsewhere?—A. Two hours.

Q. Two on, and how many off?—A. Four off.

Q. The strain is very great on a man's nervous system—6 at the wheel?—A. It is simply impossible—it is beyond human endurance for a man to steer 6 hours at a stretch after working 24 or 30 hours continuously. It is an absolute impossibility. The strongest man could not stand it. In this vessel the committee tells me they loaded 24 hours. They got off easy. The tow barge *John Smeaton*, Bessemer Steamship Company, is manned somewhat different. She carries 2 mates, 3 sailors, 1 fireman, 1 engineer, 1 cook. There are 3 more competent men aboard this barge. She dispenses with the deck hand altogether. The deck hand on this class of barges is an innovation altogether. It is another new reduction.

Q. (By Mr. FARQUHAR.) Rather it is a displacement of an active seaman for a deck hand?—A. Yes. It shows what can be done in a few years. That boat was built in 1897, 3 years ago. These things are inaugurated and people do not know them as a general thing. It goes right on, with one reduction after another until we get down to the present.

Q. (By Mr. KENNEDY.) I would like to ask, before you proceed further, about this undermanning and overloading; is it an evil that exists principally in vessels owned by private individuals and not in vessels owned by large corporations?—A. Yes.

Q. Are they generally sufficiently manned and not overloaded?—A. Oh, no; they are not sufficiently manned, but on account of their being so large they can not load them down to their real capacity on account of the draft of water in the Detroit River.

Q. How does the manning on those vessels compare with the manning of the privately owned vessels?—A. The manning is bad in both cases—about the same.

Q. You can think of no difference in the manning then?—A. No. I can not see any difference, except that I know of a boat that was chartered by the Western Company—the New York Central and Hudson River Company, commonly known as the Western line. When she was with them they put 2 new men on, and when the charter ran out and she went back the 2 men were taken off. That would show that the boats running between Buffalo and Chicago are somewhat better manned than the general run of freight boats. This barge (*John Smeaton*) is 5,049 gross tonnage, one of the largest on the lakes. She carries 2 mates, 3 sailors, 1 fireman, 1 engineer, and 1 cook. They lose 30 hours when loading, and when at sea the crew get 6 hours on and 6 off. Now the manning of this boat is cut down so that it is ridiculous. Of course they depend on fine weather and they are well insured; also there are plenty more deck hands. The vessel owner really runs no risk.

I also call attention to the case of the steamer *Cadillac*, of the Cliffs Iron Company, of Cleveland. She is 1,263 tons register, carries 2 mates, 2 wheelmen, 2 watchmen, 1 deck hand on deck and 2 deck hands passing coal, 2 engineers, 1 oiler, 2 firemen, 2 cooks. The mate has to be forward keeping a lookout, as a general thing, though that is the watchman's place; but the watchman has no time for that as he has to be doing some work around the deck. So whenever the least thing out of the ordinary occurs all hands are called up on deck.

Q. Speaking of the barges, what, in your opinion, would be the result if one of them should break its tow in bad weather?—A. Not having men enough to make the sails, the tow would simply have to drift and go on the beach unless it drifted to some place where there was holding ground for the anchor; but there are so many places where there are rocks and where there is no chance to anchor that they would simply go on the beach and break up.

Q. Does it happen that the boats break their tow and are wrecked as a result of undermanning?—A. Yes; very frequently.

Q. Can you give an instance of that?—A. I do not know that I can remember any just now. The date and the name of the boat and everything like that I can not place just now.

Now, here is a smaller class of barge, the *Grace Holland*, 629 tons, length 189, beam 38, built 1880. It seems that the cutting down of crews has been mostly done in the newer vessels. Once a vessel gets established with a certain crew, it is not so easy to cut the crew down, as the men will not, as a general thing, stand for it; but as they bring out a new vessel that is the easiest time to get it chartered out on a good economic principle. The *Grace Holland* has 4 sailors. If these other vessels are manned right, this one must be overmanned. She must be very extravagant when she is only 629 tons, and one I told you about with over 5,000 tons is not so well manned. There were 3 seamen aboard that one, and this one has 7 seamen aboard her.

Here is the steamer *Coralia*, an iron steamer of 4,330 gross tons. She has 2 mates, 2 wheelmen, 2 watchmen, 2 deck hands on deck, and 4 coal passers. They paid these deck hands \$25 a month last year. Now the deck hands that pass coal get 6 hours on and 6 hours off, there being 4 coal passers. Two of them

work 6 hours, and then the other two take the watch; and in case one of the firemen gets overheated or overworked, one of these men has to take his place. They do not go on deck unless something extraordinary happens. There are 2 deck hands to work on deck. In some instances they are worked on the lake from daylight to dark; in other instances they get watch and watch. But when the vessel comes into port, and while in port, these deck hands assist on deck and work until the vessel goes out of port, unless there is some extraordinary delay. They would keep them on deck 2 days at a stretch.

Q. How many efficient seamen on that vessel?—A. On this one there would be 7, counting the captain.

Q. How many should there be?—A. There should be at least 14; and that is a conservative estimate.

The steamer *Republic* of the Republic Iron Works has 2 mates, 2 wheelmen, 2 watchmen, 1 deckhand on deck, and 3 deckhands on coal watch, passing coal. In this one there are 7 seamen. Two engineers, 1 oiler, 1 fireman, each holding the boat 3 hours on and 3 off. As a general thing they work 6 on and 6 off. The same is true as to the wheelmen and watchmen.

Q. Is that the custom on the ocean or in the coastwise trade?—A. The British commission on the manning of vessels, in their report to Parliament, state in their report that it is an utter physical impossibility for a man to steer a vessel as she ought to be steered longer than 2 hours at one time.

Q. Is there a law of Parliament prohibiting the employment of English sailors in that capacity for a longer period than 2 hours?—A. No; I do not think there is.

Q. But it is the custom in the merchant marine?—A. Just the custom. There is no law.

The steamer *Maricopa*, of the Minnesota Steamship Company, has 2 mates, 2 wheelmen, 2 watchmen, no deckhand on deck, 4 deckhands on coal watch. She has done away even with the 1 deckhand on deck. She has 7 seamen, and ought to have 14. While loading they were 24 hours on deck.

Tow barge *Carrington*, of the Pittsburg Steamship Company: Two mates, 2 wheelmen, 3 deckhands on deck and 1 deckhand who takes the fireman's place; 1 engineer and 1 cook. They were 24 hours on deck at a stretch on that vessel. Tonnage 3,180 gross. There are 7 competent seamen on her; should be 14.

Steamer *Presque Isle*: Two mates, 2 wheelmen, 2 watchmen, 1 deckhand on deck, and 4 deckhands passing coal. Tonnage 4,578 gross. When out on the lake they get 6 hours on and 6 off. Competent men aboard 7; there should be 14.

Steamer *Onoko*, P. J. Minck Company, iron steamer: Two mates, 2 wheelmen, 2 watchmen, 1 deckhand on deck, and 2 coalpassers. Tonnage 2,164 gross. They work 24 hours at a stretch on that vessel. Seven competent men; should be 14.

Steamer *Massachusetts*, J. C. Gilchrist Transit Company: Two mates, 2 wheelmen, 2 watchmen, 2 deckhands on coal watch with no deckhand on deck. Tonnage 1,415. Seven competent men; should have 14.

Q. Where did you get this data, Mr. Penje?—A. I got this from the men in the different places all around the lakes.

Q. From the officers of your union?—A. Members of the organization, in conjunction with officers.

Q. Some of them aboard these vessels?—A. Yes; some of them sailing right in the vessels. The 3 men that got this testimony are in Cleveland, in the habit of sailing in these vessels, and know the conditions thoroughly. The statement is signed by the 3 men.

Now, I want to call the Commission's attention to one of the modern tow barges, the *Australia* of the Corrigan fleet. She carries 1 mate, 1 cook, 2 wheelmen, 3 deckhands. There are only 4 competent men aboard that vessel—competent seamen. That is 3 less than a barge of a little over 600 tonnage should have, and she is 3,467 tonnage. This is a modern tow barge, one of the latest out.

Here is the steamer *Northwest*, one of the fancy passenger steamers—one of the finest on the Lakes. The *Northwest* and *Northland* run between Buffalo and Superior for 3 or 4 months in the summer season, carrying passengers. This boat is allowed to carry 300 or 400 passengers—400 or less. She has 3 mates, 1 captain, 12 seamen—what they call seamen. Last year they paid \$35 a month, and the year before they paid \$25. That is \$5 more than the deckhands get. They are not competent men. They are called seamen, and they put a uniform on them so that a passenger does not know the difference. They look like seamen with the blue uniform, but on account of the low wages and the failure to discriminate at all, one-half of them are not seamen and could not save themselves, let alone saving a passenger in time of distress. That is a well-known fact. She carries 12 of these men. There are also 1 boatswain, 1 boatswain's mate, 1 carpenter, 4 quartermasters, and 3 lookout men. All told, there are 26 supposed-to-be seamen aboard of her. That number is too small for vessels of that class if they

were all competent men, but half of the so-called seamen not being seamen at all, the force is entirely inadequate.

Q. You spoke a while ago of the disasters on the lakes being attributable to overloading and undermanning. Have you any data in regard to the wrecks or disasters on the lakes for any recent period—a period of a year or so?—A. I believe there were 110 last year.

Q. Have you any compilation of facts as to the causes of these wrecks?—A. The causes are so very hard to obtain, because as a rule they are insurance cases, and the men are either controlled by the vessel owners or the insurance companies, and there can be nothing got out of them as to the real facts. It is only in very extraordinary cases where the evidence really gets to the public. If it is a case of lawsuit they may get at it; but it drags along for years, until the case gets out of the mind of the public.

Q. I suppose a majority of them were disasters that would occur, perhaps, no matter how efficiently a vessel were manned.—A. No; I think the majority of the disasters last year were collisions in the Detroit River.

Q. Caused by bad steering?—A. By steering in some instances, no doubt; and also by going too fast, notwithstanding there are rules regulating the speed, and by wheel chains breaking, steering gear getting disabled, etc. But with a sufficient crew aboard most accidents could be avoided. A steamer in the Detroit River should have 2 men standing at the hand steering gear all the time, so as to be ready in case the steam gearing gave out to steer the vessel properly; but on account of the smallness of the crew it is impossible to spare 2 men for that purpose, because they have only 1 steersman on deck and he is steering with the steam steering gear. I think some vessels have a provision to shift quickly from the steam to the hand steering gear, but it takes too long, and the river being so narrow—only 80 feet wide in some places—and with vessels passing each other all the time, it can not be avoided unless there are 2 men standing at the hand steering gear all the time; but, of course, they have not crew enough for that.

There were running out of Chicago during the winter 2 lines of passenger steamers, the Goodrich Line and the Berry Line. On the Berry Line on the *City of Vermont* they pay their wheelmen in the winter time \$30 per month; their watchmen they pay \$10 per month. They carry passengers all winter. They carry 2 mates, 2 wheelmen, 2 watchmen, and they pay the wheelmen \$20 and the watchmen \$10 a month. Of course it is winter time, but the idea of getting competent men for that wage, men that can be relied on, is wholly out of the question. In the summer time the boats carry 2 wheelmen and 2 watchmen, and the wheelmen get \$30 and the watchmen \$25. They carry 2 lookout men, at \$25, and 5 so-called sailors, at \$30 per month.

Q. (By Mr. LITCHMAN.) Do I understand you to say most of these men are single men?—A. They have of necessity to be single, because they do not get wages enough to keep a wife and family on. If they sailed all the year round there might be a possibility for them to make both ends meet, but the season is only 7 or 8 months long and they could not keep a wife and family.

Q. Do you know whether among them there are any who can save anything out of those meager wages?—A. Yes; there are men who save money out of those wages even, by being economical, of course, and trying to get something else to do immediately in vacation seasons.

Q. (By Mr. KENNEDY.) Have you been a sailor on the ocean?—A. Yes.

Q. Are you familiar with the conditions with regard to wages and hours and other discipline on the ocean as well as on the lakes?—A. Yes. I commenced to sail, when I was 15 years old, in the small German vessels, and sailed there until I got to be an ordinary seaman, when, through my apprenticeship, I shipped in an English vessel. I made one voyage around Cape Horn to the West Coast and back, and got an able seaman's discharge and got promoted. I had sailed then 3 years altogether.

Q. I want to ask you what is the condition with respect to wages, discipline, hours, etc., of the American seamen on the lakes and on the ocean?—A. The conditions in the coastwise trade on the Atlantic coast I presume you want. The men generally get watch and watch, and there are none but competent men in that trade. In the vessels in which I was employed I never saw them try to ship incompetent men. They would not have them in those vessels. If an incompetent man happened to ship, they would find it out and he would have to leave immediately.

Q. What about wages?—A. The wages were generally what the shipping master made them. The seamen were not organized when I was sailing there, and of course had no voice in the matter.

Q. How did their wages compare with the wages on the lakes at that time?—A. The poorest wages on the coast at that time were \$20 a month.

Q. What were they on the lakes?—A. Of course, at that time they were a great deal better.

Q. Do you know the wages in the coastwise trade at the present time?—A. On the Pacific coast, \$45; on the Atlantic, from \$25 to \$35 a month.

Q. What is the highest on the lakes?—A. For sailors, that is the deck hand, the highest is \$35 a month on the passenger boats.

Q. As against \$45 on the Pacific?—A. Yes.

Q. What is your opinion as to the relative condition of the seamen in the coastwise trade and those on the lakes at the present time?—A. The condition of the seamen in the coastwise trade is far better.

Q. Why is that so?—A. Because they are not worked so many hours, as I have told you in my testimony, 30 hours at a stretch. They do not ask a man to do that on the coast. The men would probably not do it if they were asked. They are seamen and these are not.

Q. (By Mr. LITCHMAN.) On the coast the loading is done by longshoremen?—A. Principally.

Q. And the seamen simply sail the vessel and do not take any part in the loading and unloading?—A. As a rule, they do not. There are exceptional cases where they assist; I have done it.

Q. (By Mr. A. L. HARRIS.) How are sailors provided as to rations?—A. Very poorly. On these line boats, 7 cents a meal is allowed. That is, for all hands aboard the boat. They make a contract with a supply agent, not a grocer or butcher, but a sort of middle man between the grocer and butcher and other stores, and he supplies the vessels at 7 cents a meal. He puts just enough aboard a vessel to make the week's trip. They know the schedule—how long it takes the vessel to make the trip. But if a vessel happens to run up against bad weather and is two days overdue, everybody goes hungry. The wheelmen and watchmen, who are petty officers, are treated somewhat better than the deck hands; but of course, paying 7 cents a meal, they can not expect the very best fare.

Q. What does the fare consist of?—A. General every-day fare—nothing especial; just every-day grub—meat, potatoes, vegetables, and coffee or tea.

Q. Do they sit down to the table or does each one go and get what he wants?—A. In regard to the deck hands, the food is put in a bowl and handed to them, and the first come is the first served, as a general thing.

Q. That is, for the lakes?—A. Yes.

Q. How is it for the coastwise trade—any better?—A. The coastwise trade in that respect is every bit as good as the lakes. The crews, of course, eat in the forecabin. The food in a good many instances is not any too good, but there is a law now that provides for so much food for the men.

Q. Is that law complied with?—A. No; it is not generally complied with. It is not generally enforced. It is a new law, and, of course, having the law on the statute books does not put it in operation, as a general thing, and the men being somewhat kept down anyway, they very often fail to assert their rights. If they do assert them, they are regarded as kickers, and so, as a general thing, the sailor in that respect gets the worst of it.

Q. The law is easily evaded?—A. Yes.

Q. How many meals are served?—A. Three meals a day.

Q. (By Mr. KENNEDY.) You said something about the accommodations or the facilities for the deck hands, officers, firemen, etc.?—A. The accommodations for the deck hands are of the very poorest, and, of course, as they are not self-asserting, it naturally follows that the surroundings are bad. Those pick-ups that they get, they are not clean themselves, and it would be impossible to keep the place clean. Indeed, there is no effort to keep the place clean; in fact, if they were to keep clean, they would not have time for passing coal 6 hours and then get 6 hours off; a man does not feel like scrubbing up very much after such service. Their quarters are of the worst kind; their condition is horrible from all view points.

Q. Is the law complied with in regard to space which shall be allowed to each sailor?—A. As a general thing it is on new vessels. On some of the older vessels they have not the required space, and there is no complaint made about it, but in the newer class of vessels they have space enough. Modern vessels have very nice rooms for quartermasters, watchmen, and officers—splendid, some of them; but deck hands' quarters and the firemen's quarters, too, are away down in the fore part of the vessels and are anything but what can be desired.

Q. Are the deck hands and other men aboard vessels generally well informed as to what they are entitled to under the law in regard to space, etc.?—A. Yes; they are generally well informed as to that.

Q. (By A. L. HARRIS.) You say the accommodations are poor. What does the boat provide in the way of bed clothing to keep the sailor comfortable?—A. It furnishes mattresses and cotton or calico quilts, but on account of the crowds

they carry in those large steamers, the deck hands' places get so they are not fit for a human being to stay in. The competition, they claim, is responsible for that, when the fact is that the sailors' wages aboard of those large carriers is one of the very smallest items there is in the expense.

Q. (By Mr. KENNEDY.) Who provides the bedding in the coastwise trade?—A. The sailor provides it himself.

Q. In that respect, then, the sailors on the Lakes have an advantage over those in the coastwise trade?—A. They have an advantage; yes.

Q. By Mr. FARQUHAR.) Are the quarters of the deck hands on the Lakes infested with vermin?—A. They are, as a general thing.

Q. How is it with the coastwise trade?—A. They are clean.

Q. You have no boat inspection in the coastwise trade in respect to cleanliness?—A. No; merely a different class of men. As a general thing, a thorough seaman keeps himself clean anyway. Yes; there is not a deck hands' quarter on any boat on the chain of lakes that is not full of vermin.

Q. Has the dismantling of the regular schooners on the Lakes into barges caused a deterioration of the character of seamen?—A. No, it has not; not that. There are lots of those barges that still seem to carry 4 competent seamen, as they always did.

Q. Nominally they did?—A. Well, they did practically, too.

Q. (By Mr. CLARKE.) Are not all the vessels on the Great Lakes square rigged?—A. There are a few, a very few left. Now they are square rigged on the foremast, that is all.

Q. Are there any five or six masted schooners on the Lakes?—A. No; only three-masted schooners.

Q. That is the largest?—A. Yes. They had a four-masted schooner, but she is a barge now.

Q. Are there any power arrangements for hoisting sail?—A. Yes; the majority of the larger class of vessels carry what is known as the "donkey," a small engine for hoisting anchor, sail, and flush-down pump.

Q. Are there any electric or other helps in steering by power?—A. Yes. There is the modern barge that has steam-steering gear, and some of them have an electric motor, too, and furnish their own electric light, but the number is small.

Q. When power is furnished for hoisting sail and for steering, and also for hoisting cargo, is it necessary to have so many deck hands as it was before power was supplied?—A. There might be a little reduction made for steam power in the shape of a "donkey" aboard a vessel, shipped on some of the very modern vessels, but I have been in vessels where they have had steam "donkeys," and just about the time it came freezing weather something happened to the "donkey," and if there had not been a sufficient crew aboard then it would have been just as bad, although on the modern vessels they have other arrangements, so that now it is more perfect, in that they keep steam on the "donkey" in good shape, and I think some little allowance might be made as regards the number of the crew; but when there is a barge, a boat of 3,000 tons register, and with only 4 competent seamen—I believe there is one of 3,000 tons—that is too small a crew altogether.

Q. As to the sleeping accommodations—are separate rooms furnished for the sailors and the deck hands?—A. The deck hand is the sailor. The deck hand does not sleep with the petty officer and watchmen and wheelmen. The watchmen and wheelmen have a room by themselves.

Q. How many usually occupy a room?—A. In most cases the wheelmen have a room by themselves, and the watchmen and the deck hands have one room by themselves.

Q. That is, how many will be in that room, as a rule?—A. There could not be very many; on most of those vessels there would be one there at a time.

Q. Is there any reason why those rooms can not be kept in a sanitary and comfortable condition and free from vermin?—A. It is not possible with the grade of men they carry, with the wages they pay, and the usage they give the men. A self-respecting man they could not keep there; he would not stay. One thing they have to do is to keep those men, and if the boat is clean one trip it would be in bad condition the very next passage.

Q. If those rooms and beds were kept clean would the boats be able to attract a better class of men?—A. Not by keeping them clean alone; they would have to give them reasonable hours; then the keeping of the rooms clean might have some effect—in fact I know it would have an effect.

Q. Don't the masters of those vessels inspect the quarters of the sailors or deck hands?—A. Yes; but then the master knows it is a hopeless case, just as I am stating. He knows also how long the deck hand has worked, and he knows how long he has stayed on the vessel, and he knows in most cases it is just one passage; and he knows if he cleans it up that passage the next fellow he gets will only leave

it in as bad shape again. So, of course, they do as well as could be expected. It is not the master's fault that he has got so short a crew.

Q. Then, it is your opinion that an improvement in the quarters will depend largely upon the employment of a better class of men?—A. Yes.

Q. That will depend upon better wages and hours?—A. Reasonable hours.

Q. Do the complaints which you have made in regard to badness of quarters and food, lowness of wages, and undermanning apply to the vessels owned by the steel companies and other large corporations doing their own transportation, or are they chiefly made against common carriers?—A. They are made against every steamer on the lakes.

Q. (By Mr. A. L. HARRIS.) Is that condition improving or getting worse?—A. There is no chance for it to improve.

Q. Not much chance to get worse?—A. Well, I do not know.

Q. (By Mr. KENNEDY.) Don't they improve when they go into structural iron-work and bargework?—A. The man who is sailing now doesn't go there. He is not the kind of man that will do for that work. You see structural ironwork takes a calculating, nervy, cool-headed sort of a man like the old-time sailor used to be.

Q. A large proportion engaged in that work are men who have followed the sea, are they not?—A. Seventy-five per cent of them I believe; very nearly that.

Q. And the grip men on the cars?—A. Quite a number of those are sailors, some police officers. They enter into all trades, but principally that of building bridges and doing structural ironwork.

Q. It is the man who went to sea in the sailing vessels particularly who becomes qualified for that sort of work, is it not?—A. Yes; the life of a sailor aboard sailing vessels trains a man to all practical work, gives him a steady nerve. If he can't acquire that he won't become a good seaman even, and a man staying any length of time gets well qualified to do work of that kind—work where a man has to think and work at the same time, and who changes from one condition to another quickly.

Q. (By Mr. FARQUHAR.) Under a continuance of like conditions that you have now, will it be necessary to recruit the seamen of the Lakes from immigrants?—A. No.

Q. With all the foreigners engaged on the Lakes there now, how are you going to, under the present conditions, ever give employment to Americans in your service?—A. I do not say there are so many foreigners employed now; it was 10 years ago I spoke of.

Q. What is the proportion of foreigners now?—A. It is two-thirds.

Q. Under the present conditions and with a continuance of the present conditions will you not be forced to recruit and bring the new men from immigrants; would not you be forced to go into the lowest class of foreign immigration to get your recruits on the Lakes?—A. I presume so; but if the conditions are changed, and I think they will be changed, for I can not think that we can continue the way we are, the young Americans will only be too glad and willing to go to sea and remain there, providing the conditions are so he can support a wife and family and have reasonable treatment.

Q. (By Mr. KENNEDY.) You did say that 60 per cent of those employed on the lakes were Swedes and Scandinavians, I believe. Now, you say you meant that statement for 10 years ago. Can you say what proportion of Scandinavians or Swedes are at work on the lakes now?—A. Well, I can not say the exact percentage, but the Canadians are in the majority now. Then comes the Scandinavians, then the Americans. Now, the percentage would be, I presume, about 35 per cent.

Q. (By Mr. CLARKE.) When you say Canadian does that ordinarily mean French Canadian?—A. No; I mean men born in Canada of Scotch, or English, or any other parentage.

Q. (By Mr. KENNEDY.) Are Scandinavians coming in all the while to work on the lakes?—A. They do not come any more, hardly.

Q. (By Mr. FARQUHAR.) They rather go to farming, don't they?—A. Yes; they would go at almost anything else now.

Q. (By Mr. A. L. HARRIS.) What is the wage of the American seaman compared with the German seaman?—A. Taking the deck hand, that is the seaman, the German seaman's wages are better; his wages are better. They buy four or five times as much, and his treatment can not be compared with that of these men.

Q. (By Mr. FARQUHAR.) You speak of the lake now?—A. Yes.

Q. (By Mr. A. L. HARRIS.) My question referred to the ocean.—A. Take it right through, I do not think there is very much difference.

Q. (By Mr. LITCHMAN.) Which would you rather be, an able seaman on a German vessel or a deck hand on the lakes?—A. A German sailor.

Q. (By Mr. A. L. HARRIS.) While you were learning your trade were you on the ocean at any time?—A. Yes; all the time.

Q. Was that while you were in the German service?—A. In the German and English service, both.

Q. What are the conditions in pay compared with the German service and the English service?—A. There is little difference between the German and English service, but it is made up in the buying power of the money of Germany and England.

Q. Which gets the largest wages?—A. The English sailor; that is, the man sailing out of England, but if both of them sail out of some other foreign port the wages would be equal. In the case of an Englishman sailing out of a German port along with a German, the two would get the same wages.

Q. (By Mr. LITCHMAN.) State what the wages are, if you please, or were at that time.—A. At the time I shipped out of Hamburg it was £2 10s. a month as an ordinary seaman.

Q. (By Mr. A. L. HARRIS.) Reducing that to American money, how much is it?—A. That is \$12.50.

Q. (By Mr. LITCHMAN.) At that time can you give the ordinary wages on the English vessel?—A. I got the same wages. It was in the winter time, and there was not much difference at that time. We went to England, and to New South Wales, and I went out on the same vessel again for the same wages. Our wages in England and Germany at that time were equal. As a general thing there is a difference of 5s. or \$1.

Q. What year was that, may I ask?—A. This was in 1881.

Q. Nineteen years ago?—A. Yes.

Q. Have you any knowledge whether there has been any raise in the rate of wages from that time to the present?—A. There is a little raise from that in England now, if I understand.

Q. About £3 now in England at the present time?—A. No; an able seaman's wages at that time was £3.

Q. You were speaking of the ordinary seaman at that time?—A. Yes.

Q. You said £2 10s.?—A. Yes.

Q. You said there was about 5s. addition; it was £3 then?—A. Yes; about £3 now for an ordinary seaman out of England.

Q. That is about \$15 as against \$25 in the coast trade here in America, is it?—A. Yes; that is for ordinary seamen.

Q. (By Mr. A. L. HARRIS.) How do the wages of the American coastwise trade compare with the wages of the English seaman?—A. Well, of course, they are better.

Q. (By Mr. LITCHMAN.) Please state the conditions between wages paid in deep-water traffic in the coastwise traffic in Europe and the same in America.—A. At present I believe the wages in England are £4.

Q. For ordinary able seaman?—A. Able seaman; that is \$20. Now, wages on the coast here are \$25, an addition of about \$5. In the foreign trade the American wages—that is to say, out of New York, of course—it holds good just the same with the English vessel and the American vessel lying alongside of each other. Both pay the same wages, pay the wages of New York; but a vessel going on a foreign voyage from England and a vessel going on a foreign voyage from New York, there you would draw a comparison. But I am really not posted just now as to wages paid in deep water on the Atlantic coast here, but I presume it is about \$18.

Q. Is it not the custom for a vessel in foreign trades to engage a crew in Europe for the round trip, and thereby fix its rate of wages from the foreign rate of wages and not from the New York rate of wages?—A. That is correct.

Q. Then the inference would be in that case that the wages would really be a little lower than if paid at the rate of New York wages?—A. Yes; a little lower—a little difference.

Q. As to rules and regulations covering the conduct of vessels in foreign trade, they are about the same with foreign vessels and American vessels? I refer especially to the space given to each man, and the food and the general conduct of the vessel.—A. The foreign rules in that respect, I believe, compare favorably with the laws in the United States as to food. There are countries which provide for men somewhat better than the United States do. I know the laws of Denmark, Germany, and Holland are better in regard to food than are the United States laws. But I am not very well informed on that point.

Q. (By Mr. A. L. HARRIS.) Better than the law of 1898?—A. Yes; I think so. I think an improvement on that even.

Q. (By Mr. LITCHMAN.) How long is it since you had experience on the ocean?—A. About 12 or 13 years.

(Testimony closed.)

WASHINGTON, D. C., February 16, 1901.

TESTIMONY OF DANIEL H. HAYNE,

General Solicitor of the Merchants and Miners' Transportation Company.

The commission met at 11 a. m., Mr. Phillips, presiding. At that time Mr. Daniel H. Hayne was introduced as a witness, and, being first duly sworn, he testified as follows:

Q. (By Mr. C. J. HARRIS.) Will you give us your full name and your post-office address?—A. Daniel H. Hayne, 214 East German street, Baltimore, Md.

Q. You may also give us your occupation.—A. My occupation is General Solicitor of the Merchants and Miners' Transportation Company.

Q. How long have you been connected with transportation by water?—A. Since 1891.

Q. Have you examined our topical plan of inquiry?—A. I have.

Q. Have you some general statement that you would like to make before you are examined specifically?—A. Yes. I suppose I should start with a statement concerning the line that I represent. The Merchants and Miners' Transportation Company was incorporated by the General Assembly of Maryland on April 24, 1852. The early history of the line was one of some discouragement, but on December 28, 1854, the first trip was made from Boston to Baltimore. Later on, in 1867, the company commenced to run steamers from Boston to Norfolk and thence to Baltimore, returning from Baltimore, via Norfolk, to Boston. In January, 1859, the line from Providence to Baltimore was started, but only ran a short time. In 1873 the Providence Line was again established, this time to ply between Providence, Norfolk, and Baltimore. The Baltimore-Savannah Line was purchased by the Merchants and Miners' Transportation Company in January, 1876, and the Philadelphia-Savannah Line was inaugurated by the company in October, 1900. You will thus see there are 4 lines operated by the company known as the Baltimore and Boston Line, the Baltimore and Providence Line, the Baltimore and Savannah Line, and the Philadelphia and Savannah Line. The first has 4 sailings weekly, the second has 3 sailings weekly, the third has 3 sailings weekly, and the fourth, a sailing every 5 days. In order to maintain this schedule, there are 15 steamers. They have a net tonnage of 23,868 tons and a gross tonnage of 33,533 tons. These steamers ply between Boston, Providence, Norfolk, Baltimore, Philadelphia, Newport News, and Savannah, as terminals.

Now, as to the classes, manner, and terms of employment, I would state that, generally speaking, all men on shipboard are considered seamen. There is a subdivision into officers and crew; or probably the classification that would be most helpful to you would be that of masters, mates, quartermasters, boatswains, seamen, engineers, oilers, water tenders, firemen, coal passers, stewards, stewardesses, cooks, messmen, pantrymen, and waiters.

Q. (By Mr. C. J. HARRIS.) How many men do you employ in those lines?—A. On shipboard there would be about 552 for the 15 ships now running. As to the manner of employment, the coastwise trade and the conditions surrounding coastwise seamen are so favorable that there is no necessity of our employing agents to secure help. It is entirely a matter of individual agreement between the applicants and the officer employing the help. The terms of employment are controlled by what are known as "shipping articles," prescribed by law, in which the contract of employment is clearly expressed. I have a copy of the shipping articles and can present it to the commission if you choose to see it.

Q. In a general way this shipping article is a contract between your company and the man employed?—A. With every man on shipboard. It is prescribed by law and is in writing. The contract is read over to the men when they sign, and copies of it are posted in conspicuous places on shipboard in order that they may become familiar with it.

Q. Do you say sailors prefer shipping on your boats to the general line of coastwise trade—that is, on sailing vessels?—A. No, I did not make the statement so broad as that they preferred our vessels; but from the fact that there are continued applications for employment on the coastwise vessels, and from the further fact that the sailing vessels and tramp steamers find it necessary to have agents to secure their help, it would seem that the conditions of coastwise liners must certainly be more favorable.

As regards the treatment and provision for comfort and health on shipboard, the sailors or seamen of the Merchants and Miners' Transportation Company are treated precisely like other employees. Under the broad-minded and liberal policy of the president of the company, Mr. Michael Jenkins, there is a personal solicitude on the part of the company for the welfare of all of its men.

Q. You have no control of or arrangements for the men when they are on shore, I suppose, but only when they are on the vessels?—A. May I ask further enlightenment as to that question? In what way? What sort of control?

Q. Well, for instance, do you employ these men by the month or the year?—A. By the month; but I might digress here and perhaps answer your question fully by stating that the shipping articles provide that they are engaged for the voyage on which the vessel leaves at the time of their first signing. They are engaged by the month and paid by the month. They have the right under our shipping articles to leave at any port. The company early realized that in order to get the very best service out of its men they should be treated as men. We rather anticipated the laws in that respect, and our shipping articles have always provided that the sailor may leave at the next port at which the steamer touches—providing he leaves immediately after the ship is docked. If he continues in the employment after arriving and until the ship is about to leave, we would have great difficulty in securing a new crew, and in such event the contract provides that he "has shipped" for the next voyage. That provision was made in order to protect the company and to protect the seamen. The seamen have a right to leave and the company has the right of dismissal at the ports.

Q. Would not that provision be liable to cause you serious trouble? Suppose half your crew should leave you at Savannah, how would you get enough trained men to take their places to get back with?—A. If such conditions existed, they would cause great embarrassment, but we find the crews do not want to leave the ships on which they are employed. We have never had an instance such as you suggest. If we had such an occurrence, we might endeavor to have some change made in the law to provide against it, but at the present time the law provides for that feature, and we see no reason why it should not exist.

Q. Do you have any complaint or suggestions to make in regard to the navigation laws of the United States?—A. Generally speaking, I believe they are in advance of the navigation laws of some of the other countries. There are, of course, in the nature of things some little difficulties that are experienced, but they are not of great moment. I might mention, for instance, that the coastwise companies are obliged to put in their shipping articles a scale of provisions, under the ruling of the Treasury Department based on the opinion of the Attorney-General of the United States, and it is a question among the lines whether they are obliged to give identically that fare, or whether they should give the fare they formerly gave; because you realize that in running a large passenger line there are large supplies put on board that are not consumed by the passengers and which can be served to the sailors. Thus the sailors' fare is very much better than the fare prescribed by law, which law, as I understand it, was directed toward foreign vessels and individual captains; but these are not conditions that are causing any friction whatever.

I might say further, speaking from the owner's standpoint, that I have never found any law that would give the United States courts jurisdiction over larceny committed within the boundaries of a State. There is a law touching embezzlement and damage of freight and cargo, but the law affecting larceny only seems to apply to the high seas and to territory over which the United States has exclusive jurisdiction. In other words, the larceny law has not been made applicable to all navigable waters. The owners experience great difficulty in prosecuting larceny on shipboard, for the reason that the various State laws conflict, and it is very difficult to locate precisely the situs of the crime. With that condition confronting them they are unable to feel perfectly safe in applying to any State court, because they are often unable to positively prove exactly where the crime was committed, and if the proof should show that it was committed out of the State, there would be a failure of jurisdiction and probably a suit for unlawful imprisonment, with other attending difficulties. The only remedy that we have found has been to invoke a law which states that it shall be a misdemeanor to embezzle from or to damage ship, cargo, and stores. We think that probably this law might be elastic enough to cover the offense of larceny, but it is a matter of some doubt. Certainly larceny is not embezzlement, but there would be loss and damage to the cargo in the act of larceny. We feel that such an addition to the laws as might specifically prevent larceny, so as to give United States courts and State courts concurrent jurisdiction when the act is committed within a State, would add greatly to the moral tone of the lines, and would be directly of great benefit to the employees and to the shipping community.

The acts now relating to this point are as follows:

R. S. 4596: Whenever any seaman who has been lawfully engaged, or any apprentice to the sea service, commits any of the following offenses, he shall be punishable as follows:

* * * * *

Eighth. For willfully damaging the vessel, or embezzling, or willfully damaging any of the stores or cargo, by forfeiture out of his wages of a sum equal in amount to the loss thereby sustained, and, also, at the discretion of the court, by imprisonment for not more than twelve months.

R. S. 5356: Every person who, upon the high seas, or in any place, under the exclusive jurisdiction of the United States, takes and carries away, with intent to steal or purloin, the personal goods of another, shall be punished by a fine of not more than \$1,000, or by imprisonment not more than one year, or by both such fine and imprisonment.

Now, as to discipline, that operates on shipboard precisely as it exists on land. The discipline starts usually with a mild but positive admonition to the offender. If there is a recurrence of the offense, the policy of the company is to follow it up by a suspension; and further offense by dismissal. The redress of grievances is found in a system of notices to the superior officer in command, and if the grievance is not adjusted satisfactorily to both sides, the shipping articles provide a method whereby there can be an appeal to the higher authorities in this way [reading from shipping articles]: "Upon the commission of any of the offenses enumerated in the articles, or of any breach thereof, if it should be contemplated to raise an issue, an entry thereof should be made in the log book, and should be signed by the master and by the mate, or by one of the crew; and the offender, if still in the vessel, should, before her next arrival at any port, or if she is at the time in port, before her departure therefrom, either be furnished with a copy of such entry or have the same read over distinctly and audibly to him, and he may thereupon make such reply thereto as he thinks fit; and a statement that a copy of the entry has been so furnished, or that the same has been so read over, together with the reply, if any, made by the offender, should likewise be entered and signed in the same manner." So in that way a record may be secured.

While I am on this question of the contract, I might say that a further notice is given to masters that "while without any cause notice to either party terminates the service of any signer at the expiration of any voyage as prescribed in the articles, it is presumed that this provision will not be enforced to the hurt or disadvantage of any employee without good and sufficient cause, but that reasonable opportunity will be afforded for return to the port of embarkation."

Q. With reference to hospitals, I want to know whether when the sailors are on shore they are subject to these perils here in these hospitals and sailors' boarding houses?—A. They are undoubtedly subject to perils if they choose to leave the ship. They have the right to leave the ship at any time under our contract, providing they leave the ship when the ship first enters.

Q. What I meant was whether, when the sailors are still in your employment, but in these various ports, you had much trouble.—A. We never experience any trouble; and in fact while sailors come and go—they are a shifting class to an extent—there is a stability in the personnel on the ships.

Q. What about your stevedores; are they continuously employed, or do they load the cargoes of the vessels and unload them by the contract?—A. They are paid by the hour. There are in the neighborhood of 1,300 stevedores employed at the various ports. I have the amounts paid them.

Q. I wanted to know in a general way what plan you had, whether you had these men employed directly by yourselves, or whether you employed a general stevedore force?—A. We have our own men. They apply to us individually for employment, and while they have the right to leave at any time, being employed by the hour, there is a stability in the personnel that you might say is constant.

Q. Of course, your vessels running regularly, you would have your regular force instead of employing the general stevedore forces which load and unload the tramp steamers?—A. Oh, yes; we have, as I understand it, nothing like that.

Q. Have you had any strikes on the part of your stevedores?—A. Not to my knowledge, neither of stevedores, nor of any other class of employees.

Q. About what wages do you pay the stevedores?—A. They are paid by the hour, and the prices fluctuate at the various ports. Broadly speaking, I can say it runs anywhere from 15 to 30 cents an hour.

Q. What would be the wages at Southern ports—at Charleston and Savannah?—A. At Savannah, 22 cents both for regular and overtime.

Q. What is it at Boston?—A. At Boston it is 20 cents for regular time and 30 cents for overtime.

Q. You mean to say that the Boston wage is cheaper than the Savannah?—A. Yes; it is slightly cheaper. The overtime wage is greater, you see, and the regular time is less.

Q. I can not see how that would be. I supposed the wages at all those Southern ports were less than 20 cents an hour.—A. There is a notation here of 174

cents per hour—at Savannah also. There is also a notation of 22 cents at Savannah. So I suppose the price will fluctuate between those figures as the supply exists.

Q. (By Mr. FARQUHAR.) I would like to ask if the stevedoring at any of your ports is done by organized labor?—A. The stevedores may have their organizations among themselves, but if they have, the fact has never been brought to our attention in any way. There is never any difference between the company and its labor.

Q. You find a regular rate prevailing at every port?—A. We find a regular rate, and we presume there must be an understanding among the men. We never dispute those wages, but pay them.

Q. In case of any infraction of the rules to whom or to what tribunal does the application go on the part of the plaintiff—the United States court?—A. You mean for personal injuries sustained?

Q. Yes; or maltreatment or lessening of wages or difference in the construction of the terms of employment—transfer of employment from one character to another—that would be made the basis of a suit for damages. In what court is the suit entered?—A. That depends entirely on circumstances. If the situs of the injury occurs on land or if the contract should not be a maritime contract they would have their redress in the State court; but if the injury occurs on ship, or the contract be a maritime one, they would also have recourse both to the State courts and the United States courts in admiralty. The election, however, seems to be for the State courts, because they secure responsive juries there, probably with the view of putting themselves upon the country, and they seem to select the State courts.

Q. You think there is sufficient law and means of redress so that a sailor, a seaman, or petty officer, or any one in your general employ, not a master, may find his remedy in the courts?—A. Absolutely. He is completely protected, I should say, and a little more so than the owners, and, perhaps, properly so. The most common method among sailors in seeking redress for what they consider wrongs against them is to apply to the United States commissioner, an official appointed by all United States district courts, who cites all parties to appear before him and hears the case. When the commissioner fails to settle the difficulty, and he feels it is a proper case for the court to take up, he passes it on to the court for hearing; otherwise the matter is then and there dismissed.

Q. In the matter of rations, you said you had adopted the ocean ration, as provided for by the amended Senate bill of 1898, I presume?—A. Yes; we have been compelled to put that in the shipping articles, and are therefore compelled to follow it.

Q. Did that law of 1898 say the coastwise trade should be provided with that ration?—A. It was a question of some doubt, but after some investigation by the Attorney-General of the United States he came to the conclusion that the law was broad enough to cover the coastwise vessels; but as to whether or not it was the intention of Congress to do so I think is a matter of considerable doubt. Certainly it will not improve the condition of the sailors if the lines should insist on following the scale of provisions provided by that law, because if they are allowed to give them what they wish to give them, and what is less expensive to give them, because of the additional amount of supplies they are required to put on board for their regular passenger traffic, the seaman fares a great deal better in every way, and he gets the best the land affords.

Q. There is no provision, is there, in case of an excess of rations, in cashing it in for the benefit of the sailor?—A. I can hardly see how that could be done unless he had some way of keeping the provisions given him; he is permitted to eat all he wants and has no more coming to him. I think the sailors are well satisfied, and things seem to be floating along very smoothly.

Q. Now, in your matter of loading, where you engage local stevedoring, in your articles is it provided that the class of men who operate your ships shall assist in the loading and unloading?—A. The articles do not provide for that, because the ship men do not assist in loading and unloading. We have regular gangs of stevedores, and the ship men are confined to the navigation of the vessel.

Q. What is your ordinary seaman and the helpers engaged in while in port?—A. Cleaning up, inspection, seeing that the ship is in proper trim.

Q. So it is not a holiday when you reach port?—A. It is not a holiday nor is it at all excessive work, but they have enough to keep them busy.

Q. Do any of your masters give the men a furlough of a few hours in cities when you come to the terminals?—A. There is such a custom.

Q. Are your men usually married men with families and having homes at any of your terminals, or are they single men?—A. The officers often are married; the

seamen are not tied down by family relations as a rule, although there are quite a number that have their homes at the terminals.

Q. What is the proportion of Americans?—A. About 75 per cent in our own force.

Q. Where do you usually find your men, in New England or along the Southern shores?—A. A great many seamen come from the New England States, but they seem to come from all the ports. A large number come from Baltimore. Generally speaking, they come from the main terminals.

Q. (By Mr. C. J. HARRIS.) Do you have any colored seamen?—A. No colored seamen to my knowledge.

Q. (By Mr. FARQUHAR.) Are the stevedores in the South colored?—A. Largely.

Q. South of Baltimore?—A. Yes; I may say nearly all of them in the South are colored. The average on the line is about 55 per cent white and 45 per cent colored.

Q. At all ports?—A. Yes; taking the general average.

Q. I presume, if you have a table of the wages and compensation it would be well to give it at this place.—A. The pay roll of the crew is as follows: Masters, \$150 to \$250 a month; first officers, \$75; second officers, \$55; boatswains, \$30; quartermasters, \$30; sailors, \$25; chief engineers, \$120; first engineers, \$75; second engineers, \$60; oilers, \$40; water tenders, \$40; firemen, \$40; coal passers, \$30; stewards, \$55 to \$70; first cooks, \$50 to \$60; second cooks, \$35; mess men \$20 to \$25; waiters, \$20 to \$25; pantrymen, \$20 to \$30; stewardesses, \$18. Board and accommodations are given in addition to the above figures. The number of cooks and waiters is of course regulated by the demands of the passenger season; in the summer season a great many more are employed than in the winter season. I have spoken as to the compensation of stevedores before.

Q. You have as to the stevedores in three ports, I believe?—A. I will give all of the ports. At Boston, regular time 20 cents an hour, overtime 30; Baltimore, regular time 20, overtime 30; Providence fluctuates between 16½ and 18½ for regular time, overtime 20 to 25; Norfolk, regular time 15, overtime 15; Newport News, regular time 15, overtime 15; Savannah fluctuates from 17½ to 22 regular time, overtime 17½ to 22; Philadelphia, regular time 20, overtime 20.

Q. Have you any knowledge as to how those figures compare with the wages paid by ships in the foreign trade?—A. No; I have no knowledge as to that. I presume they would have to pay the stevedores about the same prices.

Q. As to the wages of your masters and crews, would they be about the same?—A. No; I think the wages paid by the foreign trade are very much less.

Q. What method have you adopted in the inspection of vessels?—A. As regards that, it may be divided into 2 branches. There are two forms of inspection, one by the Government and one by the owner. The local Government inspectors are divided into hull inspectors and engine and boiler inspectors. They make an annual inspection. The report on that inspection is kept permanently posted on shipboard. The owner's inspection is divided into a number of classes. Among others there is the voyage inspection and the departmental inspection of everything, and the periodical docking and general overhauling. The most important probably is the inspection immediately preceding the voyage, at which time all the machinery is turned over and tried; the engines are always kept running 15 or 20 minutes before starting, to see that everything is all right; all the appliances are tested; the electrical superintendent goes aboard and tries all the electrical appliances. In that way the line is kept up in proper form.

Q. (By Mr. C. J. HARRIS.) That is the private inspection of your own company officers?—A. It is the private inspection which is made necessary under the laws in order that the ship may be seaworthy and that there may be no negligence on the part of the owners in embarking on the voyage.

Q. Is there a public-inspection officer?—A. The public or governmental inspection occurs annually. Then all of the ship—the hull, the machinery, and all the appliances are fully tested.

Q. That public inspection is merely a form, then, is it not?—A. No, sir; it is most thorough, and is done in great detail.

Q. If your vessels are only examined once a year by public inspectors, the whole vessel might be in very bad shape the second trip it made after it was inspected?—A. That is rather an impossible condition for this reason: The owners find that in keeping the vessels up there is a less percentage of deterioration. The deterioration on sea property would probably run as high as 10 per cent per year if the vessels were not kept in prime condition. By keeping the repairs up the deterioration is a very low percentage. Then there is another condition that makes the owners unusually alert. If the vessel starts in an unseaworthy condition and some accident happens through any imperfection that might have been discovered

by careful inspection, every policy of insurance on hull and cargo is vitiated by the unseaworthy condition of the vessel, and every bill of lading issued on the cargo is made null and void; and that extends to nearly a million dollars worth of property. So the owners are bound to be very alert in inspecting and watching and caring for it.

Q. (By Mr. FARQUHAR.) Do you know how much they mark off annually for deterioration?—A. That I am unable to say. I have no knowledge of what comes up before the executive board.

Q. (By Mr. C. J. HARRIS.) What is the rule as to the loading or overloading of vessels?—A. That finds its regulation in the same condition of affairs. A vessel that is overloaded is unseaworthy. Further than that there is the regard that the master and the crew have for their own personal safety. The crew have the right to object to going to sea in a vessel that they feel is in an improper condition, and there is even more strength in these conditions of affairs than in any legal verbiage that may be established to prevent the overloading of vessels.

Q. Are all your steamers passenger steamers?—A. To my knowledge all carry passengers.

Q. What is the value of the passenger traffic as compared with the freight?—A. Of course, as with all transportation companies, the freight is the backbone of the business. I could not tell you the percentage, but the passenger business is remunerative, both on railroads and steamships; otherwise, adopting a sound business policy, they would not be carrying them.

Q. You run your boats for the freight, I suppose; that is the first consideration?—A. That is, of course, the first consideration.

Q. Now, then, I would like to take up the commercial features of this coastwise trade, its relations to the railroads, and competition, if any, with the railroads. You virtually cover the Atlantic coast from the North to the South?—A. From Boston to Savannah.

Q. And intermediate points; is the competition with the railroads very severe?—A. That is a question upon which probably my experience is not as broad as you might like to have. I can only state in a general way. That is in the domain of traffic. The largest class of competitive traffic on the coast, I believe, is from the sailing ships. I do not know that the railroads or the steamship lines have any great conflict in their business relations. Before and during the establishment of water differentials there was quite an objection to the water lines by railroads, but I believe that the inevitable is now recognized, and they are getting along harmoniously.

Q. What is the relation, or rather, what is the percentage of your steamboat rates to the railroad rates between any two different points that you might name?—A. That question I could not answer definitely. I have here a statement made by the traffic people that I might read.

Q. I wanted to get at how much lower these steamboats had to put their rates in order to get their share of the traffic?—A. Well, you understand, generally speaking, that there are differentials which the water lines are allowed to make in any rate by reason of the difficulties that the water transportation involves, such as carrying insurance and so on, and there is a class of business that has grown up under these differentials that may be considered as belonging exclusively to the water lines, so there is no great amount of conflict between the water and rail interests. There is a certain amount of business which goes to the boats because of the advantage of the lower rates.

Q. You mean to say there is a combination or an understanding of prices between your lines and the railroads?—A. Not at all, because the water lines experience a competition that entirely sets that feature aside; that is, the competition of the sailing vessels, which the water lines are required to meet. Sailing vessels are chartered, the owners do not run lines, but give a boat up to a man for so much money, and the rate is secured by figuring on the charter price and the gross tonnage aboard to ascertain what it is. That fluctuates greatly on the coast.

Q. Is your line under the control of any railroad company?—A. It is entirely independent of any and all other companies.

Q. (By Mr. FARQUHAR.) What body establishes the differentials?—A. The lines settle that, I believe.

Q. Is it done through the Interstate Commerce Commission or by agreement with the lines?—A. No; I believe it has grown up as an inevitable result of the conditions confronting transportation people. I think it is a natural growth.

Q. These differentials are generally accepted?—A. Generally accepted.

Q. Have you any classification of freight?—A. Yes.

Q. Approaching anything like the railroad classification?—A. The same.

Q. The same by water transportation as by rail?—A. I believe so, except where there are certain conditions that must be met that the rail lines do not experience.

Q. (By Mr. C. J. HARRIS.) You would have the same classification on articles shipped partly by rail and partly by water?—A. Very often that is so. You see the question of classification, while a natural development, has received the attention of the experts, both on the part of transportation lines and the public, and we may assume that such a development is within proper bounds.

Q. Does much of your freight go over the railroads?—A. A good proportion, I believe. Of course large freights are carried direct from the ports at rates that the railroads would probably find unremunerative. The merchants have adopted a plan of centralizing their points of distribution, and very often they ship to local ports and distribute from them. I find in reading the papers that there is an institution in the west shipping oranges now, and they have them moving on the road ready to divert and ship on telegraphic advice. The cars are going all the time. That is enlarging on that plan of distribution. They simply start a car right out and let it go.

Q. (By Mr. FARQUHAR.) You said you had some statement there in regard to freight?—A. Yes, the statement is this: [Reading:] "There is not much competition on the part of railways and local coastwise business between the ports covered by steamship lines; the sail competition and trade conditions occasion such low and fluctuating rates between ports as to make the business apparently unremunerative for rail carriers, although in some cases they maintain the same rates as the basing rates of the steamship lines, and in other cases, especially the longer hauls, they carry much higher rates. The only comparison that could be made of the rates of the steamship lines and the rail lines would be the fixed rates of the rail lines with the basing rates of the steamship lines, but as a comparatively small portion of the business is handled by the steamship lines on these basing rates, the comparison would be misleading, the steamship lines being obliged to handle a great portion of their business on commodity rates made to meet the exigencies of the case."

Q. So your commodity rates make a great deal of difference?—A. Yes.

Q. You meet the most uncertain conditions through the commodity rate?—A. Through the commodity rate.

Q. Have you a table here that explains the character of your freight?—A. No, I have not.

Q. You have nothing that shows the article of which the highest tonnage is carried?—A. We have not, but our records show that lumber, pig iron, resin, fertilizer, cotton, canned goods, grain, rails, and iron, are among the principal articles.

Q. (By Mr. C. J. HARRIS.) What do you say as to your competition with other coast lines under the control of railroads? Do you find they have an advantage over you in any way?—A. I do not think that I am sufficiently familiar with that point to answer that question. I do not now recall any such condition existing.

Q. Does not the Georgia Central own a line of steamers?—A. Yes; they run into New York, I believe.

Q. Now, how do their rates compare with yours? Does the Georgia Central Railroad give you the same rates to interior points in competition that they can give on their own line?—A. Yes; as I understand it there is no discrimination.

Q. Then they would have no advantage over you?—A. I do not see that they would; but still that is a question that probably would be better answered by a traffic man.

Q. (By Mr. FARQUHAR.) Have you a table that shows the passenger rates between the various ports?—A. I have, sir. They are as follows:

BALTIMORE AND BOSTON OR PROVIDENCE.

First-class	a \$10.00 to b \$12.50
Round trip	a 20.00 to b 22.00
Intermediate	a 9.00 to c 11.00
Intermediate excursion	a 18.00 to c 20.00
Steerage	a 8.00 to b 10.00

NORFOLK AND BOSTON OR PROVIDENCE.

First-class	a \$9.00 to b \$11.00
Round trip	a 18.00 to b 19.00
Intermediate	a 8.00 to c 10.00
Intermediate excursion	a 16.00 to c 18.00
Steerage	a 7.00 to b 9.00

a Rates Oct. 1 to May 31.

b Rates June 1 to Sept. 30.

c Intermediate rates do not apply on Boston line June 1 to Sept. 30.

First-class rates include meals and stateroom berth. Upper-deck stateroom berths on Boston Line are \$1.50 extra in each direction, June 1 to September 30. Intermediate rates include meals and berth. Steerage rates include meals and bunk.

BALTIMORE AND SAVANNAH.

First-class	\$15.00
Round trip	25.00
Intermediate	12.50
Intermediate excursion	22.00
Steerage	10.00

PHILADELPHIA AND SAVANNAH.

First-class	\$17.50
Round trip	29.00
Intermediate	15.00
Intermediate excursion	24.00
Steerage	10.00

First-class and intermediate rates include meals and stateroom berth. Steerage rates include meals and bunk.

NORFOLK, NEWPORT NEWS, AND BALTIMORE.

First-class	\$3.00
Round trip	5.00
Steerage	2.00

First-class rates include stateroom berth; meals extra. Steerage rates include bunk; meals extra.

Rates of fare given herein are subject to change without notice.

Q. (By Mr. C. J. HARRIS.) Were your vessels all built in this country?—A. Yes, sir.

Q. What do you say of your competition with the sailing vessels of the coastwise trade?—A. That at times has been very active, as I understand it, a very vigorous competitor for coastwise business.

Q. What are your advantages over the sailing vessels?—A. I suppose better service, certain service, higher-paid employees, less liability of accident, these and various other advantages, but they scarcely weigh in the balance against a lower rate, and sometimes it is necessary to meet the conditions as they exist.

Q. On very heavy commodities in large quantities, where time was not so much an object, could you compete for that trade at all?—A. That depends entirely upon the tonnage capacity and condition of the boat. Sometimes vessels running require a certain amount of ballast, and if they are light I suppose there are times when business might be carried for less money than at others. It depends entirely upon the business offering.

Q. Well, take for instance coal; you don't attempt to compete?—A. We do not attempt to carry coal, or any bulky thing of that kind.

Q. You do carry lumber, don't you?—A. Yes, I have reference to bulk in small particles; lumber we would call by the piece.

Q. (By Mr. FARQUHAR.) Many of your vessels engage in carrying fruit in the season very largely, do they not?—A. Yes, fruit and vegetables compose some portion of the cargo; more vegetables, however, than fruit, and in order to keep pace with that traffic the steamship companies find they are required to put in ventilators. It is very expensive to keep pace with the times.

Q. Are your vessels built with refrigerators? Do you not have compartment refrigerators?—A. I do not know of any refrigerating process except pantries; there may be; that is in the department of construction, and I am not fully informed on that.

Q. (By Mr. PHILLIPS.) Can the railroads compete with you in carrying fruit or vegetables from the South?—A. Well, sometimes they secure the business.

Q. Your rate of freight is generally less than the rate is by rail, is it not?—A. There is a water differential in favor of the water line. It is made necessary by the inherent condition of things. The water lines are required to carry marine insurance, which the railroad lines do not. They have very often more occasion for transfer; and the hazards of the great deep are also conditions to be taken into consideration.

Q. Do you ever make shipping rates with railroads to harmonize?—A. That would come under the traffic division. I suggest that on points of traffic perhaps

I am not a good witness. I have understood you want us to speak of things we absolutely know by actual experience, not from hearsay.

Q. (By Mr. FARQUHAR.) Is there any other topic you have there that you want to touch upon?—A. You refer here to "forms and characters of aid and subsidy to American vessels." * * * The subsidy act seems to have found its incentive in the protection of American shipping against foreign bottoms. The domestic lines suffer no encroachment from foreign bottoms, and they, so far as the Merchants and Miners' Line is concerned have not asked for or gotten any assistance in any way. I do not think that the condition exists in the coastwise trade which might be used as an argument for the subsidizing of American coastwise bottoms as against foreign bottoms.

Q. Have your people ever considered that the registered foreign-built ship could enter into the coastwise trade?—A. We have always felt that there was a policy expressed in various ways against foreign vessels taking coastwise business, whether they made a particular business of that, or whether the foreign ships touch at various ports on their voyages to receive and deliver. That is provided against in the law and zealously watched by the custom-house officials, and we think that is the safeguard for the American coastwise merchant marine, because under the plan of enrollment, entering and clearing, they can check it. It is illegal for foreign vessels to transport any business on the coast; that is, any local business on the coast.

You refer to the condition and treatment of passengers. I would state that our passengers—cabin passengers (we have no experience with immigrants)—have the same accommodations that are found in the best of hotels. As to the effect of quarantine and health laws on ocean commerce, we find that sometimes our ships are delayed by reason of quarantine, but the delay is for the general good. All of the quarantine officers are most earnest in their endeavor to make that delay as light as possible, and we have nothing to say against the laws as they are established.

As to the vessels engaged in transportation of live stock, our line carries live stock, and provision is made for watering and feeding, and for separate stalls and dunnage. Live stock is carried under contract just the same as any other freight is carried.

Q. (By Mr. CLARKE.) Your traffic is confined to the ports north of Florida, is it not?—A. It is.

Q. You have not engaged in the West India trade at all?—A. No, sir; we are strictly coastwise and have nothing to do with foreign business, and have never had any experience with it.

Q. What proportion of this coastwise traffic between the ports where your vessels trade is carried by steam vessels and what proportion by sailing vessels?—A. That being a question of traffic would be very difficult for me to answer, but I hardly think that a traffic man could give you satisfactory light on that subject. Very often business is taken without the regular liners knowing anything about it.

Q. Have you any opinion whatever concerning the relative proportions?—A. I could not have, because it would not be based upon any experience.

Q. What is the class of freight generally carried?—A. That is another question that I have had propounded to me and I confess that I have not the information at hand, but I think the company might be able to furnish it.

Q. You said something about an apparent difficulty in punishing for a theft committed within the borders of a State in the coastwise trade. If one passenger should steal from another or one member of the crew should steal from another or from a passenger, is there no way of punishing that offense as a crime through the courts?—A. I have never yet been able, after very diligent search and also conferences with the various commissioners along the coast of the United States and the district attorneys, to place my hand upon a law that could be invoked to charge anyone with a misdemeanor or crime of larceny, whether committed by a passenger or sailor or seaman *when committed within the borders of a State*. I should explain here that Revised Statutes, 5356, to which I have previously referred, includes the offense of larceny when committed by anyone on the high seas or territory over which the United States has exclusive jurisdiction and Revised Statutes, 4596, covers the offense of embezzlement and the damaging of ship, stores, or cargo wherever the act is committed, providing, however, that the act is committed by one of the ship's company.

These acts obviously omit a passenger on a vessel when the offense is committed within the border of a State, and unless the crime of larceny can be read into Revised Statutes, 4596, the members of a ship's company are not covered when the act is committed within a State.

It is true there should be a remedy in the State courts, but the location of the act is always in doubt. There is no certainty of the precise locality of the commission of the act, and if the State courts are used and the act, though committed,

is proved not to have been committed within the State the State court would have no jurisdiction and the case would be dismissed, and probably an action for false imprisonment might result.

The jurisdiction of the United States courts should be broadened so as to give them concurrent jurisdiction with the State courts over the offense of larceny when committed on shipboard within the borders of a State.

Q. There are statutes against other offenses providing for their punishment?—A. Quite full. For instance, there is a statute against embezzlement and other offenses, but I think probably the difficulty arises because of the fine distinction between statutory crimes, and probably this condition has never presented itself to our legislators.

Q. Do you mean to express the opinion, then, that if a person commits a theft on one of your vessels within the jurisdiction of a State that that person could not be prosecuted?—A. Not in the United States courts. I have found, I think, sufficient law to apprehend anyone who is engaged to the ship under a law that punishes him for damaging the freight and cargo. (R. S. 4596). That might be considered broad enough to cover the ship's company, but further than that I have not discovered any rule or law that would cover it, and would be very glad to be enlightened on that point.

Q. Would that be broad enough to cover theft of one passenger from another?—A. I think not.

Q. (By Mr. PHILLIPS.) Could the passenger not be arrested when he lands at the first port?—A. Yes, anyone, whether a member of the ship's company or a passenger, could be arrested and tried under the State laws if we could be certain that the offense was committed within the State in which the port is located, but that fact could not be ascertained until the proofs are in and the case heard. When the State courts are used there is always doubt as to the jurisdiction.

The offense of larceny, whether committed by the ship's company or by passengers, seems to be well covered on the high seas, or when committed in any place over which the United States exercises exclusive jurisdiction, but it is not covered in the United States statutes when committed within the borders of a State, leaving the only remedy in the State courts, and the precise location of the act is usually so uncertain that the State courts can not with safety be used. Another feature is, if the ship arrives at a port within a State other than that in which the act is committed, the offender can make his escape before requisition can be made from the State in which the act was committed.

Jurisdiction being delegated to the United States District Courts in admiralty matters, we might be able to find redress in that way, but I have not been able to discover a specific United States statute defining the offense of larceny as a crime and misdemeanor and providing a punishment therefor when the act is committed within a State.

Q. (By Mr. CLARKE.) Would you be willing to have such a statute recommended to Congress?—A. I think it would be quite desirable. I don't pretend to say I have made an absolutely exhaustive search, but I have endeavored to discover such a law and have been unable to do so; if it does not exist, I think it quite desirable.

Q. If you think such a statute is necessary would you be willing to formulate a draft?—A. I would be glad to submit a tentative suggestion.

Q. (By Mr. C. J. HARRIS.) Are there any other topics now that you have notes on and on which you wish to make brief remarks?—A. I have taken the pains to read very carefully the suggestion of Mr. Furuseth, secretary of the Sailors' Union, because the Merchants and Miners' Transportation Company has always been very solicitous about the condition of its employees, and I find that the ideal condition that he suggests for the amelioration of the condition of seamen, contained in his examination on page 691 of your volume on transportation, seems to be fully covered by the advanced position which we have taken with regard to seamen in our "shipping article." Mr. Furuseth reads from a law which the seamen themselves drafted to amend the laws relating to American seamen and to improve the personnel of the merchant marine, and he makes various suggestions to your commission, as follows:

(1) "We propose to abolish crimping altogether, as far as it can possibly be abolished by law." That has been abolished under our plan, because the American coastwise trade is permitted to sign their crew direct, which we do, so that there are no intermediaries—crimps, runners, and the like—coming between the company and its sailors.

(2) "We propose to increase the space in the forecastle." * * * Our boats are built, of course, under the laws and regulations, and all of those provisions

are fully complied with, and the construction does not fluctuate and change as with the caprice of individual owners of private vessels.

(3) "To give the seaman one-half of what is actually due him in every port where he loads and discharges cargo." That is a very important provision, of course. When the seaman receives his money in small and regular installments he has not as large an amount of money to spend as if it was laid up for him, and he has not the temptation to spend it before he has earned it. Our company has adopted the policy of paying seamen monthly, just the same as any other employee, and they get along with that. I presume that is contrary to the ordinary plan of shipping in the individual vessels. * * *

(4) "And to give the seaman the right to call for a survey of any vessel that he may happen to be in without the officers of the vessel taking part in the request." * * * His relief there is found in the fact that he can leave at any time if he does not want to continue. There is no requirement for him to go to sea if he does not wish to, and the company has taken a broad view that with a man who is discontented with his position it is better, perhaps, to let him go if he chooses to leave; but we have had very few grievances of any character.

Then Mr. Furuseth further says: (5) "And to establish a standard of skill and experience for those who sign as able seamen." * * * Of course, the company has its method of selecting its employees, and they are not selected at random by some chap who is interested largely in the amount of money he can make out of it. We take an immediate interest in the personnel of the ship. * * *

(6) "And to get a law providing for the standard or number of men to be carried by vessels according to their tonnage and rigging." Of course, an owner is obliged to have a vessel properly manned to be seaworthy and within the scope of their insurance policies—they are very solicitous about having the ship fully protected in that respect.

Thus, I think, we have rather anticipated the seaman's desires, and I am very happy to observe that we have done so. Outside of this I do not know that I have anything further to say.

Q. (By Mr. FARQUHAR.) What have you to say as to the prosperity of the coastwise trade, so far as your knowledge goes and the experience of your own line?—A. I doubt whether I could give a satisfactory answer to that question, because I am not familiar with the revenue feature.

Q. Have the dividends of your line been satisfactory to your stockholders and directors?—A. I think there has been no discontent in that respect. They have been pretty regular; in fact, I may say regular.

Q. Have you enlarged your stock to build new boats, or have you used your surplus to build new boats?—A. Our vessels have been built both from funds derived from increase of stock and from earnings.

Q. (Mr. C. J. HARRIS.) Has your volume of trade been on the increase, or does it stand still, or decrease?—A. I should suppose it would be on the increase, as all progressive business naturally increases with the increase of general prosperity.

Q. We want to know whether it is progressive, or whether it is retrograding, or no?—A. It is progressing, but there are so many hazards connected with the great deep that there can be no anticipation of permanent prosperity. There has been general progress with us just the same as there has been general progress in all industrial and other lines recently in this country, and we must necessarily feel the relation.

(Testimony closed.)

EXHIBIT ATTACHED TO TESTIMONY OF MR. DANIEL H. HAYNE.

BALTIMORE, MD., March 23, 1901.

To the Honorable the Members of the Industrial Commission, Washington, D. C.

SIRS: In accordance with your request, I have looked over the law in regard to larceny when committed on shipboard, and find that sections 4596 and 5356 are the statutes I had in mind when I gave my testimony before the commission. These statutes are as follows:

"R. S. 4596. Whenever any seaman who has been lawfully engaged, or any apprentice to the sea service, commits any of the following offenses, he shall be punishable as follows:

* * * * *

"Eighth. For wilfully damaging the vessel, or embezzling or wilfully damaging any of the stores or cargo, by forfeiture out of his wages of a sum equal in amount

to the loss thereby sustained, and also, at the discretion of the court, by imprisonment for not more than twelve months.

"R. S. 5356. Every person who, upon the high seas, or in any place under the exclusive jurisdiction of the United States, takes and carries away, with intent to steal or purloin, the personal goods of another, shall be punished by a fine of not more than one thousand dollars, or by imprisonment not more than one year, or by both such fine and imprisonment."

I find, in going over my testimony, I did not intend to make the assertion so broad that there was no act to apprehend an offender for larceny when committed on the high seas. The difficulty has been principally with ship's employees who were guilty of larceny, and you will see by the inclosed acts that there is no remedy in the United States district courts for an offense committed by one of the ship's crew or by a passenger when the location of the crime is within a State.

Revised Statute 5356 is broad enough to apprehend any offender in the district courts of the United States when committed on the high seas or on territory exclusively within the jurisdiction of the United States. This act would leave out both passengers and the ship's company (in which expression I mean all who are connected to the vessel by contract) when the crime was committed within the jurisdiction of a State, and the secrecy surrounding the commission of the act is such that the owners of vessels can not determine, before the proofs come out on the trial of the case, just where the act was committed, so that it is very risky to apprehend an offender under the State laws.

Of course, where the act is known to be committed on the high seas, or on territory exclusively under the jurisdiction of the United States, there can be no doubt of the remedy in the United States courts.

We have, therefore, been required to use Revised Statute 4596, which permits us to apprehend any of the ship's company for damaging the vessel, embezzling, or damaging the ship's stores and cargo. Under this act, however, we can not apprehend a passenger in the district courts, nor could we apprehend one of the ship's company under the specific charge of larceny. We might apprehend any of the ship's company under the charge of damaging the cargo.

You will realize that when a vessel arrives at a port, and immediate action is necessary to apprehend an offender, an immediate decision of where the offense was committed must be reached, for if it was not committed within the State to which we would then apply for redress, there would be a failure of jurisdiction and probably a subsequent suit for false imprisonment. Since a vessel passes through so many States, with conflicting jurisdictions, it is desirable that there be sufficient authority under the laws of the United States to apprehend the offender at once and bring his case before the United States officials before he has opportunity to escape.

With an act conferring upon the district courts jurisdiction for larceny when committed on maritime waters within a State, there would then be no doubt as to the method of procedure, under Revised Statutes 4300 to 4305, which provide for summary trial.

The procedure in the United States courts would be to have a warrant issued by a commissioner of the court, who would hold a preliminary hearing, and if the evidence was sufficient an indictment would immediately issue and the court would grant a speedy trial if the circumstances justified, and there would be such uniformity in the method of procedure for larceny on the navigable waters that the shipping community would become familiar with the methods. The same procedure would pertain at any port where the vessel touched; but under the present doubtful condition of the law they are required to subject themselves to the State laws, which, because of their difference, are confusing and uncertain.

I inclose herewith drafts of two bills, either of which would, in my opinion, be sufficient to apprehend a member of the ship's company, but if it is desired to make the matter broad enough to cover both seamen and passengers, I would recommend the adoption of Revised Statute 5356 as amended.

If it be said that the United States has no jurisdiction over these offenses when within the borders of a State, I think the answer to this is that the United States has jurisdiction, under a proper interpretation of the Constitution, to define crimes and provide for their punishment on the navigable waters of any State, so as to give the United States courts concurrent jurisdiction with the State courts over such crimes.

As I did not have the volume containing the statutes before me, I stated that there was no redress when the act of larceny was committed on the high seas, and I have taken the liberty of correcting my evidence to agree with the statutes, and also have corrected the questions to show a proper relation to the answers.

It will give me great pleasure to be of any further assistance within my power.

Very respectfully,

DANL. H. HAYNE, *General Solicitor.*

[Inclosure 1.]

AN ACT to amend section 4596 of the Revised Statutes of the United States, relating to offenses and punishments.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That subsection eight of section 4596 of the Revised Statutes of the United States be, and the same is, amended to read as follows:

Section 4596, subsection eight. For wilfully damaging the vessel, or embezzling or wilfully damaging any of the stores or cargo, or taking or carrying away with intent to steal or purloin the personal goods of another, or receiving any stolen money, goods, chattels, bonds, bill obligatory, bill of exchange, promissory note for the payment of money, bank note, paper bill of credit, certificate of any State or the United States, knowing the same to be stolen, by forfeiture out of his wages of a sum equal in amount to the loss thereby sustained, and also, at the discretion of the court, by imprisonment for not more than twelve months.

[Inclosure 2.]

AN ACT to amend section 5356 of the Revised Statutes of the United States, relating to crimes arising within the maritime and territorial jurisdiction of the United States.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 5356 of the Revised Statutes of the United States be, and the same is, amended to read as follows:

Section 5356. Every person who, upon the high seas, or in any place under the exclusive jurisdiction of the United States, or upon waters within the maritime jurisdiction of the United States, takes and carries away, with intent to steal or purloin, the personal goods of another, or receives any stolen money, goods, chattels, bonds, bill obligatory, bill of exchange, promissory note for the payment of money, bank note, paper bill of credit, certificate of any State or the United States, knowing the same to be stolen, shall be punished by a fine of not more than one thousand dollars, or by imprisonment not more than one year, or by both such fine and imprisonment.

WASHINGTON, D. C., April 6, 1901.

TESTIMONY OF M. C. MARKHAM,

Assistant traffic manager Illinois Central Railroad and the Yazoo and Mississippi Valley Railroad.

The commission met at 10.47 a. m., Mr. Farquhar presiding. At that time Mr. M. C. Markham was introduced as a witness, and, being first duly sworn, testified as follows:

Q. (By Mr. FARQUHAR.) You will give your name and address and official position to the stenographer.—A. M. C. Markham, assistant traffic manager of the Illinois Central Railroad and the Yazoo and Mississippi Valley Railroad; my address is Chicago.

Q. How long have you been connected with railroading, and especially with the Illinois Central?—A. I have been railroading since 1869—32 years—and have been with the Illinois Central 25 years.

Q. Have you any prepared statement in answer to the general inquiries in the topical plan of inquiry on the subject of transportation to present to the commission?—A. Yes; I have prepared a short statement.

Q. The commission would be pleased to hear it.—A. The witness then read as follows:

In response to the request of the honorable Industrial Commission I appear before it to give such information as is within my knowledge as to transportation on the Mississippi River, methods employed, volume of traffic, and the effects and influences of this river transportation on the railroads.

Prior to 1870 the Mississippi River and its tributaries transported the greater part of the freights and passengers to and from the States traversed by them. Since then the construction of a large railroad mileage in the Mississippi Valley has somewhat diminished the volume of traffic handled on the rivers.

In 1870 there were only 27,182 miles of railroad in 18 States of the Mississippi Valley. In 1900 there were upward of 110,000 miles of railroad in these same States, or over four times as much.

The trade records show a decreased tonnage movement by the river year by year, yet the total vessels and volume of business is still very large. A statement of the river trade compiled by the Census Bureau for 1889 showed the magnitude of the commerce conducted thereon. From this statement we find there were 7,445 vessels plying on the rivers, having a capacity of 3,393,378 tons. For that year there were transported on the rivers 10,558,894 passengers and over 81,000,000 tons of freight.

As the important trade centers situated on the Mississippi River and its tributaries, such as New Orleans, Vicksburg, Memphis, Cairo, Paducah, St. Louis, Dubuque, St. Paul, Evansville, Louisville, and Cincinnati, have for some time past been fully served by the railroads, it is natural that the latter should share in the trade formerly controlled by the river craft. As a consequence of the more expeditious movement and improved facilities afforded by the railroads, the river traffic has appreciably declined. This is shown by the decreased movement from the important trade centers situated on the river, and is further accentuated by the withdrawal or nonexistence of some of the steamboat companies which operated on the river in the eighties and earlier. There is still a large business done on the river, however, on special commodities, such as grain, flour, lumber, sugar, molasses, cotton seed, and miscellaneous freights, both to points reached by railroads and to way landings.

The barge lines are important factors in river transportation on account of the large tonnage capacity and cheapness with which they can conduct the business.

The St. Louis and Mississippi Valley Transportation Company organized a barge line early in the eighties. It represented the consolidation of 3 barge companies previously in existence. The St. Louis Merchants' Exchange Report for 1882 said of this company:

"The new organization has ample means and facilities for handling with dispatch all the business that may be doing. * * *

"In order to show how great the facilities of the transportation company alluded to are for handling the bulk grain, it can be stated that there are now in use 98 barges and 13 towboats. The capacity of a barge is from 50,000 to 60,000 bushels, and it can be loaded quickly from the spouts of the elevators. A towboat will often start from St. Louis with 4 to 6 barges attached, or, in other words, with a cargo of from 200,000 to 300,000 bushels of bulk grain, besides other kinds of freight, as these barges are so constructed that any and all kinds of freight can be carried. The consolidated line has a capacity of moving 3,000,000 bushels of grain per month."

In November, 1900, a new steel barge line, consisting of a towboat and 2 barges, went into operation between St. Louis and New Orleans. The boats are designed to draw not to exceed 9 feet of water, and great success is predicted for them. This line will, of course, meet with strong competition from the old barge line, which is still in existence. The new barge line has already made 3 trips, and the owners seem to be very confident of success, although the last trip took 54 days from St. Louis to New Orleans and back.

In 1880, the receipts of grain at New Orleans by river were 15,762,604 bushels; of cotton, 1,087,522 bales. For the same year St. Louis received and shipped by river nearly 2,000,000 tons of freight. Since then very marked changes have taken place in the commerce movement of the Mississippi Valley. Railroads have been built into the territory formerly served by the river. The gradual improvements in roadbed, equipment, and general facilities of the railroads enable them to compete more actively with the river and conduct the traffic with decreased expense.

Lines of railroad run close to the river on both sides, nearly all the way from New Orleans to St. Paul, and New Orleans to Louisville and Cincinnati. Aside from all these, there are other lines of road which detour from the river, yet connect the chief trade centers and control the traffic that was formerly taken to the river by rail and thence forwarded by boat.

The statistics of river trade are very meager, but such few as are obtainable show that the business is not increasing.

Coal received at St. Louis for the years named.

	1880.	1890.	1899.
	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>
By river	1,639,875	2,638,500	908,750
By rail	40,232,481	67,439,725	108,159,125

Tonnage received and shipped by river at St. Louis for the years named.

	1880.	1890.	1900.
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
Received.....	893,860	530,790	512,000
Forwarded.....	1,037,525	601,862	245,580

In 1881 there were received at St. Louis 356,020 tons of lumber, logs, and shingles by rafts; in 1890, 132,940 tons; and in 1900, 73,340 tons.

Tons of freight by rail received and forwarded at St. Louis for the years named.

	1880.	1890.	1900.
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
Received.....	6,096,524	9,969,291	15,375,441
Forwarded.....	2,755,680	5,270,850	9,180,300

The cotton receipts by river at New Orleans in 1880 were 64 per cent of the entire cotton receipts of that place; in 1890, 20 per cent; and in 1899, only 15 per cent, showing a large decline in the river cotton trade. The rail receipts, on the other hand, were in 1899 over 300 per cent of what they were in 1880.

Cotton receipts at New Orleans.

	1880.	1890.	1899.
	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>
By river.....	1,087,522	425,828	343,450
By rail.....	627,577	1,722,473	1,935,177

Of 734,027 barrels of flour received at New Orleans in 1899, only 71,962 were brought by river.

Of 37,479,500 bushels of grain received the same year, only 2,754,928 were brought by river.

In 1884, New Orleans received by rail 1,135,272 tons of all kinds of freight; in 1900, 4,312,600 tons, or nearly four times more.

In the trade issue of The New Orleans Times-Democrat of September last the river situation was summed up by Captain Drown, the traffic manager of a steamboat line operating from New Orleans north, as follows:

"Some years ago regular lines of large, fine steamboats plied on fixed schedules between New Orleans, St. Louis, Cincinnati, Louisville, Memphis, Vicksburg, and the lower river. This also applies to the tributary streams in Louisiana, Mississippi, and Arkansas. As the railroads opened, the patronage transferred by the shippers from the river boats to the rail lines began to have serious effect on the boats by a decided reduction in their revenue from passenger travel and freight shipments. * * * So much business was diverted from the river to rail by shippers that as the boat lines would lose a boat or one would for any reason go out of commission, the prospects for profits in building new craft were so uncertain that there was no inducement for the boatmen to replenish their fleets and keep up their trades."

However this may be, the same trade issue of the Times-Democrat shows 207 vessels belonging to the port of New Orleans, which were in service on the river and lake in July, 1900.

The St. Louis Trade and Commerce Report for 1900 shows 6 steamboat companies with 24 steamers plying between that place and other ports north and south, besides 64 independent packets and towboats.

At Memphis there is the Memphis and Cincinnati Packet Company, the Memphis and Arkansas City Packet Company, and the Lee Line of steamers running north and south therefrom.

There were 29 steamers engaged in freight and passenger business in 1899 between Cincinnati and other ports, representing a tonnage of 16,311 tons.

Notwithstanding the decline which of late years may have taken place in the river commerce, the Mississippi and its tributaries are now, as in the past, a potent factor in diminishing railroad rates and revenues. Nor must it be thought that their influence in this respect has been or is confined only to the traffic which moves between the trade centers situated on the river. The complexities and necessities which confront the railroads in rate making are such as to make this river influence almost continuous with the Rocky Mountains on the one side and the Atlantic Ocean on the other.

The recognized principle for rate construction, deduced from long, practical experience, born of strife, competition, and rate wars between rail carriers, the demands of rival markets and commercial necessities of trade centers has rendered it imperative that certain fixed relations shall be established in railroad rates to common points of destination from various points of origin.

For instance: The river, as can be readily understood, makes the rates from St. Louis to Memphis or New Orleans. The railroads running between those points, to get a share of the traffic, must necessarily offer rates approximating those made by the river craft. Chicago is not situated on the river, but it would be placed at a disadvantage as regards the Memphis or New Orleans trade if it were not put upon a relatively fair rate plane with St. Louis. A railroad company having a line running from Chicago to Memphis, or from Chicago to New Orleans may have no interest whatever in St. Louis industries, and, for this reason, might be very glad to give Chicago such rates as would enable it to compete with them. By so doing, the Chicago railroad builds up the enterprises of the town it is interested in and reaps the benefit of getting an increased traffic therefrom.

There are many outlying towns of importance contiguous to Chicago. These also have their merchants and manufacturers who are seeking markets for their wares. Demands will be made upon the railroads which serve these outlying towns for such favorable rates as will enable them to market their products as against Chicago or St. Louis. It may be to the best interest of one or more of the railroads that these demands be complied with. Rival industries and manufacturing cities farther removed, that would be affected in the sale of their products by the favorable rates given the others, would follow in making like demands upon the particular railroads which they support, with the result that relief would at once forthcome.

Then, too, railroads running from other towns situated on the rivers, such as Cairo, Paducah, Evansville, Louisville, and Cincinnati, are obliged to make rates to river points approximating those made by the boats; and inland towns, whose trade may be affected by these, make claims on the railroads which serve them for such an adjustment of their rates as will equalize their disadvantages. Thus the demand would spread, step by step, until almost the entire northern country had partaken in a measure of the low rates made necessary in the first instance by the river influence.

Nor is this all, for, taking the converse of the situation described, the rail carriers are confronted with a condition that abridges their power to uphold rates to and from the inland towns of the Southern States fully as much as in the Northern States.

Mobile is situated on the Gulf of Mexico, 140 miles east of the Mississippi River. It has railroads reaching it which have no interest in New Orleans or its commercial growth. Its merchants and manufacturers compete for trade with those of New Orleans at common markets. The representatives of the railroads running from St. Louis to Mobile say: "While we have not the competition of the river to force a reduction of the rates to Mobile, we have the fact before us that New Orleans gets low rates by river and by rail. Therefore, to enable our merchants and manufacturers to compete in common markets with the New Orleans merchants, and thereby give our roads traffic for transportation, we will be obliged to make the same rates from St. Louis to Mobile as are made by the river lines or the railroads from St. Louis to New Orleans."

Montgomery and Selma, trade centers on the Alabama River, 180 miles north-east of Mobile, compete for business in common territory with Mobile and New Orleans. They are favored with river transportation from Mobile many months in the year. Their rates, therefore, from the North can be no greater than the Mobile rates plus these low Alabama River rates. The railroads reaching Montgomery and Selma, having no interest in Mobile or New Orleans, are desirous of getting all the traffic they possibly can to and from Montgomery and Selma. This can only be done by putting them on a fair plane respecting rates with Mobile and New Orleans.

We next come to Meridian and Jackson, Miss.; Birmingham, Talladega, Gadsden, Ala., and Chattanooga, Tenn., on one side; Columbus, Rome, Atlanta, Athens, Macon, Augusta, Ga., and other towns of importance, on the other side,

all claiming from the railroads which serve them to be put on such a plane respecting rates as will enable them to do business in common territory as against New Orleans, Mobile, Montgomery, Selma, and one another.

In the same way, Galveston, 360 miles west of New Orleans, has no river advantages, but the railroads serving that city, having no interest in New Orleans deem it proper to put it on a plane whereby the Northern products can be exported therefrom and its merchants and manufacturers be enabled to compete in Northern common markets with those of New Orleans. This arrangement affects outlying and intermediate towns between Galveston and the Missouri River, and Galveston and the Mississippi River north of Vicksburg, all of which must have merited attention.

It is in this way that specific rate differentials are established between trade centers interested in effecting sales of their products in common territory. By these means, industrial enterprises, remote from the river, are enabled to trade at business centers situated on the river in competition with those on the river; and, further, inland towns, remote from the river, are enabled to interchange trade between each other at much more favorable rates than the roads would be justified in making if the river influence did not exist.

These river rates also affect the rail rates East and West, as well as those North and South. Take grain, for instance, from the Missouri River trade center, Kansas City, to New York: the rates that would apply on such traffic would have to approximate the rates from Kansas City to St. Louis plus the low barge rate from St. Louis to New Orleans. This latter was as low as 4 cents per bushel the past year. Whatever rate is made from Kansas City to the Atlantic seaboard must be made also from the other Missouri River gateways, such as St. Joseph, Leavenworth, Nebraska City, and Omaha, or else all the grain west of the Missouri River would be funneled through Kansas City.

Some of the lines traversing Missouri and Iowa have no interest in St. Louis, and to get the most remunerative haul on the traffic, are desirous of taking it through to Chicago or other Illinois junctions to be transferred to the Atlantic Seaboard lines.

The rates on traffic east of the Toronto-Buffalo-Pittsburg line, destined to the Southern States, may be affected by the ocean carriers to and from North Atlantic and Southern ports. Railroads running into the Southern States by the Virginia gateways have to measure their rates by these if they should prove to be lower than those made by the influence of the Mississippi River.

The Great Lakes, the St. Lawrence River, and the Erie Canal virtually dominate the rail-carriers' rates on traffic interchanged between the Eastern and Western States in a somewhat similar manner as the Mississippi River does traffic North and South. The rail rates are first adjusted between Chicago and New York in competition with those established by the lake and canal. Philadelphia, Baltimore, Newport News, and Norfolk make claims for less rates by reason of less distance than New York and not having as good facilities to export traffic. After much strife and destructive rate wars these claims have been allowed.

Inland towns, remote from the lakes, in Pennsylvania, Ohio, Indiana, Michigan, and Illinois, take proportionate rates with those from Chicago as their distance is greater or less than that of Chicago. This virtually means that every point in the States named enjoys the full benefit of the lake and canal competition on seaboard business. On transcontinental traffic, or that beyond the Rocky Mountains, the Atlantic and Pacific oceans have for a long time governed the rates. Rates by rail from New York to San Francisco are measured by those made by ocean steamers via the Isthmus to San Francisco. By reason of the competition of manufacturers and merchants and commercial communities between the Atlantic seaboard and the Missouri River, the Western railroads have been compelled to make the same rates to the Pacific coast from all the inland territory as are made from New York.

We might go further and say that the rates which the American railroads make from the Pacific coast points to the Atlantic seaboard on the silks and teas and other goods from China, India, and Japan are governed by the rates made via the Indian Ocean, Suez Canal, and Atlantic Ocean.

The same may be said of our cotton and cotton goods from the Southern and New England States to China, India, and Japan.

The whole question of railroad rates can be summed up in the remark that the power of the railroads to enforce any given rates is circumscribed by the water carriers, and the maximum they can charge is prescribed by the rivers, lake, and ocean carriers.

The reductions, however, in rates which the railroads are obliged to make are not at all times confined to figures forced upon them by the water carriers. Competition between railroads themselves, the necessities of trade, demands of rival

towns, and other influences have an effect in reducing the rate basis below the figures made necessary by water competition; but, as before stated, the maximum rates they can charge are governed entirely by the transportation charges made by the rivers, lake, and ocean carriers.

It is owing largely to these reasons that rates in general have been constantly on the decline. In 1868 the lake and canal rate on wheat, Chicago to New York, was 22.79 cents per bushel; in 1899, 5.65 cents. The all-rail rate in 1868 was 42.6 cents, and in 1899, 10.23 cents. In 1882 the rate on grain, St. Louis to New Orleans, by barge, was 7.5 cents per bushel; in 1900 it was 4 cents.

The average rate per ton per mile on the Illinois Central Railroad in 1873 was 2.20 cents; in 1900 it was 6.5 mills, or less than 30 per cent of what it was 27 years before.

In 1899 the average rate per ton per mile of all United States railroads was seventy-two one-hundredths cent; in 1882, 17 years before, it was 1.23 cents, or 71 per cent higher.

A comparison of the rates charged on American and foreign railways in 1892 produced the following results:

	For passengers per mile	For freight per ton per mile.
	Cents.	Cents.
United States.....	2.14	0.97
Prussia.....	2.90	1.32
Austria.....	3.05	1.50
France.....	3.36	1.59
Belgium.....	2.25	1.39

The American freight rates show by last report at hand that they are now over 25 per cent less than above figure and that the passenger rate per mile is 2.002 cents.

The English railway reports do not give the rate per ton per mile, but a publication by J. S. Jeans, of London, entitled "Railroad Problems" has this to say of English railway rates:

"English railways practically work on the same tariffs to-day they did in the infancy of the system," and "it is probable that the average ton-mile rate on English railways will not be much if any, under 14d. (3 cents), which is just three times the amount charged on the principal American lines."

Three cents per ton per mile is more than four times the rates of the American roads to-day.

The published all-rail rate of freight on grain from St. Louis to New York in 1881 was 32 cents per 100 pounds. In 1897 it was 17½ cents on corn for export. The actual rate was many times as low as 12 cents.

The New York Produce Exchange Report shows freight rates on wheat, Chicago to New York, as follows:

	Lake and canal.	Lake and rail.	All rail.
	Cts. per bu.	Cts. per bu.	Cts. per bu.
1868.....	22.79	29	42.6
1878.....	9.15	11.4	17.7
1888.....	5.93	11	14.5
1899.....	5.65	6.63	11.13
1900.....			10.23

¹ Export.

Grain rates by barge.

	St. Louis to New Orleans.
	Cts. per bu.
1882.....	5.5 to 7.5
1900.....	4

The St. Louis Trade and Commerce Reports show rates of freight by river from St. Louis to Memphis, Vicksburg, New Orleans, and way points for the years named:

	Memphis.	Vicksburg.	New Orleans.
Sack grain per 100 pounds:	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
1880.....	12½ to 17½	20 to 30	20 to 25
1900.....			10
Flour and meal per barrel:			
1880.....	25 to 45	40 to 60	30 to 50
1900.....			20
Pork per barrel:			
1880.....	30 to 60	60 to 90	45 to 75
1900.....			30
Meats per 100 pounds:			
1880.....	12.5 to 20	20 to 30	15 to 25
1900.....			10
Hay per 100 pounds:			
1880.....	17.5 to 25	25 to 35	20 to 30
1900.....			12.5 to 15

ALL-RAIL RATES OF FREIGHT FROM ST. LOUIS TO SOUTHERN CITIES.

	<i>Cents</i>	<i>Cents.</i>	<i>Cent</i>
Flour per barrel:			
1882.....	45	65	
1900.....	20	34	
Pork.....			
1882.....	75	115	115
1900.....	55	82	82
Sack grain per 100 pounds:			
1882.....	25	33	33
1900.....	12	20	20
Meats:			
1882.....	25	35	35
1900.....	18	30	30
Hay:			
1882.....	25	33	33
1900.....	12	20	20

The changes in these rates, as shown, represent the action and counteraction of the river and the railroads. As before stated, the rates from other river points and interior points were influenced and affected by these reductions.

All that would now seem wanting to fully complete the Mississippi River as a vigorous and active competitor of the railways and to secure to the producers of the entire Mississippi Valley low rates for all time is a sufficient depth of water at the mouth of the river to float ships of 15,000 or 20,000 tons. If this deep water were attained, ships would be enabled to carry larger cargoes, and, as a consequence, could afford to materially reduce freight rates to foreign countries on the valley productions.

We export per annum over 2,000,000,000 pounds of provisions, 500,000,000 bushels of breadstuffs, and 7,000,000 bales of cotton. Notwithstanding the greater part of these products is raised in territory much nearer the Gulf ports than to the Atlantic ports, yet only a small percentage of them find an outlet via the Gulf ports. If larger ships could enter the Gulf ports, the ocean freight rates would be so cheapened as to permit a full share of these exports to seek those outlets. The competition that would arise from this between the railroads running to the Atlantic seaboard and those running to the Southern ports would of itself have a tendency to reduce the transportation charges millions of dollars yearly. A reduction of rates of 2 cents per 100 pounds on the export quantity of the three commodities named would amount to a saving to the producers of \$6,900,000 yearly. Any one conversant with the competitive action of railroads would not, under the new conditions which would then obtain, consider a reduction of 2 cents per hundred pounds excessive. Nor would this be all. The rates on the shipments for domestic use would be largely influenced by the reduced export rates.

It would therefore seem that a yearly expenditure sufficient to insure deep water in the mouth of the Mississippi River would be repaid more than tenfold in the benefit to the producing community that would inure therefrom.

Q. (By Mr. LITCHMAN.) You gave some statistics in relation to the decrease in the transportation of lumber to and from St. Louis, and your remarks lead me to ask whether or not the depletion of the forests in the territory tributary to the

Mississippi River has had any effect on that decrease in the shipment of lumber?—A. Yes; it has. But the decrease is largely accounted for by the doing away with the middleman. Twenty years ago Chicago was a very large lumber market. The lumber came down by ship from northern Michigan and Wisconsin and was handled in Chicago and sent out by the railroads to Illinois, Iowa, Missouri, and all through the Western prairies. To-day there is some lumber coming out, but the railroads have built into the lumber regions and the cars are loaded at the sawmills and go through to their destination, doing away with the Chicago middleman. And that seems to be the tendency in every trade.

Q. Has there been any effect from the development of the lumber industry in the South?—A. Yes. The receipts of lumber from the South to-day in Chicago are as large as the shipments of Northern pine, whereas 20 years ago there was scarcely a car of Southern pine to be found there.

Q. Do not these shipments seek other outlets as well as St. Louis? Are not shipments made at other places than St. Louis?—A. Northern Minnesota, Dubuque, Clinton, Iowa—all those points on the river have the lumber rafted down from the Wisconsin rivers in the same way that St. Louis had in the olden days.

Q. A proper analysis of your figures ought to take into consideration whatever modification there is by reason of these facts you have just stated?—A. I merely gave those facts with reference to the lumber. I did not include them in the general statement of tonnage. I gave them by themselves because it would not be fair, I suppose, to attribute the decrease entirely to the railroads.

Q. Would the same influences that would tend to decrease the river shipments of lumber also tend to decrease the shipments of the same material by railroad?—A. No; the shipments by rail would be decreased in the same way that the river shipments would be by the depletion of the forests; but the railroads might be increased by taking away from the river and going direct from the forest to the consumer.

Q. (By Mr. CLARKE.) I would like to inquire if the railroad companies have any interest in the new steel barge lines on the rivers?—A. None that I know of. Of course we are looking with a great deal of interest on this new barge line. That is the reason why I happen to know it was 54 days making the trip. We do not care about it being very much of a success.

Q. Suppose some important railroad interest acquired control of those lines, suppose, for instance, an Atlantic seaboard line acquired control of those barge lines, how would that acquisition be likely to affect the traffic of the Illinois Central Railroad, north and south?—A. That could be answered in two ways. If an Atlantic seaboard line controlled the barge lines, it might possibly advance rates on the barge line to such a degree as would make it more remunerative for the Illinois Central to haul grain by rail. But the very fact that the Illinois Central would haul the grain by rail would be a detriment to those Atlantic seaboard lines, because the Illinois Central is in competition for the grain business of Illinois, of Iowa, Missouri, and Nebraska.

Q. Take the converse of the proposition. Suppose the Illinois Central got control of those barge lines, how would that be likely to affect the traffic on the river and on the roads paralleling the river and on the Atlantic seaboard lines?—A. I suppose I can answer that by telling you what it is that influences our rates to-day. It is the rates of the Atlantic seaboard lines more than it is the river. The river comes in from time to time, but we are always obliged to meet these Atlantic seaboard lines traversing Illinois and running to the river. There are so many of them it is very hard to keep track of them and know what rates they are making.

Q. Let us carry this question a step farther. Suppose these Atlantic seaboard lines become practically operated under one policy and community of interest if not a consolidation. What effect will that be likely to have upon the course of business and on the roads?—A. A very salutary effect upon the course of business, and possibly a salutary effect upon the roads, but not such a good effect upon the rates as upon the business of the entire community, and for this reason: The trouble with the rates to-day is not in diminishing the revenues of the railways so much as it is in wiping out or exterminating business men of all kinds excepting the large enterprises that have large volumes of freight to offer and get inducements. The railroads are as much against that as they possibly can be. With these combines that you speak of bringing a number of roads under one management, as it were, or under one given policy, the first thing that would be done would be to give everyone equal rates. The small dealer and the small manufacturer could live then as well as the large one. That is the way it strikes me. The benefit to the railroads, to be sure, would come from the fact that they would not be obliged to make these reductions in rates that they are now obliged to make

by the action of some unscrupulous lines, which are not as good physically as their own and which can not get the business at the same rates; but they are there, and they have got to have the business at some rate.

Q. Suppose there should be a community of interest between the Atlantic seaboard lines and the Gulf lines, both water and rail, how might that affect some of those cities on the Gulf and on the Atlantic coast?—A. I am glad you brought that point up, because I think I would have overlooked it. It is something I have thought of. From what I say in this paper with reference to this competition of merchants and manufacturers in trade centers, I think that it would be impossible for any railroad to-day to withstand the reasonable, what I might term the legitimate, demands of any town or any community to which it runs. Of course we can not say that it would not have the power to do so, but I know that the practice is entirely different from anything of that kind. The interests of the railroad and the community are mutual but apart from that fact, if the demand is to be put upon a relatively fair plane, so that the community or the trade center will be able to do business in competition with some other trade center, it seems to me the railroad traffic officer can not resist it. Thirty years ago, in accordance with instructions received from the general freight agent of the railroad with which I was then connected, I billed a particular kind of freight, openly, at 15 cents per one hundred pounds between two given points, for one shipper and, at the same time, at 25 cents per hundred pounds for other shippers. The respective shippers knew this was being done, but I do not remember that any objections were made. It seemed to be all right then, as the party who received the lower rate shipped a hundred times larger volume than the others. I can not imagine such a thing happening to-day under any circumstances. Since then there has been a change in the way of thinking about such matters and a radical change in the way of action.

There is not a merchant who comes into a railroad traffic manager's office to day and lays down a proposition which is reasonable and logical that will not receive attention nor simply because he has the power will the traffic manager resist it. Under the conditions of the situation he can not go against what is logically right. I do not know of a railroad man whose mind runs in any other direction. I know they are charged sometimes with being arbitrary, but I speak from my experience when I say they want to be fair. I meet them all nearly every week.

Q. Then it is your belief that if the railroads can become emancipated from the slavery of ruinous cutthroat competition they will necessarily be operated upon strict business principles?—A. I have no reason to think otherwise.

Q. Suppose there is a pull from competing cities in opposite directions. To make the case concrete, take New Orleans and Boston, both export cities of grain. Assuming that the mouth of the Mississippi is deepened, as you suggest, so that the vessels of deeper draft can trade there, how would that competition be likely to affect the present grain export business of Boston?—A. It would possibly take from Boston a share of the business that it is now doing also from New York and from some of the other Atlantic ports; possibly also from Montreal. But it could not do it unless there were cheaper rates than now exist.

Q. You think, then, the present rates are rather favorable to the Eastern cities?—A. They are, by reason of the fact that the ocean carriage from the Eastern cities to European points is less than it is from the Gulf ports, made so largely by the fact that not as large ships can enter the Gulf ports as can enter the Eastern ports.

Q. Then the matter of time has something to do with it?—A. It takes possibly 50 per cent more time from the Gulf ports.

Q. Is there a considerable development of the coal industry in the Mississippi Valley as a result of the building of lines to the Gulf?—A. No; there is no export. The only development is the consumption of the towns. I think there has been very little export; possibly a little from Pensacola to the West Indies, or from Mobile. There has been none from New Orleans.

Q. A few years ago the president of the Mexican Central Railway told me that the people of Mexico imported coal from Cardiff, Wales, to Vera Cruz more cheaply than they could buy Southern coal hundreds of miles nearer, simply for the want of good rail connections between the Southern coal mines and the Gulf ports.—A. How long ago was that?

Q. Five or six years ago.—A. Well, since then there have been great improvements made. In fact, in the last 10 years there have been great improvements made in the physical conditions of railroads—the ballasting of tracks, cutting down of grades, widening of embankments, and by putting down heavier rails and adding larger and more powerful engines and larger cars—so that the cost per unit of traffic has been greatly decreased. You can readily understand that if an engine can haul 25 cars, and by cutting down grades and adding larger engines and larger

cars it can haul, say, 300 or 400 tons more, the cost of carrying this extra tonnage would be comparatively little. What the railroads can do now is entirely different, particularly the Southern roads, from what they could do 10 years ago.

Q. (By Mr. RIPLEY.) You have spoken of the competition of water routes as if it compelled a rate, we will say from Chicago or St. Louis, to a great number of points in the South. By that do you mean to imply that there are steamship lines actually plying by the Southern rivers to Montgomery, Macon, and other points? Is any large amount of traffic actually carried down the Mississippi and then up these different rivers?—A. I think there is not at the present time. It is a fact, as I have heard it said by traffic gentlemen at some of our meetings, that in the springtime, from year to year, boats do run from Mobile to Montgomery, but I was in hopes I had made it understood by my paper that, irrespective of the Alabama River being in operation from Mobile to Montgomery, the trade conditions of Montgomery are of such a character, inasmuch as the merchants were competing in common territory with New Orleans and Mobile, that Montgomery and Selma would have to get such rates as to put them on a plane with New Orleans and Mobile on account of the low rates to these points.

Q. It is not, then, the competition of routes up these rivers which determines the low rates, but competition between trade centers?—A. I think the competition of the rivers made the rates in the first place, and the differentials established at that time obtain to a large extent now. The trade centers are one influence, but there are a great many influences that make a proposition. For instance, a proposition is made at a traffic meeting by the representative of some one line for a lower rate than exists on some particular commodity from some given point on his line to a common trade center, which may also be on his line. The commercial conditions prevailing may necessitate this change in the rate. A representative of another rail line may immediately announce that if the reduction is made he will be obliged to make a corresponding reduction from a point on his line, probably a hundred or more miles away, to enable his patrons to market like commodities at the common trade center. This may be followed by propositions from representatives of half a dozen more lines, all claiming reductions to meet the new change. Various influences here insert themselves, and, after hours, and perhaps days, of contentious argument, a compromise is effected on the basis of establishing certain fixed differentials between the various shipping places and the common trade center. The result obtained supposedly enables all the lines having an interest in the business to do a fair share of it in the common territory.

Q. Is it not true that the defense set up before the Interstate Commerce Commission and the United States courts for the low rates granted to these important Southern cities has been that water competition existed?—A. I think that is true, but you understand that while there may be no competition to-day—that is to say, while there may be no business taken to-day—if the railroads were to put rates up to what you might call normal rail rates, to-morrow or the next day a boat would be in there.

Q. Suppose a boat line were started on one of those rivers, what would be the attitude of the railroads?—A. They would probably meet the rates for the time being. They do not want to see their trade taken away.

Q. Wouldn't they endeavor to crush out that competition?—A. I do not know as there is that feeling, a desire to crush out. They would protect themselves the same as they would from a rival railroad, feeling that they would not want their patrons to go to another carrier.

Q. The point I wish to make is this: Is it justifiable to assert that the rates are made by water competition when, as a matter of fact, that water competition does not exist, because the railroads have either killed it out or have power to kill it out?—A. I would answer that question by saying that railroad rates rarely ever go up, strange as it may seem to the outside public, who believe they do.

Q. You mean they do not directly advance?—A. Directly advance. This is shown from reports and from the united experience of the roads. There may be in some cases possibly a change of classification of some particular things, but I do not know when such changes have taken place.

Q. Is it not possible to advance rates by changing the classification?—A. It is.

Q. And that has been done?—A. That has been done. It was done in the East last summer, but there were also reductions made.

Q. Your statement, then, should be qualified?—A. Yes; to that extent; but when the rates have been established in the first place by this water competition they are not afterwards easily advanced. The merchants and manufacturers adjust their prices and their business operations to them, and the railroads merchants, and manufacturers of interior towns adjust their prices to these, so that afterwards, if the water competition is eliminated, it is not an easy task to advance the rail rates without a general disturbance of fixed conditions throughout a large territory. Railroads are reluctant to disturb conditions of long standing and possibly bring

upon themselves a censorious public opinion. I do not say that an advance could not be made, but I know of no case where rates have been put back to what they were formerly, or to a higher basis, simply because of the destruction of water competition.

Another reason why the rates are not advanced when this competition is eliminated may be the traffic officer has occasion to express views on these competitive rates from time to time, measures other competitive rates by them, and from long association and working traffic under them for years they finally, perhaps, become crystallized in his mind as proper figures for the traffic to which they apply. He could not readily disassociate his mind of the idea that as business was for a long period worked under such rates and the correlated conditions adjusted to them, they should still prevail when that which first enforced them no longer exists.

Q. The classification committee not controlled entirely by his road introduces changes over which he had no control?—A. Yes, but the changes can not be made on his line without his assent. When you speak of this classification having been advanced, it might be in this way: There are probably 6,000 or 7,000 articles in the classification, and they are rated, say, from 1 to 6. There are a great many articles shipped that will not come within the line of any of those classes, from 1 to 6; that is, commercially they can not stand the rates charged in the classes. They are, therefore, taken out of the classification, and are given what are called commodity rates. Those commodity rates are special rates to meet the situation, to enable those commodities to be shipped. They could not be shipped if they were charged the rates of the class to which they belong. Now, in this change in classification you speak of, the advance was by reason of the advance in price of a great many of these commodities. The railroads found that they could be relegated back to the class to which they originally belonged. That is where advances were made; at the same time there were reductions made.

Q. Can you specify any such changes made in the Southern classification?—A. That was chiefly in the official classification, and we do not use that in the West.

Q. In which classification is your road?—A. The Western classification and also the Southern.

Q. Coming back again to competition, you have spoken of the possible competition of river lines, which, however, does not exist in all cases. You acknowledge that condition, do you not, that on many of these rivers steamers are not operating at the present time?—A. Yes; but the rates which were charged at the time they were operating still govern.

Q. And you acknowledge that if steamship lines were started on those rivers the roads would, as a business proposition, have to protect themselves?—A. Yes.

Q. (By Mr. FARQUHAR.) Are there any lines that you know of on Southern rivers outside of the Mississippi and its tributaries, such as the Warrior, the Chattahoochee, etc., connecting different cities with one another?—A. The Tennessee and the Cumberland have boats running at the present time, also the Arkansas River and the Red River, I understand.

Q. (By Mr. RIPLEY.) We are referring to the rivers on the Atlantic and Gulf coasts, are there any lines regularly plying on those rivers?—A. I do not know of any; I am not in a position to know, as we have no lines east of Mobile.

Q. If you were compelled to transact all your business at the per-ton rate which you charge on your through shipment to New Orleans, could the road remain solvent?—A. No, sir. Do you mean by that that if we were to make all the rates on an average rate?

Q. If you were to make all rates on average rates, could you? Is it not true that the railroads recoup the loss on very cheaply constructed through business on the high local rates? I would like to have you explain.—A. I would like to qualify my previous statement if I conveyed the idea to you that if we carried all business at an average rate the railroad could not be operated. I was wrong there, because, if we hauled all freight at an average rate, we could get just as much money as we are getting now. The railroads would be very glad to get the average rate on everything, but the trouble is we can not get an average rate for a car of coal, for a car of lumber, nor for a car of grain. A great many of those staple commodities we can not get an average rate for, we can get an average rate for a car of merchandise. Now, your other question was with regard to—

Q. (Interrupting.) Distances; that is to say, is it not true that on the lines which operate parallel to the Mississippi the rates from the local points away from the river are very much higher than the rates from points farther distant from New Orleans, which, however, are not subject to river competition?—A. The rates from points remote from the river are higher than the rates to points on the river, necessarily. The railroads, I think, could not successfully operate their roads, particularly the Southern roads, if all rates were reduced to the basis of the rates made necessary by river competition.

Q. In other words, you are able to meet river competition at river points by making up what you lose on that traffic on increased local rates? Is that not true?—A. No; it is the old question over again. I would say it this way. The railroads at the interior points have given rates that, with the best knowledge they can bring to bear on them, are reasonable rates. Such rates enable the towns and communities to which they are offered to do business in certain territory. The railroads then come to the river. They find the situation at the river such that they can get traffic only by making a certain rate. The rate which it may be necessary to make at the river may be very low—it may be half the rate; it may be one-third of a reasonable rate for interior points—but it does not necessarily follow that by making that rate the road is losing money, which it has to recoup from the other points. A rate that will enable a railroad to add to its receipts more than to its expenses will not cause a loss of money in the sense that I understand you to use in putting the question.

Q. By losing money I mean pay all its interest on its bonded indebtedness and dividends upon a fair return of capital invested in the stock.—A. Yes; that is so; a road can not pay all fair returns on such rates, but it can add to its receipts more than to its expenses, and by reason of that fact it is enabled to give interior points better rates than it could otherwise give.

Q. In other words, this local discrimination helps, does it not, the local point as well as the competitive?—A. At the competitive point—the railroad is obliged to take the goods at the rates offered or relinquish them. By taking the goods at such rates it makes a little profit. It does not make all the profit that is necessary, but by reason of the fact that it makes a little profit, it is just so much better able to give rates to those who have not these geographical advantages.

Q. Are the steamships between Memphis and New Orleans, we will say, able to make up on higher local rates at river points for what they lose on competitive Memphis business where the railroad touches the river in the same way that the railroad is able to make up by increased local charges? To be specific, I find in the Interstate Commerce Reports, volume 8, page 121, a case involving cotton rates from Memphis to New Orleans, and the statement there made is that the rate from Memphis to New Orleans per hundred pounds of cotton is 17 cents through Holly Springs, while Holly Springs, being 45 miles nearer to New Orleans, has to pay 40 cents a hundred pounds. My question is this: Is not the railroad at an advantage over the steamship line by being able to charge those higher rates at local points, an advantage which the steamship companies do not enjoy, because there are no local points on which they can charge 40 cents in order to meet the loss of the partially lessened profit at the Memphis point, where the rate is 17 cents?—A. I think that at the way landings—such places as are not situated on the railroads—the rates are much higher than they are at points like Vicksburg and New Orleans, and that the steamboats do charge more. I would like to say in connection with the Holly Springs rate that Holly Springs, by being within 45 miles of the river, gets the advantage of the river rate of 17 cents by the river. All that the Holly Springs rate can be to New Orleans is the 17-cent rate plus the rate from Memphis to Holly Springs, and if Holly Springs were not so near the river the railroads, instead of charging 40 cents, would be obliged, and from the revenues and the interests paid by the Southern railroads would be justified, in charging more than 40 cents. So far as the Southern roads are concerned, the last report of the Interstate Commerce Commission shows that while the roads south of the Potomac and the Ohio rivers and east of the Mississippi River have 17 per cent of the mileage, their earnings have been only 12.5 per cent and that—I have the figures exact—they only paid 6 per cent of the entire dividends paid by all the railroads of the United States, where their share ought to be 17 per cent. They had some \$782,000,000 capital and bonds upon which nothing was paid.

Q. Understand me, I am not criticising this practice at all. It seems to be a necessity of the business, but a witness before this commission, who represented the steamship companies, has testified that, as a matter of fact, in the competition between waterways and railroads it was not the waterway which made the rate, but the railroad. In other words, that the Illinois Central makes the rate which the steamers have got to meet, rather than that the steamer makes the rates which restricts charges of the Illinois Central.—A. I have no doubt that is so eventually. It must be so. As I stated, the present rates are the result of action and counter-action on the part of the steamboats and the railroads.

Q. He testified that it is the steamship companies that suffer by competition rather than the railroad which was underbid. He testified that from the local points—we will say between Memphis and New Orleans—on the river that there was no way of recouping by higher rates; that nobody could expect that at any point, and that consequently to a point two-thirds the way up to New Orleans from Memphis the rate would be approximately two thirds of that Memphis rate—17 cents;

so that the steamer company is getting from a point two-thirds the way from Memphis two-thirds of 17 cents, whereas the Illinois Central from a point within the line is getting 40 cents, and that consequently the railroad has a great advantage over the steamship company, and that it is the railroads which have driven the steamers out of existence.—A. I do not understand the steamboats would charge two-thirds of the rate to a point simply because it was two-thirds of the distance. They generally have a blanket rate, and while the rate is 17 cents from Memphis, where they could load boats, down farther, they charge \$1 a bale, which would be 20 cents a hundred.

Q. (By Mr. FARQUHAR.) Can you give the difference in your operating expenses from Chicago to Cairo and from Cairo to New Orleans?—A. That is not a part of my business; I do not think the accounts are kept. There is no division of the operating expense.

Q. Have you any idea what the difference in the volume of traffic is?—A. I made a statement some years ago before the Interstate Commission, and I think I showed that on Northern lines—the lines north of Cairo—the ton miles to the miles of line were four times North what they were South.

Q. (By Mr. RIPLEY.) You have spoken at length of the great decrease in freight rates in the last 30 years. Your statistics, however, almost entirely dealt with through rates, did they not?—A. The statistics dealt with through rates, but the statement that I have given here includes all rates—that is, the rate per ton per mile.

Q. Would you be willing to say that there has been a corresponding reduction of local rates upon the railroads of the United States as a whole of which you have any knowledge?—A. No. I do not think there would be a corresponding reduction.

Q. Has there been any reduction?—A. Oh, yes; from time to time.

Q. On the Illinois Central, with which you are familiar, can you state any specific instance in which local rates are less than they were 20 years ago?—A. Yes; our rates on cotton have been revised, I think, two or three times, and there were reductions in merchandise on Southern lines. The rates in Iowa and other States have been revised.

Q. And these have involved a substantial reduction of the local rates to which we refer specifically?—A. Yes, because they have distance tariffs on all classes of commodities in various States.

Q. The point I wish to inquire about is this: Does not that excessive reduction of through rates to which you refer entail a burden on the railroads? Are they not doing business at less than they could afford to do that same business were they not able to make some added profit from local rates; that is to say, including the interest on the capital invested? Do I make the question clear?—A. If the railroads did not take this competitive business at these low rates they would lose so much revenue: for instance, say it was 10 cents a hundred, and that they were obliged to charge 20 cents from local places, they are obliged to take the through freight at the 10-cent rate or not take it at all. By taking it at 10 cents there is not a loss. They can not, to be sure, pay the pro rata of interest upon bonds and stock and other things, but they do add something to their receipts more than the amount they pay out. I would put it this way: I will divide the whole expense of the railroad up into three parts, and I will say that one part, or one third, is interest on stock and bonds; I will say that another third is the fixed expense of maintenance of stations and station grounds, salaries of the general officers, legal officers, division officers, station agents, clerks, telegraph operators, bridgemen, section-road men, and all that class which it is necessary to retain, whether the competitive business is or is not taken. We have in these two thirds of the entire expense, which might be termed a "fixed expense" that goes on whether we haul 10,000,000 or 20,000,000 tons. We have another expense, the other third, that I will term the "movement expense." This consists of the wages of engineers, firemen, conductors, and brakemen, the locomotive and car repairs, fuel, oil, waste, water, and wear and tear of rails and track. In the operation of the railroads of the United States, the average expense of these three respective divisions of the service will approximate the proportions given. As competitive traffic is offered at certain specified rates made for us by influences beyond our power to control, change or affect, the question to be first determined is will it pay this "movement expense." The other two-thirds expense goes on whether we take it or relinquish it. Any amount in excess of this "movement expense" that can be obtained is just so much more that can be applied toward meeting the fixed two-thirds expense and thereby enables us to make the burden so much lighter for the local or noncompetitive traffic. As before stated, the expense attendant upon the transportation of competitive freight which a railroad can secure only on condition that it charges certain specified rates made for it by outside influences

entirely beyond its power to control, change, or affect, is the actual outlay which its movement necessitates. If the railroad plant and other facilities are ample to enable it to transport such freight without further outlays, then it will be seen that the expense incurred will not be in proportion to that of its regularly established business. Nor will the movement of competitive freight always incur the entire expense embraced in the several items named comprising the "movement expense."

The "movement expense" of such traffic might be decreased considerably, according to the different conditions or exigencies that might present themselves. For instance, if the traffic were offered at a time when empty cars had to be returned, the item of wages, fuel, and other supplies, together with repairs of locomotives and cars, would not properly enter into the cost. The expense incident to these would be largely incurred with the movement of empty cars as well as with loaded. Then, again, if the preponderance of tonnage was in the direction opposite that to which the competitive business was destined and such business enabled the carrier to load up trains that would otherwise be half empty, the expense of the new competitive business would be inappreciable. Neither would this competitive business entail a proportionate share of the large expense of maintenance of track, bridges, and culverts, which constitutes a large part of this one-third "movement expense." The wear and tear of these are not in direct ratio to the tonnage transported. The wear and deterioration caused by the action of the weather, the repairs, renewals, and cuttings of embankments, of the masonry, ballast, and road crossings, the disintegration of ties, bridges, and fences would go on just the same whether this competitive business was or was not hauled, so that it would not be proper to charge such extra business with a tonnage proportion of the expense of their maintenance.

Keeping in view these many influences, it will be observed that many of the items comprising the "movement expense" already incurred by the then existing business would not be changed by the addition of the new competitive traffic and that the entire expense of its movement would in many cases be inappreciable.

From what I have said, it will be seen that the difference in a rail-carrier's rates can sometimes be very great, and yet it can not justly be affirmed of them that some are unreasonably high or others unreasonably low; that the expense which a traffic under certain conditions adds to the already existing expense of a railroad may be covered by very low rates without injury to any community or locality, and yet the rates which it may be necessary to charge upon other traffic must of necessity be higher in order that the entire cost may be covered and the property be safely and successfully operated. Any profit, therefore, there may be in the transportation of a competitive traffic—and from what has been said as to the expense, I think it will be conceded the rates would have to be exceedingly low before there was no profit—relieves the local or domestic traffic of so much of the burden of meeting the fixed steady expense, and that so long as the receipts from this competitive traffic are in excess of the expense incurred for its transportation, there can be no such thing as recouping loss on low-rate competitive business by charging higher rates on local traffic, no matter how large a difference there may be between the two rates.

Q. Suppose that this competition which has brought the rates on through business, the shipment of grain to the seacoast, down distinctly to the level and almost to the cost of moving, will not the elimination of that competition by community of interest in some way, perhaps, have a beneficial result in preventing the further progress of that decrease in rates which is a loss to the railroad, if you put all expenses together?—A. It might do that. It might prevent this gradual decrease in rates that you speak of, but the things that have operated in the past largely to reduce these rates, the rivalry of towns that may be situated on different roads, and the necessities of commercial communities will continue to operate. Manufacturers will come on one road and they will compete with manufacturers probably three or four hundred miles away to get into a common market. They may not be able to get the raw product as cheaply as their competitors, and this disadvantage will have to be equalized in some such way as by a reduction in rates. So it seems to me that the railroads that serve particular communities—trade centers—can not resist the demand for putting those people on a plane whereby they will be enabled to do business, to build them up, build up the railroads, and build up the towns.

Q. Is there any community of interest going to be powerful enough to prevent that recognition of trade centers?—A. I do not think it can run against the public opinion or the necessary demands that would be made.

Q. Does not that trade competition between centers consist in the giving of special commodity rates, rebates, and other acts of discrimination which are not

granted to certain individuals but to towns?—A. I think there is very little of that. The practice was in vogue before the interstate law went into effect. They did have special rates from special towns to certain territory—that is, from large jobbing centers—but all the merchants had those rates from those towns. I do not know that it is in operation now.

Q. You are familiar with the basing-point system of Southern States?—A. Yes.

Q. What determines whether a particular town shall be a basing point or not? Will you explain that system, for the sake of the record?—A. It virtually is about the same as I have stated in my paper, that the minute a town has grown to any importance, and it has got a certain number of jobbers that can trade in the outlying districts, then it gets rates that are related to rates made other jobbing centers. These would start, say, for instance, from a point like Atlanta, or like New Orleans, and gradually extend to other towns that were of sufficient commercial importance to justify them in receiving as good rates as the others. The rates are not always the same to the different points, but their relations to each other are such as to enable each place to trade in the outlying territory that might be claimed as naturally tributary to it.

Q. What determines whether a place shall be a basing point or not? Is it not in some degree arbitrary?—A. It is arbitrary, but the place must have some jobbers; that is, what we call jobbers—some wholesale houses that trade in the outlying districts.

Q. It involves an infraction of, or an exemption from, the long and short haul clause of the Interstate Commerce Commission, does it not?—A. It does.

Q. Do these basing points exist at all in the territory in which the Illinois Central Railroad serves, or does that railroad observe the long and short haul clause?—A. The Illinois Central observes the long and short haul clause, with, however, some exceptions, like Jackson, Miss., and a few other points.

Q. Could it be possible for any other jobbing centers to rise in competition with Jackson, Miss., so long as you dropped these basing-point rates to that center?—A. Basing-point rates were there before the interstate law was put in effect, and we base the rates now on river rates to Vicksburg plus the rail rates. Basing point rates at Jackson, in the first place, arose from the Vicksburg river competition. In the second place the rates at Meridian, a competitor of Jackson situated on other railroads some 90 miles away, makes the practice necessary at Jackson.

Q. Can you meet competition from New York jobbers in the Mississippi Valley territory by rates which are granted Chicago jobbers in that same territory?—A. The rates from both places are related. We can not change a rate a day from the West without demand being made for reduction in the New York rate.

Q. Is there any complaint on the part of trade centers in the Middle West—Chicago, St. Louis, and other places—that they are unable to compete with New York in the Mississippi Valley territory?—A. In the Southeast we give a certain territory the name Mississippi Valley. While the section is all Mississippi Valley, that east of the Mobile and Ohio railroad, which is about 100 miles east of the Mississippi, is especially so in our nomenclature. The Illinois Central has full and complete control of that section and makes such rates from Chicago and from other points as will enable those people to go into that Mississippi Valley territory. There is trouble, however, on territory east of that, as you say.

Q. Might there not be a line along the junction of those two territories where competition from New York as a trade center on one side and competition from Chicago and St. Louis on the other side would especially depress rates and give a peculiar advantage to, we will say, Montgomery?—A. The rates were very early fixed from Baltimore, on the one hand, and Cincinnati, Louisville, and St. Louis, on the other. The matter has come up three or four times in the last 10 years, and it has been shown that the effort of the West was to put in the products from its manufactures as against the East, and changes are made from time to time. Every meeting you will find a list of changes, making rates one way or another to meet the new conditions.

Q. Are you aware of the recent experiment described in the press, inaugurated by the Chamber of Commerce of Chattanooga, or by the merchants of Chattanooga, chartering a steamer to ply down the Tennessee River to Paducah, in order to prevent excessive rates, excessive to that center?—A. I have seen a statement to that effect. There are boats running on that river all the year round.

Q. There is nothing in the nature of innovation, then, in this experiment?—A. Probably coming up as far as Chattanooga, there is; but Chattanooga has been able to get lower rates than it would otherwise get by reason of the competition of Nashville.

Q. The statement is made by the press that by shipping by water from Chattanooga to Paducah a saving of 30 to 40 per cent on through shipments to New York

and Philadelphia is effected. Can you explain that further?—A. No. I should think that would be an excessive saving.

Q. It might result in a considerable saving, though, under such conditions as are familiar to you?—A. Yes; but I think they have boats up to Nashville, and the rates from Nashville to Chattanooga plus boat rates to Nashville of course can not be as great as though they had only rail transportation to Chattanooga all the way. It would be only in some special commodities, I think, where the saving would be effected. There is grain, flour, and other articles.

Q. In the territory served by the Illinois Central is there a tendency at the present time toward the extension of the system of floating rates on cotton?—A. There is.

Q. Will you speak upon that topic and show what its effect upon the railroad is—the cotton business?—A. In general, its effect has largely done away with the middlemen, and has effected a saving to the producer of from possibly \$1 to \$3 per bale. The conditions governing the handling of cotton and its transportation to Eastern factories have greatly changed in recent years. Formerly the cotton factor at New Orleans or Memphis advanced money to the producer for supplies, stock, wagons, and other material entering into the production of the crop. Interest and commissions were charged for the money, and, in addition, the planter was obliged to ship to the cotton factor 10 bales of cotton for every hundred dollars advanced. In addition to the interest charges, the producer of the cotton was subjected to excessive prices for the handling of the cotton at New Orleans and Memphis. Besides the interest and commission charges, there were charges for brokerage, storage, insurance, sampling, classifying, marking, weighing, packing, compressing, drying, watching, handling, stowing and screwing. These various labors were under the guidance of associations, and the result was the producer was left with very little, if any, profit.

In recent years compresses have been located in the interior towns, banks, and other facilities have been established, through bills of lading are issued, all of which supply the interior merchant and the producer with requisite means to carry on the business. Buyers from the Eastern mills can now make their selections from the interior towns and ship direct to better advantage both to mills and the producer, than formerly. Floating cotton, as it is termed, is cotton shipped from a town where there is no compress and stopped in transit at a town where there is a compress and where it is then compressed, classified and afterwards reloaded for destination. By floating into the compress small lots from various towns, purchasers are enabled to ship full carloads of different classes of cotton to various destinations.

Q. Is cotton bought direct for the Southern mills in the same way, as a rule?—A. I think it is very little bought on our line for Southern mills, but I think that where it is, it is bought in the same way as for the New England mills.

Q. What is going to be the effect of the extension of this system of floating cotton on former cotton centers, such as Memphis and other cities?—A. I think it will gradually take cotton away from these centers: the planters will ship direct. They get as good prices now at the station as they did formerly at Memphis or New Orleans, and they had to pay freight, aside from storage, insurance, sampling, and commissions.

Q. Is there not difficulty in this cotton traffic or in the general traffic of the Illinois Central by reason of the lack of balance north and south bound tonnage? Does this increase the cost on Southern roads, as a whole?—A. Of course, if the tonnage was equalized, the cost would be decreased in both directions.

Q. How far is it unequal? Can you make any statement respecting the proportion of north-bound and south-bound tonnage on the Illinois Central, for instance?—A. I think the last report I saw showed it to be very nearly equal; but even though it were equal for a year, it necessitates a large lot of empty cars being hauled each way. That would arise in this way: Take, for instance, the country in and around Chicago for 200 miles where the traffic moves. The merchant must have his goods on his shelves along in February or March. That will necessitate their being moved from New York or from the East probably in February, and from Chicago soon after. When the farmer comes into the country towns with grain for sale after he has done his seeding, the goods he wishes to purchase must be in the merchant's store. The railroad has already brought them there, and as the farmer was not then ready to market his products, the railroad had to return the cars empty for more merchants' goods. When the farmer is ready to market his products the greater part of the merchants' wares have been already hauled, so that empty cars will have to be hauled to the farmer for the transportation of his products; so that while the tonnage might be as great north as south, or nearly equal each way, still empty cars might have to be hauled in each direction by reason of the tonnage movement not being contemporaneous.

Q. As a rule, do the Southern roads operate under more or less disadvantage in this respect compared with the Official and Western territory?—A. They operate under greater disadvantage.

Q. That circumstance would justify a higher rate per ton per mile, would it not?—A. Yes. Then, the fact that they have not the tonnage per mile of road means that they have not the earnings per mile of road.

Q. Is there a tendency toward an increase in the distinction between carload and less than carload rates on Southern roads?—A. I think not. They sometimes charge the same, and sometimes have a carload rate, which is less than carload rates.

Q. Is that not determined by the Southern classification committee?—A. I do not know; we have rates for less than carload lots.

Q. Are you not subject to the Southern classification of shipments in there?—A. We are independent; we make any rule we want to establish, but we have a carload rate which is just, and also less than carload rates.

Q. I do not understand how you are independent. I supposed every railroad operating in the territory east of the Mississippi and south of the Ohio was subject to uniform classification for that territory.—A. If all agreed upon a classification I suppose that would be true, but I know we have these rates. I am not very well acquainted with classification matters. Some of the other subordinate officers attend to this, but I think that the lines within a hundred miles of the Mississippi River have carload and less than carload rates.

Q. Have they always had that distinction?—A. I do not know that all have.

Q. Has your road?—A. Our road has, as far back as 1883.

Q. Do you make more or less distinction at the present time as compared with 20 years ago?—A. I could not say as to that; I would say more, if any.

Q. What would be the effect of greater discrimination?—A. To increase the carload business.

Q. What would be the effect of that on the small shipper?—A. He would be enabled to get carloads at cheaper rates than he would be otherwise.

Q. Suppose he could not handle a carload?—A. The object in decreasing the carload rate would be to enable him to handle it.

Q. What is the present status of the litigation between the Mississippi Railroad Commission and the Illinois Central Railroad respecting the land of the Yazoo and Mississippi Valley line? Was there not opposition by the railroad commission to the acquisition of that land on the ground that the statute forbade consolidation of competing lines?—A. I do not know anything about that. The Yazoo and Mississippi Valley Railroad is a distinct organization entirely from the Illinois Central.

Q. It is controlled by the Illinois Central, is it not?—A. The officers of the two lines are identical. There is no litigation pending, I think.

Q. (By Mr. FARQUHAR.) Within the last two or three years have you found competition in the carrying of grain between, say, Kansas City and Galveston and the Mississippi River and your road?—A. Yes.

Q. Have you ever been able to compete with that further Western rate—the Galveston rate?—A. Yes; we are doing it all along. The rates from Kansas City to Galveston and New Orleans are made with relation to the rates from Kansas City to St. Louis plus the barge line and from Illinois territory to New Orleans via all rail.

Q. You spoke of the railroads making the rates always within a paying margin; did the railway men at the time the Kansas City and Galveston rates were made think that was a paying rate—the cut rate to get through?—A. There was one time that the Kansas City Southern road made low rates. The Illinois Central has never had very low rates. We have gone out of business a good many times by reason of low rates; that is, we did not give our shippers the rates which they said were necessary for them to have in order to enable them to ship as against other territory.

Q. Do you regard this steel-barge line on the Mississippi as an experiment, or are there business reasons for believing they will hold their ground?—A. I think the owners went into it with that intention. It is on the new plan of McDougal. He is the fellow who built the whaleback. They, however, are confined at present to two barges. I suppose for the purpose of seeing how they will come out.

Q. Is it a fact that the old barge lines of the '80's really paid, or were they abandoned because the railroads cut rates on them or lessened the rates so that they could not pay?—A. I do not think they paid.

Q. Was that original barge line, as far as you know as a railroad man, started to cut Eastern rates and thus bring Eastern roads to terms?—A. I think it was started in the interest of the Missouri Pacific, which had no interest whatever east

of the Mississippi River. It was known at the time, as I recollect, as the Gould interest.

Q. You spoke of the transcontinental rates on silks, teas, etc., saying that tonnage coming this way was controlled considerably by rates of the Suez Canal and the Indian Ocean. Is it not a fact that the Canadian Pacific made the rates for the transcontinental roads?—A. The Canadian Pacific could make them, but the Canadian Pacific would be subject to the same reasons why they should have good rates as any of the other transcontinental lines in competition with the Canadian Pacific. Any road in order to get its share of the business may move particular rates down, but wars can not last forever. Then they have to have these understandings in regard to what rates they will make, and when they come to that condition the maximum they can charge is what they can get by measuring it with such rates as are made by the Indian Ocean and the Suez Canal.

Q. What control has the Interstate Commerce Commission over Canadian Pacific roads?—A. No control.

Q. Don't Canadian Pacific lines recognize that they are subject to the jurisdiction of the interstate-commerce law and the Interstate Commerce Commission?—A. When they run into the United States I think they have acknowledged the jurisdiction, but there is nothing to prevent their giving a portion of the revenue which accrues on the Canadian lines to shippers, if they see fit to do so.

Q. (By Mr. RIPLEY.) Do you deliver any traffic to the Canadian Pacific road at Chicago?—A. The Canadian Pacific does not run into Chicago.

Q. Does it not control a line which operates into Chicago?—A. I think not.

Q. (By Mr. CLARKE.) Traffic from your road to the Canadian Pacific is made by way of the Wabash, is it not?—A. I suppose it would be; or possibly by the Michigan Central.

Q. (By Mr. RIPLEY.) Is there any large amount of cotton shipped all rail to Boston for export?—A. Yes.

Q. How would the rates, let us say, from New Orleans or Memphis to Liverpool through Boston, compare with the all-water rates from New Orleans or Memphis to Liverpool?—A. The rates would be the same to Liverpool via Boston and from every other port all the way around to New Orleans.

Q. The proportion, however, which the railroads in American territory would receive would be fixed on that same basis?—A. It would vary according to the rate offered.

Q. Which is the variable rate, the rail rate or the water rate, in the combined traffic?—A. They both vary. The rates to-day from Memphis to Boston, New York, Philadelphia, Baltimore, Norfolk, Charleston, Savannah, Pensacola, Mobile, and New Orleans are all fixed figures. Each one of those ports reports each day what ocean rates they can obtain to Liverpool on cotton.

Q. To whom do they report?—A. To a central man in Memphis.

Q. Can you give his name and address?—A. It is under-on—J. A. Anderson, I think. He is secretary of the Memphis cotton committee. Those ocean rates from the various ports are added to those fixed rail rates. The port which has the lowest rate to Liverpool fixes the rate for all ports. On the supposition that the ocean steamers take the rates which they offer in that section, the railroads have to shrink their rail proportion down to a figure that will enable them to make the same through rate as is made through the lowest port. That is the only way they have found whereby all lines could get a share of the cotton and at the same rates.

(Testimony closed.)

WASHINGTON, D. C., May 14, 1901.

TESTIMONY OF MR. WILLIAM LEGGETT GUILLAUDEU

President of the Old Dominion Steamship Company.

The commission met at 2 o'clock p. m., pursuant to recess, Chairman Kyle presiding. At that time Mr. William L. Guillaudeu, of New York City, president of the Old Dominion Steamship Company, was introduced as a witness, and, being duly sworn, testified as follows:

Q. (By Senator KYLE.) Please state your full name, address, and business.—A. My name is William L. Guillaudeu; my residence is New York City; office address, 81-85 Beach street; I am president of the Old Dominion Steamship Company.

Q. You may state, Mr. Guillaume, something in regard to your own company—its organization, where it operates, what class of freight or freights is handled, and also whether you carry passengers.—A. The Old Dominion Steamship Company was organized under the laws of the State of Delaware in 1875. It operates lines of freight and passenger steamers. Its main line is that from New York to Norfolk, Portsmouth, Pinner's Point, Newport News, and Richmond, Va. It has subsidiary lines to many small points in the Chesapeake Bay country, likewise subsidiary lines on the North Carolina sounds and rivers. It has intimate connections, both freight and passenger, with all the great railroad lines operating out of the Virginia ports, chiefly the Norfolk and Western, the Seaboard Air Line, the Atlantic Coast Line, the Southern Railway, the Chesapeake and Ohio Railway, the Norfolk and Southern Railway, and smaller steam and rail lines. The great bulk of its business on the main line is freight, with, however, a large passenger business.

Q. What number of steamers do you run?—A. We operate 6 ocean steamers, 12 subsidiary steamers of a sound, bay, and river character, and between 35 and 40 harbor craft—lighters, barges, steam transfers, and steam tugs.

Q. Is this company organized to operate in conjunction with railways?—A. Only incidentally.

Q. Or to piece out their terminals into New York City?—A. No: it is operated as a water transportation line primarily, and that is its purpose. Its railroad alliances are incidental to the growth of the business.

Q. Were the original incorporators railway men, as a rule?—A. Not active railway men, in any sense; no.

Q. Are they now?—A. Some of them; yes.

Q. Identified with what railways, chiefly?—A. The chairman of the board of directors of the Norfolk and Western Railroad, the president of the Seaboard Air Line Railway, the president of the Southern Railway are on our board of directors, those lines having stock interests in our company.

Q. (By Mr. RIPLEY.) How long has this railroad interest in your directorate existed?—A. Fully 20 years.

Q. Since the organization of the company?—A. Not quite. Something over 20 years ago. It was felt that it would strengthen the company to have the principal railroads with which it was then connected and doing its business interested in the company, and that was brought about, and that interest has been held continuously by two of the lines. There was also a third interest at that time which has since been transferred to the Southern Railway.

Q. Are there any independent water lines which have no affiliation with the railroads operating in the Chesapeake Bay and up to New York, for instance?—A. The word "affiliation;" how broad do you mean to make it?

Q. I mean community of ownership, if you please, or actual representation on the board of directors.—A. My understanding is that there are several of the coast lines, notably the Merchants and Miners' Company, the Mallory Company, and the Clyde Line—which I think have no absolute railroad ownership, but they have a large affiliation in the sense that a very large proportion of their business is in connection with railroads and they have close working and traffic alliances with the roads.

Q. Is your policy the same as theirs in the making of rates?—A. On through business, I think so.

Q. You are members, are you not, of the Associated Railways of Virginia and the Carolinas?—A. No; not of that organization. I think no water line is. But we are members of what I might call the wider organization, the Southeastern Freight Association.

Q. Of which Mr. S. F. Parrott is chairman, with headquarters at Atlanta?—A. Yes.

Q. What is the function of that Southeastern Freight Association as far as the making of rates is concerned? Do they prescribe the rates which you shall charge?—A. No: It is a common bureau through which the rates used in common—that is, by all lines participating in competitive business—issue. They subscribe to the expenses of it. It is a joint office, without powers, however, of fixing rates.

Q. Do you agree to accept the rates which they fix, or have you power to make an independent rate?—A. Absolutely no rate can be fixed for us that we do not fix ourselves.

Q. You however find it for your interest not to be too independent, do you not? That is to say, you strive to preserve harmony between the different lines interested?—A. I think all business arrangements are a matter of concession, of give and take. You will understand that the Old Dominion Steamship Company is directly represented by its traffic officers on all matters which have to do with considering rate matters, and they decide themselves.

Q. (By Mr. PHILLIPS.) About what per cent of the capital stock of your line is owned by the railroads or railroad people?—A. The total ownership by the three interests, I have stated, is more than a majority of the stock.

Q. That is owned by railroads?—A. Yes.

Q. (By Mr. RIPLEY.) Do we understand you to state that you do not know whether there are any other competing lines in the same situation with reference to the railroads—that is, that the others are all independent lines?—A. No; I understood your question to mean were there any outside.

Q. Are there any others that are controlled by the railroads?—A. There are several lines on the coast in which, according to common report, the railroads have an interest, notably the Ocean Steamship Company of Savannah, and the Cromwell and Morgan lines to New Orleans. I think the Chesapeake Bay lines are largely owned by the railroads. I think most of the Eastern lines from New York, running east, are owned by railroads.

Q. Is there, then, any real competition between the steamship and railroad lines along the Eastern coast? Will you explain what the situation is in that respect?—A. There is genuine competition, I should say, between the steamships and the North and South railroads running up and down the coast, to the coast points proper, as between New York and Norfolk and Richmond, New York and Wilmington, New York and Charleston, New York and Savannah, New York and Brunswick, New York and Jacksonville, there is genuine competition. On business through those ports to the interior, I think the competition is more relative to the several interests as between the water lines and their rail connections to the ultimate point in the interior.

Q. In other words it becomes a question of competition between all-rail lines and rail and water lines combined?—A. Yes; that is very well said.

Q. In such a case we will say there is competition to Atlanta—would that be a fair illustration?—A. Yes, certainly; Atlanta is practically the Chicago of the South.

Q. When rates all rail and rail and water are made together, is there any allowance made in the nature of a differential to the water lines or to the rail and water lines combined?—A. Yes.

Q. Will you state the principle on which that allowance is figured?—A. The theory is that the water route (the combined water and rail route) has certain disabilities, the most important of which is the leakage of bulk at the point of transfer; secondly, the marine risks and dangers of damage and loss, and third, the infrequency of sailing, the longer intervals between movement as against all-rail lines. Those I consider are the three most important elements which have seemed to require, and have so worked out, a lower rate on the part of the rail and water lines.

Q. Do these objections or disabilities apply equally to all kinds of freight? That is to say, as a rail and water line combined, are you peculiarly hampered in certain kinds of business as compared with others?—A. Yes; we are absolutely out of certain kinds of business notwithstanding our lower rate, notably in the enormous movement of cotton mill machinery. In all this great development of the Southern cotton mills, the transportation of much of the machinery which is made in the East has been lost by the coast lines, practically all of it, because of its delicate character. And there is other business perhaps of that character where the same thing applies, the rail movement is so much superior. The unbroken car which the manufacturer loads right at his foundry door and mill door and which goes to the ultimate point of destination, even to the very entrance door of the enterprise, offers inducements which the steamer can not hope to equal.

Q. Is there any distinction made in making up rates as to the different classes of commodities, as to whether these commodities are really in the competitive class or whether they are of a character which boats would not carry in any instance? Or is there one principle adopted, namely, of granting a differential to the rail and water lines as compared with the all-rail lines? Is the principle applied equally to all kinds of business?—A. The principle is of almost universal application. The modification of it comes in the scale of the difference; if I may say so, the rate of the difference. To a certain extent, however, the position is an average one. In no case, I might say, is the differential made wide enough to absolutely attract a certain commodity because of the differential. It is made an average which gives a fair result to the shipper.

Q. What is the amount of the differential, for instance, as between New York and Richmond, can you specifically say, on first, second, and other class goods?—A. The differential between New York and Richmond as enjoyed by our line against the railroad carrier is 5 cents, first class, and 1 or 2 cents sixth class. I may have to refresh my memory as to that.

Q. What are the rates first class, for instance, in cents per 100 pounds?—A. My recollection is that the railroad rate is 33 cents per 100 pounds, first class; our rate is 28 cents.

Q. From New York to Richmond?—A. From New York to Richmond.

Q. Is there any such differential between New York and Norfolk?—A. No.

Q. Complaint has been voiced from Richmond to this commission that it does not enjoy the same rates either by all rail or rail and water that are accorded to Norfolk. Will you explain to the commission why in the one case the privilege is given and in the other denied? I wish you would give the rates and information with respect to the way in which rates are made, either from the West over your line up to the North or in the opposite direction?—A. I think that the origin of that difference was the old steamer scale of rates. The New York and Philadelphia steamers, for instance, reaching Richmond touched at Norfolk and went on some 120 miles up the James River to Richmond. Their rates for carrying freight have been for many years—10 years, I suppose, as long as steamers have run there—higher to Richmond than the rates to Norfolk. Some years ago it became the policy of our company, because of the distributing competition between the two cities, to make the rates the same. My recollection is that the rail rates from the Northern cities have never been the same by the different sets of carriers between northern points and Richmond and northern points and Norfolk. I may say, I think it is the continuation of the original basis which was originated by the steamer lines.

Q. Does it seem to you that the complaint of Richmond is in any way justified by the conditions, Richmond and Norfolk being competitive centers? Let me ask another question: Does the existence of competition by the Cape Charles route to Norfolk have anything to do with the matter?—A. No, I think not. I think it can be fairly claimed that it is the absolute influence of the proximity to the sea which would always, perhaps, make a lower rate to Norfolk than to Richmond on the merits of the case—on the merits of carriage or service performed.

Q. What is the system of prorating, we will say, on a shipment over your line to or from Memphis or to or from Atlanta?—A. The basis is the distance carried by each link in the line.

Q. Not absolute distance, however, by water?—A. No, there comes in a scale or an equalization—so much water distance to so much rail distance.

Q. What is the constructive mileage that is prorated on through business via Norfolk?—A. Our line adopts a uniform basis of 160 miles.

Q. What is the actual distance?—A. Three hundred and twenty-three. It was called 320 miles in the old days. It was an estimate of two for one.

Q. The assumption, then, made in prorating is that the expense of water carriage is, for an equal distance, about half that of all-rail carriage?—A. Yes; I think that scale was fixed or worked out by the longer water lines. It is common on the coast. I think I am right in saying that the other Atlantic coast lines use that basis of two for one.

Q. Is there any feeling on the part of either the railroads or the steamboats that this prorating distribution is perhaps not altogether fair to both parties under the present costs of operation?—A. Yes; and it has been in our case recognized by the allowance for extraordinary terminal and handling expenses; so that, while our prorating distance has not been changed, there has been an acknowledgment that on so short a route it is not equitable. Hence we allowed, further than that, a terminal of so many cents a hundred pounds, and this applies through a very wide range of country.

Q. In prorating, do you make any distinction between the cost from New York to Norfolk or Richmond for local consumption and the cost from New York to Norfolk or Richmond through to points beyond?—A. What is the first of your question?

Q. In other words, do you apply the principle of the import or export rate on coastwise business, and is it the custom with other steamship companies?—A. Yes; the proportion of distance carried fixes the percentage, and we accept that percentage, wherever it may lead, on our through business.

Q. What is the rate to-day from New York to Richmond, first class, as you have said?—A. Twenty-eight cents.

Q. Twenty-eight cents by your route; that is, from New York to Richmond, for consumption at Richmond—terminating at Richmond?—A. Yes.

Q. What would be your proportion of the through charge to Atlanta, passing through Norfolk or passing through Richmond?—A. I have not the figures in mind, and I do not know exactly, but it would work out in cents per 100 pounds, with all the elements at that point, probably pretty nearly as much.

Q. And still you do recognize a certain difference, do you not, on the same principle adopted in making import or export rates by the trunk lines?—A. We are bound to. Some of the roads, theoretically, in the old days would, in making up a rate, adopt our rate to Norfolk, and perhaps the next carrier's rate to the next junction point, and so on, and the sum of all would make the total rate. Now, all the elements come in which serve to make that rate by our line, and whereas our rate to Atlanta is one thing, it would be another to another point.

Q. Are you a competitor in rate making with the other coastwise lines which ply to Savannah; for instance, on Atlanta business, they prorating through with the railroad connection and you prorating at Norfolk with a railroad connection of your own?—A. Yes.

Q. There is direct competition between the several steamship lines and by the railroads?—A. Yes; there is all through, generally.

Q. Your own line has its own soliciting agents distinct from the railroads?—A. Yes; and the through lines have as well. We have through-line machinery.

Q. What do you mean by that?—A. I mean that the business, for instance, over the Southern Railway from New York to Atlanta is done under an organization known as the Piedmont Air Line, a certain organization that has a trade-mark and has its agents in New York, Boston, and everywhere; it has traveling men at work for that line.

Q. And you are a member of that line?—A. We are a member of that line, and we have to pay our quota of its expense, because it works for everyone over that line. It is just an aid to our own machinery. No one company could afford to sustain such a line out of its own funds. Therefore, everybody contributes for this extraordinary service.

Q. Do you get the same amount for transporting goods from New York to Norfolk or Richmond destined for the West that you do on goods from New York to Richmond or Norfolk destined for the South?—A. No.

Q. Will you explain the principle on which you make the distinction?—A. The distinction is made for us in the through rates; the Atlanta basis, first class, being \$1.11 from New York, while the standard New York-Chicago basis is 75 cents, or 65 cents by our lines. There is not absolutely as wide a difference as that by reason of the different classifications in use. As a rule the southern classification runs lower than the trunk line classification. As a rule I think I am safe in saying that. The rate scale is higher, but the general classification is lower. That the rate scale is higher is due to the vast difference in the tonnage moved, the quantity of goods relatively, as between the East and the West and the East and the South, and the greater number of competitors of all kinds in the Western business.

Q. Are the steamship companies which operate along the coast getting into line in matters of classification and methods of charging by weight, etc., with the railroads?—A. I think so.

Q. A great deal has been made at various times before this commission of the difficulty of rail and water competition. Do we understand you to state that there are certain disabilities, on the other hand, under which the steamships operate in competition with the railroads; in other words, that it is not an entirely one-sided competition between the superior and inferior agent?—A. No; it is not.

Q. Will you speak of such experiments or attempts as you have made to get at the relative costs of different parts of your business; that is, terminal charges, conducting transportation, etc., respecting the principles which in your judgment should apply in such a case in making up rates?—A. The proposition is a very large one, but here is an illustration: One of the striking differences, perhaps, between water transportation and through rail transportation is found in the fact that the steamer must of necessity load into her and have taken out of her every pound of freight that she moves, whereas in modern railroading a very large proportion of the traffic over railroads is not handled at all by the railways. The expense of stowing ocean vessels, even for coastwise business; the necessity for more careful stowing; the fact that the vessels have a number of decks, require a little more skilled labor than is required in running freight into a car; hence the labor charge is a great deal higher, and the steamer has to meet a fixed charge at each of her ports, generally speaking, far in excess of what the railroad has, even when it breaks bulk; and to the extent that it does not break bulk at all it is just that much ahead. Against that, I suppose, might be set the enormous cost of the railroad plant before it can do all this, as against the very much smaller plant cost of the steamship organization.

Q. That being so, a short water route would perhaps not have any particular advantage as to cost over a railroad, terminal charges being so much greater and

there being only a short distance in which to recoup for the lower cost of moving a ship as against a train and for the extra charge of the tonnage?—A. It has seemed so to me. That is the best answer I have gotten to my examination of the subject up to this time, and if you will allow me, I will explain why we do not know a little better. Water lines have no real basis of comparison between one another. The requirements of railroads and their willingness to give much data connected with their business is a great help in operating other railroads. That requirement is not made of the water people, and I suppose they can not well give it out. They can not well make such figures, probably because to do so is liable to invite undue competition, so that we water men have not a chance to compare our results with other water lines similarly situated. Hence I can only give you the result of my own thought at this time, and I confess I have not thought of this subject enough to reach full conclusions.

Q. The long and short haul clause of the act to regulate commerce has been largely set aside in the Southern States by reason of the existence, as the railroads allege, of active water competition at a great variety of points. Do we understand you to say that such water competition is not as great a hardship to the roads where the water route is a short one as it would be in the case of competition with a long-haul water route?—A. No; you can not have understood me in that, because it has never applied to me in that way.

Q. Will you explain how it does seem to you?—A. As far as I have gotten in my investigations, the difficulties there are largely a matter of earnings to the individual companies rather than matters affecting the public.

Q. In other words, the rates are not made by the cost of doing the business, but by other considerations?—A. Yes; practically.

Q. We have had before the commission complaint from representatives of shipping interests at Cincinnati and other places that the rates into the South from such gateways as Chicago, Cincinnati, and St. Louis are relatively much higher than the rates for an equal distance into the South from Eastern centers. Does the existence of this water competition down along the Atlantic seaboard fully justify that condition, if it be as stated? Do I make the point clear?—A. You make the point clear, but it is a singular thing that the great cause of fear that we Eastern men have is the ever growing volume of business from the West to the South, the leaving or diversion from the Eastern shipping points of much business that used to flow through our channels and is now going from the West into the South, and the feeling the traffic men have is to watch that Western-Southern movement, because, moving as it does in very large bulk as a rule, we have felt that it enjoyed lower rates than we have.

Q. Do you refer to the grain and packing-house products?—A. No; I do not; they have a very slight relative movement. They have almost ceased to go East and then South.

Q. How long since was it the custom to bring grain and other products from the West to New York and then ship to the South down along the coast over your line?—A. Fully twenty years. Virginia common points have practically had the advantage of as low rates as Baltimore, and even lower; and Baltimore being under New York, it was an impossibility for us to move it. My understanding is there is some business brought from Baltimore and Philadelphia for coast points farther south—south of Hatteras, but the great volume of the business goes direct by through car movement across the Ohio River, and is distributed all through the Southern States.

Q. In that case, having eliminated grain and packing-house products, you refer to manufactured products?—A. Yes.

Q. Such as, for example, what?—A. Manufactured iron articles, agricultural implements, furniture—a pretty wide range of commodities.

Q. Is that by reason of the growth of manufactures in the Middle West or by reason of the adjustment of the tariffs?—A. Both, I think. Primarily the growth of the manufactures; secondarily, the rates. If I may be allowed to express an opinion, I think rates always follow commercial conditions. I think it is the market conditions which make the rates.

Q. Have you any reason to suppose that those rates have been from the Ohio gateways less than the published tariff rates, inasmuch as they have abstracted so large an amount of this business from the coastwise steamers?—A. I am not in a position to pass on that. I am not closely enough in touch with the rate situation at this time to answer that question intelligently.

Q. That would be a possible explanation, would it not?—A. Yes.

Q. Would any enlargement of the powers of the Interstate Commerce Commission, which would absolutely insure the maintenance of published tariff rates, in

that way operate to the advantage of the steamship lines?—A. From my experience, I would say no. I think not.

Q. You feel, however, that some protection by the railroads themselves, for instance, might benefit that condition?—A. There are railroads and railroads, and steamers and steamers. I am glad to believe that the railroads with which we are associated are just as firm in rate maintenance and in conservative methods as we ourselves could be or could expect under any adjustment.

Q. It has been testified before this commission that such is the condition of eastern lines. Have you reason to suppose it is different on lines that operate farther west at the present time? Have you seen any indication, so far as the abstraction of your business from your territory is concerned, to suspect that rates are being cut in that way?—A. No: as a general proposition, no. We feel that rates in the Southern territory are particularly well maintained. As a section, the transportation men generally feel the Southern territory is clean—that secret rates and so on are almost unknown. I am not immediately in touch with the West and South movement. I do not know what troubles they have, but as far as my general information goes what I say applies to that as well.

Q. Have the costs of operation of water transportation decreased in recent years in the same proportion that the costs of operating railroads have?—A. No. There is a refinement in all water methods, I think, and the lines which are the most successful are successful by reason of that fact. But, for the reasons which I gave at some length a moment ago, we have not the great stimulus of comparison. Some of us are working it out along railroad methods, as I call them, trying to do our best in the most conservative of business methods; and in doing that the public is served, because to do the work most economically means that you must have the best tools. Speaking of our own service, it is infinitely better than it was twenty years ago. It has improved almost as much as the railroad service has.

Q. Is it correspondingly cheaper from the point of view of operation?—A. The methods themselves are more expensive, to keep up with the modern requirements. There is greater expense in operating the line, but with the extension of business which has followed intelligent methods we get a lower cost. I will not say a lower cost, but a cost low enough to give a fair margin.

Q. You would maintain that a scientifically operated steamship line can reduce its cost of operation in the same proportion that the railroads are reducing theirs, so that the relative disability under which the steamship lines operate as compared with the railroads is not increasing?—A. I doubt if the steamer has the latitude to make economies that the railroad has, so its reductions could not lie in the same proportion. There is a relative betterment in the steamer's condition by the better methods. There are certain basing costs, however, like the greater consumption of coal for higher speed, and the greater necessity for electric lighting, and all that sort of thing, which means an added cost which you can not get away from. But the intelligent application of force and mind produces its effect.

One of the questions of the commission, I understand, is as to laws and legislation needed. I do not think any is needed at the present time. I feel that it is incumbent on us to work out our problem further, as far as intelligence and the application of the best business methods will go, before we should ask Congress to legislate in our behalf. That is my personal conviction.

Q. (By Mr. FARQUHAR.) Are you acquainted with the labor cost of operating your boats?—A. Fairly so, I hope.

Q. What is the pay of engineers by the month?—A. On our fast steamers it runs \$125 a month.

Q. How far does the scale run down: how many engineers do you usually have?—A. First assistant, \$75; second assistant, \$60. That means their keep added, of course. They live on board the ship in all cases.

Q. What are the wages of firemen?—A. \$38.

Q. Have you any able seamen at all, or do you just have the deckhand?—A. We have no able seamen in the deep-water sense, but qualified seamen whom we pay \$25 per month.

Q. What are your captains paid?—A. We have two captains who get \$200 a month, two more who get \$175, and one on a smaller ship at \$150. That is on the main line.

Q. Your mates?—A. First officers, \$75; second officers, \$50; third officers, \$30.

Q. Have you a distinction of wheelmen with separate pay?—A. Yes; two quartermasters on each ship (that is the technical name for wheelmen) at \$30. Then there are watchmen, and the full crew, the entire list being as follows:

Pay roll of steamship Jefferson.

Deck department:	
Master	\$200.00
First officer	75.00
Second officer	50.00
Third officer	30.00
2 bow lookouts, each	40.00
2 quartermasters, each	30.00
Watchman	30.00
6 seamen	25.00
2 deck boys	15.00
Purser	83.33
Assistant purser	40.00
Engine department:	
Chief engineer	125.00
First assistant engineer	75.00
Second assistant engineer	60.00
2 oilers, each	43.00
2 water tenders, each	40.00
9 firemen, each	38.00
3 coal passers, each	28.00
Steward's department:	
Steward	75.00
Saloon stewardess	20.00
Forward stewardess	10.00
Chief cook	50.00
Second cook	40.00
Third cook	10.00
Broiler	35.00
Pantryman	25.00
Officers' messman	28.00
Forward messman	15.00
Head waiter	25.00
Waiters (as required), each	18.00
Porter	50.00

Average number of crew, 60.

Q. Have you your own stevedores at terminals, or is there an organization of stevedores at terminals?—A. We do all our own work at all ports.

Q. Have you any rule as to your sea force doing the loading and unloading? Are they engaged in it?—A. No; not on the main line. It is not found to be economical, and a double crew would be required to do that.

Q. What is the ordinary pay of stevedoring at New York?—A. We pay 25 cents per hour week days and 30 cents on Sundays and holidays.

Q. (By Mr. RIPLEY.) Do you employ negro labor at Norfolk?—A. Entirely in the South.

Q. What is the pay of that class?—A. The stevedore rate at all the Chesapeake ports in Virginia—Norfolk, Portsmouth, Pinners Point, Newport News, and all those points—is 15 cents per hour for the men who run the hand trucks. The men on the ship who stow and take out, and so on, get 20 cents an hour. That is found to fairly reflect the differences in the value of labor and the living conditions and all. It seems to equalize between the North and the South fairly well.

Q. (By Mr. FARQUHAR.) In your annual statements in the coastwise trade, what is the usual percentage that is set aside for depreciation?—A. I think there is no set rule. Our own method has been to have a reappraisal by a committee at periods of about two years apart, reflecting the actual condition upon examination. We have tried to be very conservative in that respect. The lines have different methods. I think there is no established procedure.

Q. Has the coastwise trade any advantage in rates in marine insurance over ships in the foreign trade?—A. Yes; in this sense: I think the underwriters feel that the coastwise risk is less; that it is of a different character from the deep-sea insurance.

Q. Is your insurance placed in American or foreign companies?—A. Both.

Q. What proportion?—A. At a rough guess, perhaps half and half. May I supplement that statement by saying that my own feeling is that our advantage is best served to have as much placed in the home market as we can. But we soon exhaust the home market—the American market. The insurance companies do not like to take big risks, and we are very large insurers in cargo and hull. So

we fill up with all the American insurance we can get, and then go abroad. That is the practice to-day.

Q. Are the foreign and American rates on the same basis?—A. Practically, because we decline to pay more.

Q. Is there much competition among the foreign countries to acquire American policies?—A. I think so. The foreign policy has been a little more favorable than the American policy heretofore, but the American companies are now beginning to write the more comprehensive form of policy; so that the American form of policy, which in the old days was not so desirable, is being improved.

Q. Is your foreign policy taken under the Lloyd insuring rules or under American inspection?—A. The vessels are upon American inspection. We build according to the American rules, and they base on that. Our ships do not come under Lloyd's rules at all.

Q. They are under the American standard?—A. Yes.

Q. And the foreign companies accept the American standard?—A. If one of our ships was loaded for offshore they would not do that.

Q. At anytime have any of your coastwise steamers been drawn into the foreign trade?—A. We have chartered to the West Indies, and once, in the old days, to Brazil. We do not like to have our vessels go offshore; we prefer to keep them at home.

Q. (By Mr. PHILLIPS.) Did you state the amount of your capital stock?—A. I did not. It is \$1,250,000.

Q. Have you any bonds?—A. One million 5 per cent bonds.

Q. Preferred or common stock?—A. Just the one; \$1,250,000 of stock and \$1,000,000 bonds outstanding.

Q. (By Senator KYLE.) What percentage of the operating cost of your line goes toward labor?—A. Of what in our statistics appears as labor, the absolute labor cost of handling our freights, and which is summed up in our trade as 'longshore labor, nearly 25 per cent of our total cost (24.7 per cent, to be exact) is paid for labor. If you include the clerks and agents, a step higher up, the proportion is 33.6 per cent of the entire operating expense.

Q. (By Mr. KENNEDY.) I would like to ask you how the coastwise interests view the proposition to subsidize American vessels in the American trade; whether they have any particular interest in such a course any more than the people at large?—A. I suppose they merely have the individual opinions that each man gets from reading the papers and reading the discussions, and so on. Speaking for myself, I find it difficult to make up my mind either way, because I have not the data to do it on. I do not know the conditions surrounding lines other than our own, so that my opinion would be no better than that of any railroad man or banker, or publicist.

Q. You could not say whether such a policy would affect your interests?—A. It could not directly, because we could not come under it. We could not participate in its benefits, and I do not see how it could affect us other than if it added to the tax burden we, as taxpayers, would pay a little more. That, however, would come around in the additional trade and all that goes to make that up. Of course we carry between our ports considerable business which goes export from the end of our line. So, I suppose, it is an endless chain.

Q. You employ union labor?—A. Our labor may or they may not be in the unions. We have no rules or restrictions as regards that.

Q. Are any of the members of the Seamen's Union in your employ?—A. I think so, but it does not appear. We place no restrictions on our men in doing what they choose in that way so long as they are devoted to their duty.

Q. Are the men aboard ship generally Americans or of other nationalities?—A. I think the seamen, of which, of course, we do not have to carry many, are generally foreign in the lower grades. The higher grades are necessarily American.

Q. (By Senator KYLE.) What nationality?—A. There seems to be a large Scandinavian element in all our coasting vessels. They seek the employment: they take to it. And, of course, on modern steamers there is really very little sea work. It is scraping and keeping things clean, and handling lines and all that; and the old-time able seaman has no place on a modern steamboat, or any other steamboat, in fact. Following the sea is not attractive to American men in this day. I am sorry to say. It is a very difficult thing to get the old line of well-trained American seamen.

Q. Is that because sea life has become obnoxious or other callings more inviting?—

A. Prizes of high positions are too few and other callings are more inviting.

Q. (By Mr. LITCHMAN.) From what sources, then, do you recruit the ranks of the higher-priced officers?—A. I think we are very nearly at the end of the old deep-sea sailor, and what is to take his place is a question we are all asking ourselves.

We are training in young men as fast as we can get them, but they are hard to get. It is a hard thing to find a captain that has had the old training.

Q. (By Senator KYLE.) Wages are good?—A. Yes; they are almost the maximum.

Q. (By Mr. LITCHMAN.) The foreigner who is capable of manning a ship must first become naturalized before he would be eligible to promotion?—A. Absolutely. I think we have only one captain of foreign birth, and he has been an American citizen for a great many years. All the rest are Maine and Massachusetts seamen, who came up through efficiency and are expert seamen. We pay them well and treat them well. Our men do not lose a day's pay perhaps in 10 years.

Q. (By Mr. FARQUHAR.) To the average seaman or petty officer, does the coastwise trade offer greater inducements than the deep-water trade?—A. I think it is not felt so, except as the men can be oftener at home and have more home life. That is the attraction, that a man can be at home every few days.

(Testimony closed.)

NEW YORK, February 20, 1901.

TESTIMONY OF MR. THOMAS F. WOODLOCK,

Railroad editor of the Wall Street Journal, New York City, N. Y.

The special subcommission met in the rooms of the Chamber of Commerce at 10.45 a. m., Mr. C. J. Harris presiding. At 2.50 p. m. Mr. Thomas F. Woodlock, railroad editor of the Wall Street Journal, appeared as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. C. J. HARRIS.) Mr. Woodlock, will you give your name and address?—A. Thomas F. Woodlock; railroad editor, Wall Street Journal, No. 42-44 Wall street.

Q. (By Mr. KENNEDY.) To begin with, can you give the commission any information or any light on the proposed combinations or community of interest arrangements in the anthracite coal fields?—A. Well, the only information that I have is derived from the published prints; but it seems to me pretty clear that what the railroad companies have been doing, or endeavoring to do, is to purchase the comparatively few remaining coal lands in the hands of independent operators, so as to prevent the danger of a competing line ever being built again that would take away such independent tonnage as they now have. Without going into figures any too closely, I should say that the companies have bought up probably an amount of annual tonnage equivalent to say 6 per cent of the total—about three to three and a half million of tons a year, including the Pennsylvania Coal Company, which, of course, is the largest item. The others are scattered purchases.

Q. (By Mr. RIPLEY.) Giving them a control of what proportion of the total tonnage?—A. Well, it is a little hard to give any definite figures on that, because the shipments over the coal roads, as I understand the matter, include both the independent tonnage and the tonnage owned by the road; but on last year's basis the companies which are generally, by popular rumor, supposed to be more or less affiliated in this matter, namely, the Reading, Lehigh Valley, Jersey Central, Pennsylvania Coal Company, Erie, Susquehanna and Western (which is owned by the Erie), and the Lackawanna, which are generally understood to be acting in concert, got about 72½ per cent of last year's shipments. The Pennsylvania Railroad is independent, but has always acted with the strong interests whenever it has been necessary to do so. That is to say, the Pennsylvania has never been a disturber, and can always be counted on by the majority.

Q. (By Mr. KENNEDY.) Why has it been independent?—A. That company has never been obliged to ally itself with individuals; it is an extremely strong corporation, and it has been its policy not to adopt any entangling alliances, so far as we can judge. With the Pennsylvania Railroad and the Delaware and Hudson, which are supposed not to be brought under that influence, there would be left 7½ per cent.

Q. Is that all? How about Coxé Brothers and the Ontario and Western?—A. I have given 100 per cent; that is, as far as it is shown in an unofficial way.

Q. Where does Mr. Haddock come in?—A. In the Erie Railroad shipments, Coxé Brothers have the Delaware, Susquehanna and Schuylkill road. It is a comparatively small road, but it gets nearly 3½ per cent of the total tonnage.

Q. Do you believe that the community of interest established by those roads will absolutely control the anthracite coal situation?—A. I think that there is a sufficient community of ownership already to assure that. In other words, I do

not think that the Ontario and Western is allied to it in any way, and I do not think that Cox Brothers & Co. are; but I think that most of the others will act together. The Ontario and Western is a free lance, but it is not unreasonable; it attends to business, and makes the same prices as the others do.

Q. Do you believe events point to absolute ownership under one single management?—A. No; I think it would be a very injudicious thing, from the point of view of the coal roads.

Q. Why?—A. It would simply provoke extreme competition. Then, besides, there is a natural bar to any total monopoly in the anthracite business. As I have always understood, when the price of anthracite goes above a certain level the consumption falls off very rapidly, because bituminous coal is used even under difficulties, and there is a great increase in the consumption of gas in the cities, and it is not practicable to keep the price of anthracite at any high level.

Q. You say provoke competition?—A. Provoke legislation that might not otherwise be justified. I do not think it is the intention of the people connected with the coal roads, so far as I can see, to do anything more than agree on prices, and especially so as to avoid spoiling the market.

Q. Have you an opinion as to the economies that will be effected by the community of interest arrangement?—A. I do not see how there can be any special economy where there is no physical union of the properties. For instance, the purchase of the Pennsylvania Coal Company by the Erie does not, as far as I know, involve any consolidation of the affairs of the two companies. The chief expenses of coal production are mine work and breaker work, and that is more or less dependent on the tonnage. Where there would be, if it were possible, a great economy would be in the establishment of a single selling agency. That would save a great deal of trouble; but I do not know whether the matter is going through; it would certainly evoke some opposition.

Q. (By Mr. RIPLEY.) Was that not the principle of Mr. McLeod's plan of 1893?—A. I believe so.

Q. Namely, to establish a single selling agency?—A. Yes. Mr. McLeod had a pretty logical plan that dealt with the whole thing, and Mr. Morgan seems to have followed some parts of it in his recent operations.

Q. He has apparently avoided certain pitfalls which beset the way of the former attempt?—A. Oh, yes; I think so. For a while the lease of the Jersey Central to the Reading was objected to at the time, but there can be no particular objection to the Reading's owning 51 per cent of Jersey Central stock.

Q. (By Mr. KENNEDY.) You believe, then, that the community-of-interest idea is for the purpose of eliminating the independent tonnage?—A. No; I think that was an afterthought. I think that arose from the necessity of buying up the independent or the possibly independent coal lands accorded by Mr. Morgan to the anthracite roads when the Pennsylvania Coal Company took up the new coal road, the Delaware Valley and Kingston, along the line of the Delaware and Hudson Canal, and let it be known they were going to build their own line unless there was a fair reduction in anthracite rates. That stimulated the purchase of productive coal lands.

Q. Which road purchased a large part of those coal lands?—A. The Ontario and Western bought quite a block from the Lackawanna Iron and Steel Company, which was owned by the Lackawanna; but that was a case where the tonnage was not really independent, because it was owned by one road and sold to another. The Ontario and Western also bought about 600,000 more tons a year capacity this winter. That, with the tonnage of the Pennsylvania Coal Company, makes up about the 6 per cent I spoke of as having changed hands since this thing started.

Q. (By Mr. KENNEDY.) Can you tell us something about the purchase of the Pennsylvania Coal Company by the Erie Railroad, first by the commissioner who acted for them and then by the Erie Railroad?—A. All we know about it is that the operation was very quickly conducted. It was known that negotiations were taking place between Mr. Morgan and the Pennsylvania Coal people, and it was also thoroughly understood that he was acting for the Erie in the matter. Our understanding was that he paid the equivalent of about twenty-eight or twenty-nine million dollars for that property to the Pennsylvania Coal Company, acting for the Erie road. He got a commission—how much we do not know, but the ordinary banker's commission in such matters. I think the commission took the form, to the syndicate, of some Erie first preferred stock. There was five millions of first preferred stock issued as a sort of bonus in connection with the underwriting.

Q. Did he pay a high price for the stock, and then did the Erie later on pay a still higher price?—A. I think that Mr. Morgan got a commission from the Erie.

Q. Was not the purchase in the first place by him, he making later a sale?—A. It was a purchase by him and later a sale to the Erie; but it was necessary for him to follow that plan, because he had to act quickly.

Q. Was there a very high price paid for the Pennsylvania Coal Company property or was it considered a moderate one?—A. Well, so far as the records go, at least so far as I know the records, it is the highest price that has ever been paid for a block of coal land within the history of the business.

Q. (By Mr. RIPLEY.) You mean per acre?—A. I mean per ton of output. That is the only way one can consider it. Of course, if the Pennsylvania Coal Company has a large quantity of undeveloped land, which is not my understanding, this price is not so high; but, assuming that it is a fairly well developed property, the price paid in comparison with what Mr. Gowan paid for the Reading coal lands—that price broke the Reading at the time—is very high. You can figure it this way: Assume that the Pennsylvania Coal Company cost the Erie \$32,000,000 and that the Pennsylvania Coal Company's lands turned out $4\frac{1}{2}$ per cent of last year's shipments of coal. Now, the Reading turned out 20.7 per cent, and by making an equation between the two or valuing the Reading coal lands on the Pennsylvania Coal Company's basis, they worked out at something between \$125,000,000 and \$130,000,000. At the time of the last reorganization those Reading coal lands stood on the books at \$70,000,000, which represented not their original cost, but a considerable sum of money for deficits also that were charged for cost of land; but even if you suppose they cost \$70,000,000 back in 1870, they stand to-day on that valuation as worth \$125,000,000. Now, the Reading has gone into bankruptcy twice since that time—once in 1888 and the second time in 1893.

Q. Was that bankruptcy due to carrying that land at so heavy a price?—A. Undoubtedly.

Q. On this basis the purchase of the Pennsylvania Coal Company would entail an exceedingly heavy burden in addition to the present debt burden of the Erie Railroad?—A. I think it will cost them 4 per cent on \$32,000,000—\$1,280,000 a year plus whatever dividends they declare on five million of preferred stock that went in.

Q. In other words, how much, approximately, on each ton of coal that that Pennsylvania Coal Company puts out has got to be charged up to interest on this purchase, approximately?—A. Approximately 60 cents; 50 to 60 cents a ton.

Q. Supposing that this operation involves an addition of 60 cents a ton on each ton of coal the Pennsylvania Coal Company puts out at the present price, what effect will that have on the price of coal produced in the entire remaining field?—A. It would not necessarily have that effect, because the Pennsylvania Coal Company used to pay dividends at the rate of—I forget the rate, but it is a very large rate—and likewise piled up an enormous surplus which was divided among the stockholders before the deal was made, so that all profits of the Pennsylvania Coal Company will necessarily go to the Erie, whatever profits there may be on the output of coal.

Q. In other words, this 60 cents a ton will not be put on the price of coal?—A. No; but it will come out of the coal company's profits.

Q. Does not that profit concern the public?—A. It does not concern the public as much as it does the Erie.

Q. (By Mr. KENNEDY.) Do you anticipate any benefit to the coal-consuming public as a result of this community-of-interest arrangement between the railroads in the anthracite country?—A. I do not think that it will have very much effect either way.

Q. You do not?—A. No; because experience goes to show that it is very easy to haul coal prices down, but very hard to put them up. If it had not been for that strike last year coal prices to-day would have sagged a little, and they have been unable even yet to put the prices to where Mr. McLeod had them. My understanding is that even at to-day's high prices, following the results of last year's strike, the price is not as high as Mr. McLeod succeeded in establishing.

Q. Is the price unreasonably high at this time?—A. I could not answer that question; I have no way of telling. But here is a point bearing on that: Not one of these coal roads, with the exception of the two old companies, the Delaware and Hudson and the Lackawanna, is doing very much more than making a fair dividend, and some of them are not doing that. Now, the Jersey Central is doing a good deal better than it was doing 3 or 4 years ago, but a great deal of its improvement has come from general business. The same is true of the Reading. The Reading has made quite an improvement, and if you will look into the Reading's figures, you will find that their general traffic, merchandise of all sorts, is very largely responsible for the amount, not the coal companies. The Lehigh Valley and the Reading Coal Company, and such coal companies as are reported separately by the railroad companies, all show deficits. The Lehigh Valley Coal Company showed a big deficit last year. The Lake Erie and Wilkesbarre showed profits. The Jersey Central has piled up an enormous debt. Now, you can

say, if you will, that the transportation companies simply charge everything to transportation, and that the coal companies most usually show a deficit; but the transportation companies are not making very extraordinary profits. Neither the Reading nor the Erie nor the Lehigh Valley nor the Jersey has done very well.

Q. (By Mr. RIPLEY.) Do you refer to the absolute amount of profit or profits relative to the capitalization?—A. I mean earnings; I mean absolute figures. They do not usually show very largely. They have not done nearly as well as many other companies, and there is a distinct prejudice against these securities of anthracite companies on the ground that they are handicapped by the nature of the product. It is a very hard thing to control; it is an unsatisfactory thing to have to do. Anthracite is expensive to mine, expensive to handle, and the owners have never been able to control the market to such an extent as to make reasonable profits on anything but a very low capital. The reason why the big profits were shown by the Delaware and Hudson and the Lackawanna Coal Company is that the capital was low at the start.

Q. Have these companies ever been reorganized or in the hands of a receiver?—A. I do not think the Lackawanna or the Delaware and Hudson has ever been in trouble.

Q. In other words, the roads which are kept on a low capitalization have steered clear of reorganization and receiverships?—A. Undoubtedly.

Q. Those which have taken the opposite course have been continuously in the hands of the receivers?—A. Well, that is just the record.

Q. (By Mr. KENNEDY.) You believe, then, that the public have an exaggerated belief as to the profits that go to the coal roads?—A. Yes; I think they have. I would sooner go into the bituminous business, where coal is handled at 2 and 2½ mills a ton a mile, than into the anthracite business where it is handled at 9 mills a ton a mile.

Q. Why should there be such a difference in the handling of it?—A. I can only see the outside of it; but in the first place, as I understand it, most of this anthracite coal has to be hauled out over the mountains—pretty steep grades on those roads, some of them excessively steep. The Reading seems to be best situated in that respect. Then anthracite coal is broken and has to be screened and sorted. You can not mix the cars, and you can not handle cars of anthracite like you can cars of the bituminous. Even at tidewater you have got to be careful of it, and I should say probably there is a justification for the difference.

Q. Does not bituminous go in cars over the mountains?—A. As a general thing bituminous originates at the top of the grades. The Chesapeake and Ohio handles a large quantity of soft coal, and that coal originates almost on top of the grade, so that if you started the cars they would run pretty much to tidewater without a locomotive. That is true in a general way of soft coal, as far as I know, on nearly all the railroads which carry it. It is partly true also of the Pocahontas coal fields and of the Northwestern fields on the Norfolk and Western. That is not true of anthracite. I speak now simply as an outside observer. I have no experience at all in these matters.

Q. You would not believe that this apparently high charge per ton per mile of anthracite in comparison with bituminous is put on by the railroads for the purpose of eliminating the independent coal dealers, or has that rate prevailed all the time?—A. Oh, no; the independent operators used to have contracts with the railroads whereby the rate of transportation they paid was based on tide-water prices. The railroad took the coal and sold it.

Q. How about the man who was independent in mining and shipping?—A. He would get the railroad to ship what he had and would deal with the railroads after this fashion: They would take his coal to market and sell it and give him 60 per cent of the price at tide water, New York. Now, there was an attempt made by the operators some 2 years ago or 18 months ago to change that basis to 65 and 35, and just before the Pennsylvania Coal Company was bought, or rather when the independent road project seemed to be about materializing, concessions were made, as I understand, to a number of individual operators, and the railroads agreed to handle business on the 65 and 35 per cent basis, the operator getting 65 per cent and the railroad 35 per cent. Of course the higher the tide-water price the better price the railroad got.

Q. Then the independent shipper shipped at 37½?—A. Sixty-five. He paid 35 per cent of tide-water price for his transportation, and I believe that to be the ruling rate now.

Q. (By Mr. C. J. HARRIS.) These anthracite coal roads could not haul the coal at the soft-coal price and make anything, could they?—A. They could not, because if you look at their accounts they are not making very large sums anywhere.

Q. It would not be a business proposition, in other words?—A. No.

Q. (By Mr. RIPLEY.) I would like to ask a question. Can you make any statement respecting the terms on which the Jersey Central was purchased by the

Philadelphia and Reading? In what way does that differ from the operation of 1893, in which the Philadelphia and Reading and the New Jersey Central were concerned?—A. In 1893 Mr. McLeod leased the Jersey Central from the road on a 7 per cent dividend. This time the Reading has bought something over 50 per cent, or else exactly 50 per cent of Jersey Central stock at \$100 a share, and it has offered 4 per cent bonds to be issued in payment of the debt.

Q. Is that quotation of 100 high as compared with the quotations of recent years?—A. It is the highest price for which Jersey Central has sold, as far as I know, since probably 1881.

Q. The bonds will be floated to that amount?—A. Bonds will be advertised to-day—twenty-three millions of collateral trust 4 per cent bonds.

Q. Will the effect be to issue a large proportion of bonds, constituting a fixed charge?—A. Yes; the road undertakes a fixed charge of \$920,000 a year, and it receives whatever dividends are received on Jersey Central stock, on the amount it holds, which is about 50 per cent.

Q. Suppose a period of depression should come and the price of the remainder of that Central of New Jersey stock should drop, nevertheless this being fixed in bonds will remain a constant permanent charge?—A. Certainly.

Q. Good times or bad?—A. Certainly. The fact is that the Reading bought half of the Jersey Central stock at the highest price for which it had sold in many years.

Q. Will not that burden the lessee with a very heavy fixed charge on which it has to earn dividends in the future?—A. Yes; \$920,000 in one case and \$1,280,000 in another, and the interests on those sums must be forthcoming, good and bad times.

Q. Will that have any effect on the price of coal, the Reading being a large producer of anthracite coal, indirectly or directly?—A. In so far as the Reading Company and the people connected with the Reading Company and those other big companies can get a big price for coal, of course they will try to do so. The whole question depends on the ability and the intelligence of those people to realize how far their ability can go. I think they mostly realize that it is not judicious for them to attempt to get a very high price for coal. What they need is a steady market at what they consider to be a reasonable price.

Q. You have stated several times that certain of these roads are supposed to be in common ownership. Is there any way of knowing publicly which roads are owned in common?—A. There is no matter of record; there are no figures; but it is thoroughly well understood. For instance, Mr. Morgan represents a group of interests that are undoubtedly dominant in the Reading, Lehigh Valley, Jersey Central, Lackawanna, Erie with all its appendages, and it is believed that they are taking steps to control more or less the Delaware and Hudson. But as to the last named it is indefinitely known. It is believed in the street that the Delaware and Hudson is being brought into camp.

Q. But such information as to the others, respecting the other roads is———A. (Interrupting.) A matter of hearsay; unofficial.

Q. Is there any evidence of common action of those roads to a certain end, any evidence of substantial agreement on price to tide water, or anything else of that sort?—A. No; except that they all sell coal at about the same price and make their changes at about the same time.

Q. Is there anything new in that?—A. Nothing whatever; it has been going on pretty much that way since 1884 or 1885. There was a period of disturbance after McLeod's scheme failed, and nobody knew just what the prices were, but during the last five or six years there has been the usual harmony of price that exists in any trade. I think that is the extent of the business here.

Q. Can you state anything with respect to the men who are directors at the same time in a great number of these companies that you have mentioned? Are the same men in the directorate of a great number of these companies? You need not specify actual names.—A. I think they are. I think that Mr. Morgan has representatives in the Reading and in the Lehigh Valley, but I do not know whether he has yet in the Jersey. He has in the Erie, of course.

Q. (By Mr. KENNEDY.) You said just now that Mr. Morgan owned a dominant interest in some of these roads.—A. Mr. Morgan and the interests allied with him, the interests that he represents and acts for; quite a number of people are concerned.

Q. Can you say what interests those are?—A. Mr. Morgan generally has the support of the leading financial interests in the street when he gets started in an operation. In this instance it is customary to talk of the Morgan interests, meaning just that line. People talk about the Morgan roads, the Vanderbilt roads and the Gould roads. The Morgan roads are the Reading, the Lehigh Valley, the Southern Railway; those are distinctive Morgan roads.

Q. It is not so much Morgan capital—?—A. (Interrupting.) That I can not tell. Mr. Morgan has very large capital, and no doubt he has a large amount invested. He is believed to have the power of changing the boards; in other words, what he says on these matters "goes." That is about the situation. Just why it should "go" and how it goes we can only conjecture.

Q. (By Mr. RIPLEY.) Is there any such influence in the directorate of the New England roads?—A. Mr. Morgan is supposed to be strongly interested in the New Haven, but the New Haven has other affiliations which would prevent its being controlled by him except to a very limited extent. I do not know of any such influence.

Q. You have heard the statement that in 1893 Mr. McLeod's downfall was due to the policy of the New Haven road acting through Mr. Morgan's influence?—A. I have heard that. That has been one of the things that have been suggested.

Q. Does it appear to you to have been proven?—A. Oh, nothing was proven. There is a general impression that it was an incident of common occurrence, where one interest fights another.

Q. Is there, in your opinion, any attempt of these anthracite-coal roads to get an independent entry into New England over their own lines or over lines controlled by that same syndicate?—A. I haven't heard of any. The Poughkeepsie bridge route takes some coal now.

Q. (By Mr. KENNEDY.) Is there any overcapitalization of the coal roads?—A. I think anybody would admit that the Reading is overcapitalized, from the fact that after 4 years of pretty steady demand and prosperity the common stock is worth no more than 30 cents on the dollar in the markets. I think anybody would say that the Erie is overcapitalized. The record of reorganization of both of those roads was very faulty; they were left with heavy burdens.

Q. Since you touch on it, I would like to ask if you care to speak generally on the overcapitalization of the American railroads.—A. I think, as a general thing, our railroads are not overcapitalized. If you take the railroads together they are capitalized for about \$61,000 a mile, stock and bonds—both together.

Q. All kinds of stock?—A. All kinds of stock and all kinds of bonds, which is about \$8,000 a mile more than 15 years ago; and one reason for that increase in the capitalization has been such reorganizations as those of the Richmond Terminal and the Erie and the Reading. Each swelled the volume of junior securities that was not expected to get any dividend to an absurd extent. Now, take the case of the Erie, for instance. I have not figured up just how the new securities of the Erie compare with the old, but the old Erie had a capitalization of about \$70,000,000, common stock, if I remember right. Now it is about \$50,000,000, preferred, and \$112,000,000 of common. It has not any more property now than it had then, and it has more bonds. In other words, the Erie road is undoubtedly capitalized for a good deal more per mile to-day than it was 20 years ago.

Q. Is not the Erie a more valuable property to-day than 20 years ago, from the earning standard?—A. I think so, because the country is growing up to the Erie. Mr. Hill is recognized, I guess, as the foremost railroad man in the United States, and Mr. Hill has told his friends that he thinks the country has grown up to the Erie road now and that it can make some money, and perhaps pay something on the common stock. But, you know, for the last 5 years Erie stock has been a joke in the street. Everything else has gone up, and people have taken an interest in it. It was only when Mr. Hill went into the road that anybody paid any attention to Erie stock.

Q. (By Mr. RIPLEY.) What has been the movement of that stock since that time?—A. It has gone up from about 15 to 30; just about doubled in price.

Q. (By Mr. KENNEDY.) Is not some of this increased capitalization of the Erie justified on account of the value of the property from an earning standpoint?—A. There was no necessity for it. The old Erie common stock sold in 1892 for a higher price than what the Erie common is selling for now. Eight years ago the old Erie common stock sold for more than the present does. There was no necessity to issue great masses of all that stuff. It is a wrong principle. What Mr. Morgan did in all his reorganization was to estimate the minimum of earning capacity and take care to get the fixed charges down to that, but when he came to charges that were not fixed, or to securities dependent on future prospects, people could pretty much help themselves.

Q. How is the case affected by this overcapitalization?—A. It is not affected; it has no power whatever on the rates or earnings. Capitalization is a resultant of forces, and not a force itself.

Q. Would the labor part of a transportation line be affected by it?—A. No. A railroad nowadays starts with gross earnings, and its earning capacity varies strictly with its gross earnings. And if you know what a road's gross earnings

are likely to be, you know what its capitalization is going to be. No matter how you start, whether with the cost of the road or promoters' profits four times multiplied regardless of cost of the road, you must come sooner or later to where your capitalization must meet your earning capacity. Earning capacity is the final test of capitalization. It is the only thing that prevents overcapitalization, because all the other factors tend to make it swell. It is the natural tendency of bankers to promote. It is their business. As earning capacity grows the tendency is for capitalization to grow with it.

Q. You think passenger rates and freight rates are in no wise held up by overcapitalization?—A. Not by overcapitalization. They are governed by conditions into which capitalization does not enter at all. That is my view.

Q. (By Mr. C. J. HARRIS.) Where there was a dispute in regard to rates, and it was taken before the Interstate Commerce Commission, then, of course, the capitalization would have to be considered; they would have to deduct, as you say, the actual capitalization—that is, what it was worth—not what paper bonds or stock might be issued?—A. I should not consider that would be the way to go about the question at all. I should differ entirely with the Interstate Commerce Commission. I do not think the original cost of the road has got anything whatever to say to reasonable rates.

Q. But you would have to take into consideration the actual value of the road some way, would you not?—A. Not its original cost. There is only one way to do it—earning capacity and a reasonable return on the capital.

Q. (By Mr. CONGER.) Capital invested or capital stock?—A. Why, take the whole volume of capital invested. I should say that if a railroad were to pay anywhere from 6 to 8 per cent on all the stock and bonds, on its cost of road, the item of cost of road in a balance sheet, as a rule, will come near representing the stocks and bonds on the other side, except where a railroad has investments in the stock of another road. But you will find the cost of equipment about represents the quantity of bonds and stocks outstanding.

Q. Does the account "cost of road" on the books of a railroad corporation usually indicate the sum for which that road could be reproduced?—A. No; the cost of duplication is a very different thing from the original cost. Now, the strength of the Pennsylvania Railroad to-day lies in the fact that it is only bonded for about \$47,000 a mile. You could not duplicate the Pennsylvania Railroad to-day for twice that sum. To hold the Pennsylvania Railroad down to 6 or 8 per cent on \$47,000 a mile is to limit the recompense for ability, care, and economy.

Q. Is it not a fact that on the books of some of these railroads this cost of road is usually much more than the cost of reproduction, that having been brought about through construction companies, or something of that sort?—A. The cost-of-road item generally contains a good deal of matters that are not purely construction, such as discount on bonds and analogous items, and it may happen that those are unusually large; but it will not, as a rule, represent a great deal more than the actual sum so spent. The Atchison road, when Mr. Stephen Little examined it, showed the composition of the line, and it did have a great deal in the item that represented other things besides rails and ties and work on the track. Those things are cost of the road. Discount on bonds is cost of the road, in that sense.

Q. Well, certain discount on bonds might be justifiable in the cost of the road, but on the other hand I think you would have to agree that cases have been known where contracts have been given to construction companies, those construction companies being in fact officers of the road, for pretty fancy figures.—A. I have heard of such things.

Q. Fifty per cent. or 100, more than the road is built for?—A. I think if you take the cost of equipment of the roads of the United States, if you had an Interstate Commerce report or a Poor's Manual, and take that item for all the railroads of the United States, I should say it would represent within probably 10 or 15 per cent the actual cost of those roads as charged to that account, but it would not begin to represent the real value of those roads.

Q. You think the real value would be much more?—A. Because the railroads have become naturally more valuable on account of the growth of population; and, second, because large amounts of money have been diverted and gone to the improvement of the roads and no credit taken for it in the permanent accounts.

Q. Is not the reverse sometimes true, that the charges have been made to appear as assets—cost of roads—when they really ought to have gone to operating expenses?—A. That is true in a sense, but if you were to subtract the amount charged against income and spent for betterment of the property you would have a tremendous balance on the other side. It is pretty much impossible for a railroad to do that now without its being incidentally jumped upon.

Q. You stated a few moments ago that you take issue with the Interstate Commerce Commission as to its method of ascertaining a reasonable rate. Can you outline what you think would be a proper way?—A. No; I think just enough to disagree with their method. I do not see any method to determine a reasonable rate; only I do not think the original cost of the road should have any important bearing in the matter at all. There are just two things that seem to me to bear on the matter, and one of them is the cost of duplication—laying down alongside of that railroad another railroad similar, with terminals, with business provided for it, and everything else. That seems to me to be the more important thing. If a road cost \$15,000 a mile 30 years ago, and has kept its capital account intact and added nothing to it, and to-day is earning \$6,000 or \$7,000 a mile gross, and making the equivalent net, I do not think its construction accounts, as they stand on the books, have anything to say on the matter at all. Otherwise you prohibit all growth. I do not agree with the Interstate Commerce Commission plan. I should be very sorry to have to get up and prescribe one, but I disagree with their method.

Q. (By Mr. RIPLEY.) Is not a large amount of this increase in the value of railroad property due to the rise of value of land itself—that is, to the increase in the value of the right of way?—A. Well, I should say that the increased value of the land is largely the result of the presence of the railroad and the growth of the population.

Q. The railroad was there 30 years ago, and the population, was it not?—A. The railroad has preceded the population in a general sense. In all parts of the United States the railroad has gone first and the population have followed.

Q. How does the capitalization of the railroads compare with the capitalization of our new industrial combinations?—A. There is no standard by which one can compare the two; but I do not hesitate for a moment to say that, comparing the average of all railroads of the United States with such companies as Federal Steel and Steel and Wire and these other big concerns, that the railroads are capitalized in an ultra-conservative manner, or, if you would like to put it around, you could say the others are capitalized up to the limit that the people that are expected to buy the stocks will take. You know there have been cases where the capitalization of some railroads has been absurdly low, and there has been a tendency in all such cases for these railroads to be reorganized in just a contrary fashion to that in which a railroad is reorganized when it is bankrupt. The Chicago and Alton is an excellent case. It was a peculiar proposition. For the matter of about 18 or 19 years it stopped still; would not build anywhere; just simply stood still and ran its road. Mr. Blackstone, who was quite an elderly man, was in control—almost held control himself; with two or three others he held control of the road. It stood still and paid big dividends of 7 or 8 per cent on its common stock right along. Mr. Blackstone became sick, and some of the directors concluded to sell the road. At the time they were selling it they had an earning capacity of about, if I remember right, \$2,900,000 a year. That was the net earning capacity of the Alton road. It was a machine that was turning out that much in net earnings, and it was then capitalized, if I remember right, for about \$24,000,000. I will give you the figures exactly [reading from book]. The road had twenty-two millions par value of stock, of which some was common and some preferred; and it had about eight millions of bonds as well; call it thirty millions altogether, and I think it earned substantially \$2,900,000 a year with reasonable certainty all the time. The earnings were very steady. They didn't grow, and they didn't fall off. Now, the bonds on the road and rentals—the company had leased some lines—absorbed a matter of \$1,100,000, which left substantially \$1,800,000 for the stocks. Now, when Blackstone was sick these stocks were offered. The Alton road was in the market. Nobody that had the money would buy it. It was offered first to a big railroad man, whose name is not necessary to mention, because he didn't buy it. Then Mr. Stilwell, of the Pittsburg and Gulf road, tried to form a syndicate to buy it, and for some two or three weeks talked about it; but he could not do it—was not big enough—and finally Mr. Harriman bought it, and Mr. Harriman agreed to pay \$175 a share for the common stock, and \$200 a share for the preferred stock of the old road, representing a cost to him of \$40,000,000 for the \$22,000,000 of stock. He bought the earning capacity of the Alton road over its bonded debt of \$1,800,000. Mr. Harriman then added a matter of about $4\frac{1}{2}$ to 5 per cent of earning capacity on the cost price to him of the Alton road. He knew that a first charge on that earning capacity could be floated at 3 per cent, or even less. In other words, he knew he could get his cost price and leave himself the rest for his profits. Well, sir, the Alton road, after having had a capitalization of eight millions of bonds and twenty-two millions of stock, now has a capitalization of \$54,000,000 of bonds and \$40,000,000

of stock, in all \$94,000,000; and fixed charges on those bonds and the dividends on that preferred stock just absorbed the \$2,900,000 earning capacity of the Alton road.

Q. Is it the same road in mileage?—A. Not altogether: because they have bought a small piece of road, about 50 miles long, that they didn't have before; but it is substantially the same. Instead of being about 847 miles it is about 900. There is a case where you see the bonded debt has been swollen nearly seven times and the stock capitalization has been doubled, and yet the road did not have to earn a dollar more than what it used to earn before, and everybody is ahead.

Q. (By Mr. RIPLEY.) Is everybody happy? Are the shippers along the line of the road happy?—A. I do not know whether the Alton has made any change in rates or not.

Q. Referring to a question by the chairman, do you assume for a moment that that road was entitled to earn by the rate on freight a return on ninety-odd millions of capital?—A. Certainly not.

Q. What basis is it entitled to a rate upon?—A. It is entitled to earn a fair rate on the cost of laying down another Chicago and Alton road alongside of it to-day.

Q. Which would be how much, so far as you can judge?—A. I could not tell what it would cost to duplicate the terminal; but, in a general way, if you will allow free trade in the building of railroads, and especially if there is any possibility of securing condemnation of property for terminals, a railroad's rate will be kept down to such a point as for it to be just unprofitable to put down another road.

Q. The result of this experiment is that you have a vast amount of securities at a very low quotation?—A. No; the quotation has gone up, too. The present quotation for Chicago and Alton 3 per cent bonds is about 92, and there was thirty-two millions of them: call it 90, and you get \$28,800,000. If you take the twenty-two millions of 3½ per cent bonds at, say, 85—

Q. (By Mr. CONGER, interrupting.) Second-mortgage bonds?—A. Well, that is what they amount to, but they are not so called. You see, there are two companies, the Chicago and Alton Railroad Company and the Chicago and Alton Railway Company, which owns the stock of the old company and has issued its own stock. The preferred stock, \$40,000,000, is worth \$75 a share—that is, \$30,000,000. The common stock is selling for \$40—that is, \$16,000,000. There you have a market valuation of \$46,000,000. The Alton road is valued in the market at \$70,000,000. The market value was not to exceed \$45,000,000 when Mr. Harriman got it.

Q. (By Mr. KENNEDY.) What were the bonds then?—A. The capital stock was \$22,000,000, partly common and partly preferred, and the bonded debt \$8,000,000.

Q. That is about \$30,000,000?—A. Yes, in par value, which was valued at something better than \$45,000,000. The capital stock and bonds now amount to \$64,000,000.

Q. Have you a well-defined idea about what it would cost to duplicate that road?—A. I argue from the fact that there is plenty of money available for such enterprises that there is not a good deal of money in duplicating; in other words, another road could not come in there and do very much better than those in existence.

There was a project some three years ago to build a new line from Chicago to St. Louis. There are three lines now, if I remember right—that is, the Alton, the Wabash, and the Illinois Central. There was a project to take a short line called the St. Louis and Northern and extend it into Chicago. That project was backed by some bankers here, and it was killed because the other roads did not want another Chicago line: there was no need for it now. They simply bought it up, and the Alton now owns that. If there was a great deal of money in putting down another line between Chicago and St. Louis to-day I should think that is a very easy way to make money.

Q. You argue that the value of it is not what a line costs, but what it costs to duplicate it?—A. To duplicate it; yes.

Q. It cost not to exceed \$30,000,000 to lay it down in the first place?—A. Yes.

Q. I would like to get an idea what it would cost to duplicate it.—A. I am not competent to pass on that. All I know is, it would cost a great deal more than the original line cost.

Q. (By Mr. CONGER.) The 900 miles of track could be duplicated for much less than \$70,000,000 at the present value?—A. That is, not the Alton road. The Alton road has more mileage than you indicate. What is more, it will take ten years to finish that road. After you get the whole road laid it is not a finished road then. You have to keep on spending money on the road for many years.

Q. On that theory a railroad is never finished, is it, in point of fact?—A. Never; because when you get it done you have got to throw it away and get another one.

Q. Is it not probably a fact that the value of this road—that is, a large portion

of the present market value of it—is in the terminal facilities?—A. Yes. You know that low-priced stock sells higher relatively than a high-priced stock will.

Q. There is a percentage of advance?—A. A big percentage. In other words, if you have 6 per cent income to give away on a stock, you can sell your stocks for a great deal more money by making a 4 per cent stock and a 2 per cent stock than by making a 6 per cent stock, because there is always what the people call "prospects."

Q. I recognize that principle very well; but I think the Standard Oil and the Calumet and Hecla and several other stocks that might be mentioned are sufficient evidence of the fact that stock may be sold at a premium?—A. Certainly; but here is a case where the stock has been issued to about as much as the market will take. It is a case of making a profit; that is all.

Q. (By Mr. RIPLEY.) In view of its being undercapitalized?—A. In view of buying a good thing at a reasonable price. Mr. Harriman bought the Alton road at a 5 per cent basis, and he knew very well that on the present basis of interest account there was a very large profit in it.

Q. Has there been any complaint that that profit was not widely distributed between those who subscribed to the enterprise?—A. I believe the syndicate made a profit of about 16 or 18 per cent. I do not know, but I think it did. I was not in the syndicate, but I think there were other profits that the syndicate did not get. They got all they contracted for, but the mere fact that there were other profits, I suppose, made them feel perhaps that they would like to have had them.

Q. Has there been any account of such profits?—A. It is not usual in such cases to make any profit.

Q. Is the difficulty due in any way to the fact that the finances are not regulated by the State governments? Would it be competent for any State government to regulate the finances of a road? Could a State regulate the financial operation of an interstate road?—A. In what way?

Q. By controlling the amount of issues, or giving assent to leases, or in any way exercising jurisdiction over them. In other words, could a State prevent undue overcapitalization of this road?—A. I do not know that this capitalization of the Alton road is going to have any special effect on the public generally—upon none except those people who buy the stock.

Q. It is unfortunate to the holder of the security?—A. I think the man who buys Chicago and Alton stock at 40 is going to get left.

Q. Ought not the State to protect the investor?—A. It can not do it; he refuses to be protected. The only way you can protect him is to make it a penal offense to gamble on Wall street. He wants to gamble. He thinks he is the man who is going to get the money, and that the other fellow will get left.

Q. You would not advocate any Federal legislation to control or supervise financial operations of this kind?—A. It would be impracticable. I do not think it would be wise to attempt it.

Q. You are aware of the policy of Massachusetts?—A. Yes; it is somewhat similar to the English policy.

Q. Will you state your opinion respecting that policy?—A. I think the English system and the Massachusetts system both are good, very good, but they tend to protect the railroads. Their effect is not to protect the public, but to protect the railroads, because it is practically impossible to get a competing road. All you have to do in England to show that the road should not be built is to show that it would injure the interests of the road already there.

Q. Is not that for the benefit of the community, if there is a sufficient number of roads built to accommodate the people?—A. I think so; I am entirely of that opinion. But that is not the opinion of the shipper; that is not the opinion of the Interstate Commerce Commission.

Q. Is it not the opinion of the railroad commissioners of the State of New York? Have they not lately refused to grant new charters?—A. Yes. I think it is very wise.

Q. Has not that policy been commended, as a whole?—A. I think so. It is a good policy.

Q. If it is a good policy for New York State and Massachusetts and in England, why should it not be a good policy for the United States, making allowance for the need of roads in certain parts of the country, namely, the West?—A. The peculiar thing about the United States has been that it has been run on the theory of protection, whereas England has been run on the theory of free trade; but in England the railroads have been protected, while in the United States the railroad industry has not merely not been protected, but it has been very seriously harassed. The result of it has been that, so far as the production of cheap and good transportation is concerned, the United States leads the world. In England they are

away behind the times in that respect; but I am of the opinion that it would be a very good plan if you had to seek legislation before you could build a road right alongside of another road.

Q. (By Mr. KENNEDY.) How does the capitalization per mile of English roads compare with the capitalization of the American roads and those of other European countries where the government has more control over them than in this country?—A. The capitalization of the roads in Great Britain, if I remember right, is somewhere between \$220,000 and \$240,000 a mile, and ours is about \$61,000. Their roads are capitalized for about four times as much per mile as ours are. I do not know anything about the capitalization of French and German railways, because it is difficult to get figures.

Q. Can you give the reason for that?—A. When the British railroads were completed, along in 1840 and 1850, the land in England was worth a good deal more than here, for one thing, and then you must remember in the capital account of English railways is still included every atom to every man, and everything connected with the early operations of the roads when they started to build the roads, and the English roads have always capitalized everything that could possibly be capitalized since that time, and are still doing it.

Q. If the road was laid with iron rails at the beginning, and now with steel rails, is that old account considered in the capitalization?—A. All the iron is there, and such additional cost as would be involved in putting down steel. If they put a switch box that was not there before, it goes to capital. I asked some English railway managers what their theory was on that point, and one of them made this statement: Whatever sum of money is necessary to make the railroad in perfect condition to-day, no matter what it was before, it is capital account; the result being, of late years, the rate of return of English railway stocks has been falling quite materially. The English railway has got to a point now where they have got to stop swelling the account any more and try to improve their operations.

Q. Do you know anything about dividends that are paid upon the stock of English railroads?—A. Yes; the best English railroads pay dividends ranging from about 5 per cent to 7½ per cent.

Q. On stock representing that large capitalization?—A. Yes.

Q. (By Mr. CONGER.) Usually bonded, are they not?—A. They have debentures, but those are very small. You may take it that their capital stock is about the largest item. I think their debentures and forms of bonded debt do not amount to more than about 30 per cent of the whole.

Q. (By Mr. RIPLEY.) Will you state your opinion respecting the policy in Massachusetts of holding capitalization strictly down to the investment of the road? Are you aware that that is the policy?—A. Yes.

Q. Have you any opinion respecting its applicability to the rest of the country, or what the effect would be if tried by the States, conforming to that policy, or by the United States Government enforcing it?—A. I think it would be a good thing. I do not see any very great objection to it. There might not be so much in the way of commission for bankers, but it would certainly tend to make the value of stocks more stable.

Q. As an example you mentioned some time ago the Kansas City, Pittsburg and Gulf Railroad. Will you state if that is a typical example in the financing of railroads?—A. Yes; the Pittsburg and Gulf road was started by Mr. Stillwell, a man of very sanguine disposition and great energy, and he conceived the idea of building a line direct from Kansas City to the Gulf of Mexico and establishing a deep-water port on Sabine Lake, which he proposed to dredge, and he proposed to put a ship canal from Sabine Pass up to the lake. The reason he took Sabine Pass was because the land there was pretty much owned by the people interested in the road. At a place called Port Arthur it has a depth of 6½ feet, with nothing but mud below. He started in to dredge the ship canal for 11 miles and dredged on this lake. He was able, by dint of hard work, to raise money for the completion of the road, mainly in Amsterdam, and the way he financed it was this: He had a mortgage which permitted him to issue bonds at the rate of \$25,000 a mile for the road, for the main track, and also for yard tracks and terminal tracks. If you remember that point you will see where it comes in presently. All these bonds he sold at whatever he could get for them, generally 65 or 70 cents on the dollar, and he threw in common stock for a like amount as a bonus, and these bonds were dealt in here for, well, somewhere around 60 or 70, and common stock hung around about 10 cents on the dollar. Anyway, the people who took the bonds, many of them, were able to get out, because the bonds had a value; but it was obvious at the start that the property could not carry this rate. They got out. I think, twenty-one millions of bonds before they finally went into bankruptcy. Their mortgage was peculiar in this respect, that it allowed them to issue \$25,000

a mile, not merely for main-track mileage, but if they chose to lay five or six tracks alongside their main track and call it a yard they got \$35,000 a mile of bonds for every mile of that track. And they did build 90 or 100 miles of such yard track, and they issued \$25,000 a mile in bonds on that yard track. All they had to do when they wanted a million or two was to build yard tracks and put out bonds, which they did. The road went into bankruptcy, and is now the Kansas City and Southern, with fixed charges cut down and reorganized, and it has a pretty fair show.

Q. (By Mr. RIPLEY.) There is no body which has supervision over an interstate road of that kind to examine it in advance of its charter and exercise control either over the prospectus or over the affair in any other way?—A. As far as I know, none.

Q. Would it not be an advantage if interstate roads could be under control in that way?—A. Very great. The Interstate Commerce Commission has been operated simply and solely from the other side. It has looked to the interest of the shipper right along, and has restricted and restrained the railroad—has not protected it at all.

Q. The point I was getting at is this: Whether in your judgment it would conduce at all to the security of the investor and to the prevention of costly competition of paralleling of roads for speculative purposes if the Interstate Commerce Commission were to have an extension of its powers corresponding to such supervision as is the case in some States in these matters?—A. I think the Massachusetts railroad law should be enacted in a general sense, or woven into the Interstate Commerce Commission law. The Interstate Commerce Commission law is too one-sided as it is.

Q. Purely in the interests of the public?—A. Purely in the interests of the public.

Q. Without any regard to the investor?—A. Yes; the investor as the owner of a railroad. Certainly, I think that would be a very good thing.

Q. (By Mr. KENNEDY.) What, in your opinion, has been the influence that has been most potent in bringing about the consolidations of railroads which are going on at such a scale in the country now?—A. Really, it was the logical outcome. The movement goes back to the enactment of the interstate-commerce law. When that law was passed the railroads found themselves without what they conceived to be their only source of strength, namely, pooling. As a matter of fact, it was not, but they thought it was, and, as you know, one by one the ground was knocked from underneath on the various other forms of organizations, in place of pooling, and when the Trans-Missouri Association's decision came the last straw was gone, and Mr. C. P. Huntington—who is generally understood to be the inventor or the crystallizer of the community-of-ownership principle—said the only way for the railroads to protect themselves at all and keep things in order and prevent discrimination in rates was for the men who owned them to run them; in other words, for the directors to direct. Now, it has always been the case that a few groups of bankers—very few of them, probably seven or eight—really were in position to control 75 per cent of the important railroad mileage of the United States. You can count up now a list of probably six or seven men or interests that control 100,000 miles of the most important mileage of the country. This is a matter of public knowledge; it is not a matter of record. Now, what these men have done is this: Take the case of the Vanderbilts and the Pennsylvania Railroad Company; some time ago the Vanderbilts and the Pennsylvania Railroad people are supposed to have gotten an agreement affecting the trunk-line situation and the anthracite situation and the soft-coal situation. There was a division of responsibility. The Pennsylvania said, "I will keep everything quiet and orderly in my bailiwick;" and the Vanderbilts said, "We will keep everything quiet in ours." That is what we all suppose took place. At all events, the trunk-line situation has been quiet, and nobody is getting knowledge, and the same is true of the soft-coal situation. It is just this one thing of cutting down business; it is not any effort, necessarily, to control. Now, there have been cases where the control idea has been rendered necessary. For instance, in the case of the Union Pacific. The Union Pacific bought the control of—substantially, I think—the Southern Pacific. Why? Because the Union Pacific was, by nature and by Congress, intended originally to form one line with the Central Pacific, but the owners of the two drifted apart, and this was the first chance they had to put the two together, and the Union Pacific people bought the Southern Pacific road simply and solely for that Central Pacific line to get a clean line through from Omaha to San Francisco.

Q. (By Mr. RIPLEY.) That happened this present year?—A. This last month.

Q. (By Mr. KENNEDY.) Are they likely to get away from the Southern system?—A. They have the means to do so if they want to, and I would not be surprised if they did.

Q. What would that mean?—A. The Central Pacific stock, preferred and common, was deposited as security for the issue of Southern Pacific 4 per cent bonds—twenty-eight millions collateral trust bonds—and those bonds can be called at par and collateral released. Now, the Southern Pacific can undoubtedly, if it so pleases, sell to the Union Pacific the common and preferred stock of the Central Pacific, and thus give the Union Pacific the absolute ownership of the Central Pacific from Ogden to San Francisco, making the line complete.

Q. I take it from your reply to my former question that you believe the Supreme Court of the United States, by its decision in the trans-Missouri case, killed the practice of pooling as a practical question, and forced, in a way, the combinations which have been going on ever since in the railroads?—A. Yes; and I do not think, even if a law were passed allowing the railroads to pool, they would pool. This has been the simplest and safest solution of their trouble; in fact, the only safe solution. None of their associations were of any value. There was always some member kicking and making trouble in it. The combinations were very costly to maintain, and they were always having trouble with them. There was not one of them that worked well, not even the Trunk Line Association. There was a row there half the time. Well, all that is finished. The railroads are directed by their own directors, and these people happen to be the same directors for many of them, the effect being that if a man gets a rate or gives a rebate, and does something he ought not to, he can be reached at once.

Q. This scheme will do away with ruinous competition, and perhaps with the former trouble that brought about receiverships, etc.?—A. It will certainly tend to prevent disturbance of rates. Rates have been more stable in the United States in the last two years than they have been in the last thirty years. I guess there is no question about that. The rate situation has been absolutely peaceful compared with what it was three years ago.

Q. You look upon the community-of-interest consolidation of railroads as a good thing, then?—A. I think the community of ownership, as it is called, whereby the management of these roads is concentrated in a few hands, may in theory be a bad thing, but in practice it would not be found profitable as a bad thing. In other words, if they do not run these railroads on the principle of stability of rates, economy in management, and efficiency in running the machinery, there is no sense in it, and I am positive that that is what they have in mind.

Q. Do you think that the great financial men of the country, half a dozen men, have in mind the absolute ownership of these great railroad systems?—A. I do not think so; I have never seen any evidence of such disposition. I think what they desire above all else is so that the control shall be concentrated, so far as the avoidance of trouble is concerned—the avoidance of fights, rate wars. Now, there is the Burlington road. It is absolutely independent and uncontrollable, and it is outside of everything. It has no affiliations. The Burlington road is a factor in the situation that I suspect will have to be dealt with by purchase. I should not be surprised if the Burlington should be purchased at a high price, too, for the safety of the other roads.

Q. Have you anything to say on the question of Government ownership of railroads?—A. I do not think it would be good for the Government or good for the people. I do not see why the Government should own the railroads at all; I do not see any more reason for it than that the Government should go into the steel business or newspaper business. There is no essential difference between the two things. The manufacture of transportation is just as much an industry as the manufacture of steel.

Q. (By Mr. CONGER.) How far should that regulation go as to rates? Do you think the Interstate Commerce Commission at the present time has sufficient authority over rates?—A. Whether they have had the direct authority or not, I think rates in this country are not merely actually but relatively lower than they are in any other country in the world.

Q. Do you attribute that fact to the authority exercised by the Interstate Commerce Commission?—A. Only in part. I think that nine-tenths of what we regard as harm done by the railroads is due to overbuilding and unwise competition. The Interstate Commerce Commission simply accentuated it and put the dot on the "i."

Q. You said a little while ago that you thought it should be made necessary to seek legislation before a railroad could be paralleled. If a road is to be protected to that extent by the Government, ought not the Government to exercise authority over the rate to protect the public against exorbitant rates?—A. But the commission has been doing that, so far as I understand. I think it has done a good deal in that way.

Q. Do you understand the commission, under the present law and interpretations of the law by the courts, has authority now to reduce rates?—A. No; I do not think

it has final authority to reduce rates, but it has authority to do a great many things which practically bring about a reduction in rates.

Q. Is it not a fact that the authority that was supposed to be given to the commission in the law as originally drawn has in a great measure been taken from it by decisions of the courts?—A. I think so. I think it may be true that the framers of the act intended to give powers to the commission which the law did not directly sanction; but at the same time the question of reduction in rates is a matter that could hardly be final with anybody except the Supreme Court, as I should take it. It is a very serious thing. You can not delegate to a subordinate judicial body the power to name rates over all the railroads of the United States, making it perfectly simple for that body to name any rate it might please and to regulate the whole business.

Q. I do not know that anyone contends for any such authority to fix rates in any sort of way, but I think it is contended that the commission should be given authority to regulate them.—A. The commission can not regulate them without fixing them, and if the Interstate Commerce Commission has authority to say what is a proper rate and what is not, it is a serious matter. It is an authority you can not put in the hands of any body of that character.

Q. (By Mr. KENNEDY.) Has the Interstate Commerce Commission any powers at all, to amount to anything? Has it any powers that the railroads are bound to respect?—A. They have not so many powers as they thought they had and that the railroads feared they had at the start. No, I guess not; I do not think that the Interstate Commerce Commission as an active body is what I should call a very powerful body. I am not familiar with the powers they have. What good influence has it in transportation matters? It has promoted very free discussion of questions. There is one good thing it has done, if it has never done anything else, and it is a matter of great importance, and that is the inauguration of a system of uniform reporting. Their annual reports are very good.

Q. (By Mr. CONGER.) Do you think that power along that line should be extended so as to give them authority not only to prescribe uniform accounts, but also to inspect and audit the books of the railroad companies?—A. That would be pretty much impracticable. They do about all they can be expected to do in their own reports, and if the railroad can be compelled to furnish the figures called for in the Interstate Commerce Commission report, they can not go very far wrong without its being very evident very soon.

Q. Would it not be possible to give them authority to inspect accounts to the end that by the inspection they might detect discriminations in rates, of payments of rebates, and like things?—A. You mean to go down on the railroads without any warning and look over their books to ascertain if they are paying rebates?

Q. Well, possibly.—A. You mean like the bank examiner comes in, suddenly?

Q. Yes.—A. Well, I do not know that there would be any necessity for that, because, as far as can be learned, as far as we know, the payment of rebates is pretty nearly dead.

Q. You think that is a fact?—A. I do.

Q. You think that uniform rates exist now to all shippers alike?—A. In a sense they never did before; to a greater extent than before. I do not think there has ever been a time when the people were getting more even treatment in that respect than now.

Q. Is it or is it not a fact that the notice from the Pennsylvania Railroad Company to Mr. Andrew Carnegie that the rates with which he had been favored in the past were to be discontinued is the primary cause of the present formation of the steel trust? Have you heard that?—A. I have heard that and many other reports. That is not the way I look at it. No; I think the present formation of the steel trust is due simply and solely to Mr. Carnegie's careful plan, his attempt, successfully, to make somebody buy him out. Mr. Carnegie wanted to be bought out, in my opinion.

Q. Pretty long-headed gentleman?—A. He is. He sells out at the top of the boom at top prices; but I always understood that when Mr. Frick had the option he was unable to buy, and that Mr. Carnegie had determined that he should be bought out. I think that was in his mind when he talked about the National Tube Works some two or three months ago, when the matter first became mooted, and I think he has worked to that end simply and solely, and I do not think the Pennsylvania Railroad has had any influence in the matter at all.

Q. Well, that report that the company had notified Mr. Carnegie that the rates that had heretofore existed should not be continued is supposed to be the cause of his threat to move his plant or erect a new plant on the shores of Lake Erie, is it not?—A. Mr. Carnegie has made a good many similar statements at various times in his career, and they had their effect every time, and he may have said such a thing to the Pennsylvania Railroad.

Q. You do not attribute much weight to it?—A. No; I do not.

Q. Regarding the powers and duties of the Interstate Commerce Commission, is it not a fact that the commission is without power to enforce its decision?—A. Yes.

Q. Do you think that that is as it should be, or should the system be changed or corrected? Should the commission be given power to enforce decisions?—A. Is it not true that the railroads have accepted their decisions in a very large majority of cases?

Q. I think, as a matter of fact, it is true they accept in unimportant cases, and when issue is made they do not accept.—A. The way I feel about it is this: That the determination of what is and what is not a reasonable rate is really the one important question of all others, because you can very easily remedy the long and short haul business and the discrimination business. They are not so important. But when it comes to the determination of a reasonable rate I would be very sorry to see that power placed in the hands of any public body. I do not think the Supreme Court of the United States is competent to determine that. The only thing that determines it in the long run is free trade in railroads, free trade in transportation, and you get the reasonable rate fixed by nature.

Q. You would not favor the strengthening of the Interstate Commerce Commission act by making the decisions of the commission operative pending appeal?—A. No.

Q. You think that would be unwise or unjust?—A. Yes; because there is no necessity to have the thing started right off. To make changes of that character is a very serious thing. An appeal can last for months, and if there is any wrong done to anybody, when the appeal is finally passed upon it is a great deal easier to settle with the shipper than it would be to settle with the railroad. In other words, the wrong done to the shipper can be very easily adjusted, but it might be very difficult for the railroad to protect itself.

Q. (By Mr. KENNEDY.) Suppose a multitude of little wrongs are involved which the shippers might not care to urge?—A. It is not those cases they fight about; it is the big ones.

Q. (By Mr. CONGER.) Is it not a fact that under the present custom and practice very often the railroads will put in only a portion of their evidence, if you please, in hearings before the commission, and then, anticipating the decision will be against them, bring on new evidence and carry their cases into the courts, the case then being allowed to run along 2 or 3 years, not only to the great exasperation of the shipper, but sometimes his absolute annihilation?—A. I can see how that might be so, but I do not call to mind any case; I am not very familiar with the legal points involved.

Q. We have had testimony along that line before the commission at Washington.—A. Quite possible.

Q. And the question I was putting to you was whether it might not be advisable to strengthen the interstate-commerce act so as to make the decisions of the commission operative pending appeals. In other words to put the burden upon the railroads to hurry these things up instead of delaying them.—A. You can not hurry the Supreme Court of the United States. The Nebraska maximum-rate law was there—I can not say how long—3 or 4 years. That law authorized a horizontal reduction of about 20 per cent in freight rates, and if that had been going on for 3 years it would be a pretty serious thing for the railroads. It was decided in favor of the railroads when it got to the Supreme Court. Now, you could not hurry the Supreme Court.

Q. (By Mr. KENNEDY.) You spoke a while ago about some one desiring to gamble in Wall street. I want to ask you if that is what is done in the stock exchange with securities of railroad companies?—A. I used the word in a colloquial sense. I should say the majority of the transactions on the New York Stock Exchange represent the purchase of stocks on margin, of sales of stocks on margin.

Q. And in the handling of the stock itself?—A. What I mean to say is, a man has, say, \$1,000 and he thinks he would like to buy 100 shares of stock that costs, say, \$10,000. He can not buy that 100 shares and take it home with him; but he can buy 100 shares and get whatever profit there is in it and be liable for the loss when he goes to sell. That is what I mean by selling in Wall street. People will want to do that as soon as they are able.

Q. Can you give us a little chapter on the stock exchange—on railroad securities in the stock exchange? I presume you are familiar with that question.—A. From what point of view do you mean—the dealing in them?

Q. Yes; what effect speculation has upon the value of them?—A. It has no permanent effect at all. It is a perfectly certain thing that values make prices in the long run, and values mean earning capacity. In other words, earning capacity makes

profits, no matter what the bulls may do or the bankers may do for the time being to manipulate. In the long run values make prices.

Q. If you read that stock is going up 4, 5, or 10 points, or is going down the same number of points, that has really no significance?—A. It may have a great deal of significance, but it don't make the facts. Take Mr. Hill's road. Mr. Hill was the first man in the United States to thoroughly lay bare the principles of transportation and put them in practice, and the result was his road has been a gold mine to those people who have stayed with it from the start, and it works at lower rates to-day than any road up there.

Q. You mean the St. Paul and Great Northern?—A. The Great Northern. It runs at lower rates than others; it is not overcapitalized, and it has been splendidly operated and splendidly built from the start. Now, Mr. Hill's stock has gone up from the basis of about 100 to what is equivalent to-day to about 300. The stock apparently sells for 190, and there have been so many dividends and subscription rates in connection with it that it is really equivalent to 300. I have seen Mr. Hill's stock go down 20 points while that process was going on. It is not at all uncommon for stock to make a movement of that character.

Q. (By Mr. RIPLEY.) From mere sympathy?—A. Yes, or the necessity of the holder. Suppose a large holder of that stock makes a loss some time or other in his business and is compelled to sell out. His necessities will produce a serious decline in price.

Q. (By Mr. KENNEDY.) What consideration is it that determines whether stock shall be listed or put on the exchange or kept off the stock market?—A. The stock exchange has a very good set of rules governing that matter. They are very stringent in their requirements of companies that desire to list securities. They may have to furnish a good deal of information, not merely at the start, but periodically; officers have to examine into their mortgages, generally speaking, supervising them to a very large extent. It is an excellent thing on the part of the stock exchange. The stock exchange means to list nothing that is not reasonably square. A stock listed there must at least be honest, and it must make statements.

Q. (By Mr. CONGER.) The information that is required, I suppose, is of benefit to the investors?—A. Naturally; it is open for the public.

Q. Might it not be wise for the furnishing of that information to be regulated and required by statute?—A. Yes, if you could, but the fact of the matter is that railroads are no longer greatly at fault in the matter of reports. They have improved them vastly in the last few years, and they all seem inclined to do the best they can in that direction. It is no longer a trouble with the railroads; most of their reports are good. I can not call to mind a single important road to-day that does not make a reasonably good report.

Q. If those reports were required by statutes the requirement would then apply to unlisted stocks, would it not?—A. Oh, yes; but the unlisted stocks are somewhat peculiar on the stock exchange. They represent such things as sugar, which is not willing to furnish the information that the listing requires. You see, they have two lists; they have listed and unlisted, and the unlisted is so called because they are not strictly on the list, but are allowed to be dealt in on the floor. Nothing can be dealt in that is not either in the listed or unlisted department. The stock exchange practically says: "If you want to deal in that kind of thing, it is at your own risk."

Q. The point I was trying to get your opinion upon was as to whether it would not be just to the public, in the interest of the public, to have these reports required of all the corporations, so that unlisted stocks would be compelled to report?—A. Those are mostly all industrials. Yes; I am entirely in favor of that. They ought to be compelled to report, the same as railroads.

Q. Do the statutes of the various States at the present time, in your opinion, furnish sufficient information to shareholders? For instance, is a list of the several stockholders in any given case easily obtained?—A. No; there are some cases in this State and in the State of New Jersey where the stockholder can compel the officers of the company to allow him to inspect the stockholders' list; but, in point of practice, if they do not want to show the list, you have got to go down there with officers of the court and have a lot of trouble over it.

Q. That is a privilege every stockholder ought to have, is it not?—A. Undoubtedly.

Q. It is a matter that might well be regulated?—A. In England every corporation is required to file a list of its stockholders at Somerset House, and any holder can go in there and pay a shilling as a fee and find the list.

Q. At any time?—A. At any time.

Q. What objection is raised here in this country to the furnishing of a list of stockholders, if any?—A. As a rule, nobody wants to see them unless there is some fight going on, and then the dominant party naturally objects to giving anything away.

Q. Under present conditions it is possible, is it not, for the dominant party or, we will say, the management of a corporation, to actually continue in control without even itself owning a majority of the shares?—A. Certainly. It is very difficult to change the management of a company under present conditions.

Q. And to make this information accessible to other stockholders would make a change very easy?—A. Certainly.

Q. Is it a fact that the managers of these large corporations, railroads and industrials, object to the requirement proposed on the ground that if it were a requirement it would be possible for a competitor in business to become the owner of a few shares of stock, and thereby get information that would be injurious to the corporation?—A. I had never heard that point raised; but I do not see what value it would have, because I do not see how the mere knowledge of the fact that So-and-so is a stockholder of such and such a railroad is going to especially help a competing railroad to get any information.

Q. (By Mr. KENNEDY.) We have heard that point many times.—A. I do not see that it is of any special value.

Q. (By Mr. CONGER.) It has been testified to before us several times that these privileges of stockholders are now restricted for the benefit of or to protect the interests of the corporation; and one gentleman went so far as to say that it was a common practice on the street for parties desiring information to buy a few shares of stock and then go to the office of the corporation and undertake to demand it, and get it by demanding it, and that such practices as that were considered honorable and justifiable. What would you say on that point?—A. I should say if a stockholder is entitled to go to the office of his company to demand from them information of a character that might be useful to competitors, I do not see how you can prevent the competitor buying stock and exercising those rights. I think it is entirely proper for the managers of a company to refuse an ordinary stockholder information of that character; and I should not consider the stockholders' list would furnish that information. I do not think any stockholder should be allowed to go in and sit down and look over the books of a company. It is not necessary that he should have that privilege. If you are going to give that power, then you need to put into the hands of the managers the power to restrict transfers of stock.

Q. How far do you think the report of the financial affairs of a corporation to stockholders should go? Should it be made in great detail?—A. Corporation reports ought to be made in the greatest possible detail consistent with the interests of the company. It is just possible that a company may not be able to state what, say, the manufacturing profit in its business is, because that might give its competitors a clue; therefore its managers might say "We do not care to state the gross sales; we will simply show you the net profits." But where there is a case of that kind they ought also to come forward with an intelligent audit by experts to show that those profits are profits.

Q. Do you know of any such custom as I have been outlining in my questions, of people going to rival corporations and trying in that way to get information?—A. I should say, my common sense would tell me that such things must have been tried many times. I do not know of any case. I have not had a great deal of experience with industrials.

Q. (By Mr. KENNEDY.) Do you think of anything you would like to volunteer that has not been brought out by the questions?—A. Not at this moment.

(Testimony closed.)

NEW YORK, February 20, 1901.

TESTIMONY OF MR. THOMAS L. GREENE,

Vice-President the Audit Company of New York.

The special subcommission met in the rooms of the Chamber of Commerce, New York, February 20, 1901, at 10.45 a. m., Mr. C. J. Harris presiding. At that time Mr. Thomas L. Greene, vice-president of the Audit Company of New York, appeared as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. C. J. HARRIS.) Mr. Greene, will you give us your full name?—A. Thomas L. Greene. I am now the vice-president of the Audit Company of New York, which is an auditing and examining company. If you would like to know, I may say I was brought up as a clerk in the railroad business under my father, who was one of the pioneer managers in olden time, and I was in the railway business in a dozen capacities for a dozen years. In coming to New York I

was engaged for merchants also in transportation matters, was editorial writer for one of the New York papers and for magazines and periodicals for a dozen years, and I have been obliged by my calling to study the business situation and the corporation question. I have written a book on the subject called *Corporation Finance*, which contains, after a fashion, something of a discussion of some of these questions. Although it was written 3 years ago, it has general suggestions on the questions which the commission are considering. I ought to say at the outset I do not speak of any views except my own. I have no right to speak for anybody else, in case the question should come up; and, furthermore, I am not in the employ of any railroad company, or of any banker, and I do not know the particulars or details of any deals that may be going on. I say this because it is both a strength and a weakness to be in this position. I can not give you any information whether one company is going to absorb the other or not; but it is also, on the other hand, an advantage in the sense that it is usually the person who has had close touch in the past with these things who keeps generally informed on the subject. So far as that is concerned, I have some general ideas in my mind on the situation, at least some permanent general ideas.

Q. In your business as an official of an auditing company have you made examinations of financial companies and railroads?—A. I would prefer, if it is agreeable to the commission, to leave the question of the exact examinations of the Audit Company out of the question. I mean by that statement that our relations are so confidential that I can not give you information; it would not be right for me to do so. I would prefer to confine myself to my general information, which has extended over, as I say, more than 30 years' experience.

Q. Were you ever connected with the anthracite coal business?—A. I had cause to study the anthracite situation, the general situation, somewhat closely.

Q. Did I understand you to say that you were connected with the independent producers of anthracite?—A. I was at one time; I represented them at one time.

Q. What was their production, annual production at that time; that is, what was their percentage of the coal business?—A. My recollection is that at that time it was somewhere between 28 per cent and 30 per cent. I would not like to state the exact amount. That was 4 or 5 years ago. It was a very considerable portion of the total coal tonnage, as you see, and at that time a very considerable proportion of the tonnage of one or two of the railroads.

Q. What is the tendency of the anthracite coal trade to-day?—A. The individual operators occupy a peculiar position. They are and have been honest and fair owners of their properties, and they have a right, the same as everybody else has, to conduct their business in their own way, and at the same time they are part of a very great problem in the coal regions, and perhaps before taking up particularly their position it would be well to speak of a few facts about the general situation, if that is agreeable to you. The difficulty in the coal region is that what the college man would call an economic waste is tremendous. It is at the foundation of the problem that our financial people are seeking to solve. The anthracite coal of the United States is confined to a small area in eastern Pennsylvania. I think it is about 400 square miles, but you can find that out from somebody, and in that sense it is of course a natural monopoly. However, the ownership is so cut up by individual holdings and by different railroads that it is most uneconomically handled. I think that that map [referring to map] is approximately correct as to the situation of coal in the Schuylkill and Lehigh regions. Let us say, for example, that coal from those regions will be hauled right past the Wyoming Valley over the mountain. If you know the country there you know the Wyoming Valley coal goes over a pretty high mountain, and will sometimes be hauled over that same mountain back through the Schuylkill regions to tidewater. I cite that as one instance of the great economic waste of transportation power.

Another thing is that the railroads must, of course, have tonnage. They are miners of coal principally to secure transportation of it, because it is by transportation that they get their charges, and it is perfectly proper and fair that it should be so. The result of that system is that the most economic mines are not worked to their full capacity, and that the mines which it costs a great deal more money to work or operate, because they belong to this or that or the other railroad, are operated. Any engineering expert that you choose to call will tell you in technical language, which I can not do, the reason why some of these mines cost certainly as much as 50 cents a ton more than others to operate. It is the same with all mines. Some are on the level, some fill up with water and have to be very expensively pumped, some are very disadvantageously located in various ways. Now, if it were possible to shut up the uneconomic mines and operate to their full extent those which can be operated cheaply; if it were possible to distribute the total around so that the railroads which are entitled to the transportation would get

it—that is to say, if the Wyoming tonnage could be sent one way and the Lehigh and Schuylkill another instead of crossing each other; that the tonnage which now moves on two railroads within 100 miles of each other could be transferred from one to the other—if all this were possible, there is no reasonable doubt in my mind, from conversation with railroad people and with the mining people, extending over a long period of time, that there could be a saving in mining and transportation of \$1 a ton. There is also another saving possible in the way that the coal is distributed to the retailers, and incidentally, I may remark, that there is another saving, possibly, in the way the retail dealers distribute to consumers.

Q. (By Mr. KENNEDY.) Is that saving of \$1 a ton likely to take place when the community of interest is perfected?—A. I was just coming to that. That is a very important point, and I will bear it in mind. There is also an important bearing in it upon the coal trade as a whole in the fact that the governments of the States have not allowed them to combine. Furthermore, the trade as a whole is not economically managed in the sense that a great business should be conducted. It should be played almost, as you might say, figuratively speaking, like a game of chess. The railroads as a whole do not know how much coal is going to one place or another. They do not know, for example, whether Binghamton is using as much coal as Elmira. Now, the great iron companies know where their markets are, and they study them, but such study is impossible in the coal trade, because these companies are not combined. There is no general policy about it. If you will consider all those facts, on economic mining, on economic transportation, the fact they have each of them a large number of selling agents, of subordinates, I mean more particularly who sell coal, it is apparent to you, I think, that this economic waste I spoke of is really very great.

Now comes the question whether that waste could be done away with. I am of the opinion that it can not be entirely done away with without absolute ownership. The community of interest will certainly enable the owners to effect very many economies, but they can not get the full benefit of the situation at all. Let us take a practical illustration: perhaps in that way I may make myself clear to you. The Central of New Jersey and Lehigh Valley roads run alongside of each other for miles and miles. If it were possible to transfer the coal that now passes over one road to the other, that coal could be handled by the other railroad with a very great saving; but, of course, the Central can not afford to have its coal put on the Lehigh Valley unless its owners themselves have an interest in the profits of the Lehigh Valley arising from the transportation. It is impossible, you see. That will do as one illustration of the fact that, in my judgment, the full economies possible in the region can not be had without absolute ownership of some kind, and that, it seems to me, is the real stumbling block in the way of the plans for the real uniting of the properties. If I were the United States Government, if I had anything to do with it, or if I were the State of Pennsylvania, I should consider it to the interest of the community in the long run to absolutely force these people together rather than to compel them to remain apart as the constitution of the State of Pennsylvania now does in this particular case I am talking of now. Let us look at it in this way: If it were possible to save, say, a dollar a ton (I am inclined to say that in the course of time more than that could be saved, but let us take a dollar a ton) the price of coal would be reduced to consumers fifty cents a ton, 25 cents a ton could be taken to pay interest on the additional money which would be required before the one road would be operated instead of the other, and the companies could put together 25 cents a ton for the additional earnings, let us say, on the present capitalization. That would be an ideal situation which everybody would benefit from.

Q. Is that what would take place?—A. Now, then, as to that I have not spoken of the operatives. This 25 cents a ton would leave a fair profit to the companies and allow larger, higher wages for the operatives, you know. Now, as to whether that could take place of course that is a very big question. I have always considered that one way to make lower prices to consumers would be to make greater economy in mining and transporting possible. Certainly as long as everybody is working, as all are now, they will not reduce the price of coal if they can possibly help it, because the whole situation depends on getting a certain amount of profit on it. They would be in much better condition to reduce prices, and be willing to do so if they could in some way save a very large amount in the cost of transportation. Mr. Haddock told you that the price of coal just now is at the highest point for safety. It may be asked what would hinder them if they were combined from putting up the prices. I have no further interest in the question than everybody else. My only interest is that I buy a large number of tons of coal every year for family use. So I am directly interested in that question. I think it would be physically possible for them to put the price of coal

up \$1 a ton or \$2 a ton more for a time, but only for a time. It would be the most reckless proceeding they could possibly undertake in consideration of their own profit, because anthracite coal is to a certain extent a luxury. The competition is extremely severe; the indirect competition is extremely severe at the present time. In a great many cases we here in New York who burn anthracite coal very generally are apt to lose sight of the fact that in Chicago and Western cities they have a better class of bituminous coal which they burn in their grates and furnaces, and only a small proportion indeed of the total coal tonnage that is used in the West is anthracite. There is the competition of oil; there is the competition of gas. The gas companies, as you know, are making as much money in the summer time as in the winter, simply by the introduction of gas ranges, which people find very useful, which can be turned out in hot weather and not have a fire when no fire is needed. Now, over and above all that, there is the question of electricity. It is no use trying to prophesy, because no one can tell, but there is just a bare possibility that sometime in the future there may be for all our great cities a large electric plant, fed by bituminous coal which may supply heating and cooking possibilities to our families. This economy that I spoke of, and which is possible in the anthracite trade, might in the long run—not now—but in the long run, prove to be the salvation of the capital invested in those companies, if something of that kind came about. In other words, they would then be prepared to drop prices a dollar a ton if they had to do so. It may be that competition of that kind may some day come out. The electrical experts can tell you of the possibilities of it better than I can. We are already furnishing it by a plant down town to a certain building. My general proposition is if it could be shown that the coal operators could in this way save a large amount of money, whatever the sum, that they would themselves be compelled by the pressure of public opinion, by pressure of possible competition, in order to forestall that possible competition, to reduce the price of coal to the public, if the savings that I speak of should turn out in the course of time to be realized. I think, therefore, while I have nothing whatever to do with it, that the plans of these people for uniting the companies is in the lines of the best interests of all concerned in the long run. I feel it so as a consumer of coal.

Q. What would be the result if they should unite to the extent of controlling the bituminous fields as thoroughly as they may the anthracite fields?—A. I do not believe that is possible except in localities.

Q. It has been charged that is what they are doing now,—A. They can only do it, in my judgment, to a limited extent, and I will go back to call your attention to the strike in the bituminous trade—we have had a very severe one—3 years ago, where the whole field was supposed to be stopped, and yet from some place, nobody knew where, enough coal kept coming on the market to break the strike. Now, the experts in coal tell me that the whole country, the whole United States, is underlaid with bituminous coal, not anthracite, but bituminous coal, and while there are certain fields where it is more favorably worked from the location of the mines like, for example, in West Virginia, and while it is possible for those fields to be controlled to a certain extent, I do not believe it is possible ever to control the bituminous field or that it ever will be controlled fully to such an extent as to make any appreciable public difference. Mr. Saward was before you the other day. He is now out in his paper with a cry against the bituminous people because the market is getting overstocked. I was reading it here this morning. The main purpose of these people, as I understand it, is to keep up the freight rates and not let them come against each other.

Q. (By Mr. RIPLEY.) Does not that involve holding up the price of coal if the coal is carried on a percentage basis by the railroads? Does not holding up the freight rates imply holding up the price of coal? Is there not a definite relation between the price of coal and the transportation under all of these agreements being made?—A. Unquestionably so. The general idea of a traffic man is that he sits in his office and determines that he will charge 50 cents or 75 cents a ton for coal, something of that kind. Let us take the practice; let us take Chicago. There is a great market for coal all around there, and the price of coal practically in Chicago is fixed by circumstances under no particular individual's control. It depends on the demand for the coal and all that. A man who is traffic manager of a railroad, who runs into Chicago, says "the price of coal is so much, the price of mining is so much, and what proportion between the two shall we get?"

Q. But is that situation true of this particular anthracite coal field, if there be a community of ownership of different roads, and if all individual properties be brought into an agreement for the life of the property to ship for 65 per cent of the tide-water price?—A. I am not sure that I clearly understand what you are getting at, but I would say those possible economies I have been speaking of were dependent more or less on absolute combination, as I said. Now, the community

of interest which the gentleman referred to is of course a step in that direction, and in so far as it is a step it has of course this economy. I do not know just how much economy they will be able to put in force through that plan. For example, they would be utterly unable, with a minority of the stockholders, to transfer the traffic of the New Jersey Central to the Reading. I see in the paper there has been a sale of the Central of New Jersey to the Reading Company.

Q. An absolute sale?—A. An absolute sale of the majority of the Central to the Reading Company.

Q. (By Mr. KENNEDY.) Bituminous coal, as we understand it, is carried at a very much lower rate by the transportation companies than anthracite coal. Is it probable that if this community of interest is brought about or if a consolidation is effected that the price of bituminous will be put up on that account?—A. That is of course the same question in another shape. I do not think it possible to any serious extent. Now, take for example the anthracite trade. Apparently here is a community of interest; apparently there is nothing to prevent their putting the price of anthracite coal up, yet Mr. Haddock, who is in the business, the other day said that the limit has been reached.

Q. You agree with him?—A. I think he is right. I, as a consumer of coal, am perfectly willing to rest on the owners. If they should force me to pay \$2 a ton more and the rest of the consumers and I should put in an apparatus to burn soft coal, or if that would be impossible, to get along with gas or oil or electricity, I would never burn another ton of anthracite coal. They would kill the goose that had laid the golden egg. It is the same reliance in every trade. We rely on one corner grocery to keep down to the prices of the other corner grocery. The same is true with every business, that our main reliance for low prices is on enlightened selfishness.

Q. (By Mr. RIPLEY.) I would like to ask you just a word further respecting that sale of the Central of New Jersey to the Reading Company. You say that the sale was made to a New Jersey corporation?—A. No, a Pennsylvania corporation with special powers.

Q. Not the Philadelphia and Reading Company, which is a Pennsylvania corporation. Will you explain?—A. The laws of the State of Pennsylvania under the constitution, I believe, prohibit the owning of mines by a railroad company. What they did do was to organize the Philadelphia and Reading Railroad Company with capital stock, the Philadelphia and Reading Coal Company with capital stock, and the Reading Company, which owns both of them.

Q. Certainly. Do I understand you now that this sale of the Central of New Jersey has been made to another corporation?—A. No; this same Reading Company that owns the railroads.

Q. That company, then, is a New Jersey corporation?—A. A Pennsylvania corporation, and allowed by its special charter to own the stock of other companies.

Q. And the mining company and the Philadelphia and Reading road is owned by the same company?—A. By the same company.

Q. All of them, however, take their charters from the State?—A. In that sense, but there is this difference, and that is the difficulty in this almost ideal plan that I am speaking of, of community of interest of the coal companies, which would be best for the community at large, that the minority stockholders are in the way. You can not turn the coal, as I said before, of the Central of New Jersey over to the Lehigh Valley, or the Lehigh Valley to the Reading, unless you own that road absolutely.

Q. What would be the remedy for these minority stockholders—the courts?—A. The courts are very jealous of the rights of the minority stockholders.

Q. Can you state any recent case from memory?—A. Yes. Of course it would be far better for you to get the opinion of some practical lawyer. The only case that is in my mind at the moment is what is known as the New York and Putnam Railroad, where the New York Central bought a controlling interest and foreclosed on it, and the courts very nearly upset it on the ground that it was a wrong to the minority stockholders. All this involves technical points which I am not speaking of now, but, as a matter of fact, the courts are getting more and more jealous of the rights of the minority stockholder.

Q. The primary difficulty of absolute consolidation of these interests lies in State legislation and in the situs of the charters.—A. On the general proposition which I am now discussing the State of Pennsylvania, as is true in a great many States, is very much down on monopoly, and there is no greater monopoly in the United States, on the face of it, than the anthracite coal field. There are not any other anthracite coal fields, and some of us are bound by circumstances to burn it; but I think that the only hope for lower coal in the future is through such a combination of interests in the anthracite territory as will allow the owners to produce that coal cheaper, and that can not be done the way the work is done now.

Q. (By Mr. KENNEDY.) Are the public who use anthracite coal paying charges at the present time upon investments made by these railroad and coal mining companies to secure property that will last fifty, sixty, or a hundred years?—A. In some cases, yes. The Reading is a great illustration. I think you had somebody before you who spoke about that. Mr. Gowen, thirty years ago, began the plan of buying up the properties that were contiguous to the railroad. He bought up coal lands that were not used, with the idea of controlling the supply. He bought land that was not worked, and that would not be for a long time, and he tried to get freight rates to support that policy. As everybody knows, he failed. The road was reorganized.

Q. Was that the reason he failed?—A. Undoubtedly the main reason.

Q. Now, have you any idea as to how much a ton the public pays in the way of charges on those lands?—A. Oh, that was thirty years ago I am talking about.

Q. At present on the property they have acquired?—A. They do not pay anything now.

Q. Don't they pay a royalty?—A. It does not make any difference whether you pay a royalty or bond interest to buy the land; there is no difference. If you buy coal lands and work them and put out bonds at interest and it amounts to \$50,000, it makes no practical difference whether you pay that \$50,000 to the owners of bonds or to the owners of the railroads.

Q. What I want to get at is this: Whether these people have not secured a monopoly of coal lands which if they did not hold other people would work, thereby making the price of coal lower and relieving the public from paying charges on their investments?—A. I do not think that that is practically so now; it was when they started out, or that was their idea; but, as I said, they failed. It might possibly be true that if there were 50 roads into that territory and about a hundred different people working those mines that the competition between those people, if such a situation is conceivable, would after a while reduce coal to a small price per ton, but it would only be for a while. They would all go into bankruptcy, and the situation by slow degrees would come around to where we are now.

Q. Do you know what profit the railroad companies have in coal when they get here to the seaboard or tidewater and sell it?—A. No; I do not. It is impossible to tell. The circumstances are so varied. Each road has its own special circumstances.

Q. You could not give an instance?—A. I do not think it would be possible to do so. It is understood, for example, that the Reading mines cost more to operate on the whole than some of the others.

Q. (By Mr. RIPLEY.) That is true of the whole Southern field?—A. It is true of the whole Southern field, the Schuylkill, for instance.

Q. For what reason?—A. It is the general difficulty of working the field, and the condition in which it is. The coal is slightly different. All these different fields have different characteristics of coal.

Q. Do you mean to say, then, that all of the issues of securities originally made for the purchase of those coal lands, in order to hold them, have been squeezed out?—A. Substantially so. The Reading company has been reorganized twice since that time.

Q. Has the effect of that reorganization in each case been to decrease the volume of stock and bonds out?—A. I should have to consult figures before answering that question. That is a matter of record I do not remember; but in any case it has reduced what was at one time absolute fixed charges of the companies to contingent charges; and one of the things these people are trying to do, if it is a possible thing, by this community-of-interest idea, is to pay something on preferred stock, for example, which really represents old bonds that were issued and the holders of which suffered a pecuniary loss through the policy taken at that time, of buying out more property than they could carry.

Q. Do I understand you, then, that one reason for this present attempt is that sufficient earnings may be made to pay interest on this preferred stock, substituted for the old bonds?—A. That I think is a fair statement of the case, generally speaking, of not only the Reading company, but a great many other railroad companies of this United States. The railroad officers I am sure feel a sort of obligation, if it is a possible thing, by fair means, to pay on the preferred stocks of, say, the Atchison and the Union Pacific, and a great many companies of that kind that have been reorganized, because you must not forget that following 1893 25 per cent of the railroad mileage of the United States was in the hands of receivers, and I suppose that 75 per cent was seriously affected, so that 100 per cent suffered.

Q. To go back, then, to this particular question. Is it not possible that the effect of economies resulting from combination might be simply to pay a larger return

upon those securities which have not been profitable, instead of reducing the price of coal?—A. Yes: that might be the case. My general position about that is, if a shoemaker can invent a process by which I can buy my shoes 50 cents cheaper, I am perfectly willing that he should have 10 or 15 cents extra profit. That is the general economic position I think the community is taking. It lies at the bottom of our patent laws.

Q. You will acknowledge, however, that there is a large volume of such securities on which interest is not paid, which are waiting for returns, and that a fair inference might be that economies would yield a return on those old securities rather than reduce the price of coal?—A. You have the general idea that if you can reduce the price of coal; if you can give a little higher price to the operatives and a little dividend on some of these exchange preferred stocks, you have in such a situation a consummation devoutly to be wished.

Q. Is there any agency, however, which, at the present time, represents the public directly to see that it gets that 50 cents or 25 cents?—A. No more than in the case of the corner grocery.

Q. And you think the security is ample in that case?—A. Without at this moment going into the general question, I think in the anthracite case we can rest perfectly sure that the public in the long run will get that benefit. At any rate, it is a question which, in my humble judgment, could not be taken up by legislators at this time.

Q. (By Mr. KENNEDY.) If all the railroads should get into the anthracite coal combination: they are interstate carriers, I believe—would it not be desirable, in view of the possibility of those companies putting on arbitrary rates for carrying and on the price of coal, to have some body like the Interstate Commerce Commission with power to say when the rates are too high and order them lowered?—A. To answer that question, I would like to call your attention to the fact that great consolidations of railroads outside of the anthracite fields are now in process. In my humble judgment, that is a part of the general question. The Interstate Commerce Commission have apparently been waiting for a dozen years to find firm ground on which to plant their feet. I am not sure whether the present developments will not finally lead to just exactly the basis that the Interstate Commerce Commission have been long trying to find.

Q. Just excuse me there a minute. Do you mean the Interstate Commerce Commission particularly or the people in the country who believe in the Interstate Commerce Commission?—A. I mean both together, and it may be that they may now find exactly their right place. I am not at all sure that that is not a good plan. Perhaps it may be. On the general question, it may be well to say that a good many of us are glad on the whole that it is a matter of consolidation and not a matter of pooling, for the reason that the pool keeps things as they are. It simply sustains prices; it is in the nature of what is a real trust, as the Standard Oil was, for example, while consolidation permits economies, and it is only through economies that we can hope for reduction in prices.

There was a rumor in the papers the other day that one large industrial company had bought a railroad. Of course, as we all know, Mr. Carnegie has long owned the road from the lakes to his works. Now, if that road is bought to give his own road low freight rates, and if the Interstate Commerce Commission says, "Make as low rates on your own road as you please, but give the other people the same," we have a situation that is good.

Q. (By Mr. RIPLEY.) It is absolutely essential to that position that the Interstate Commerce Commission have such power?—A. Yes: as to how it should be brought about, that is a technical question I am not going into.

Q. Your proposition would not be practical unless the commission had such power in some way given it?—A. I did not mean by that power necessarily to take the railroads by the throat. That is matter for discussion. But that they should in some way have an even thing. From the point of view of the public I do not see any objection to it. What the railroad people object to is to have the Interstate Commerce Commission tell them what to do: to say to them, "It is law; you must do it;" or what form of contract they should make. That is the general proposition of the railroad people. They do not object to the reasonable scrutiny of the Interstate Commerce Commission or of anybody else.

Q. (By Mr. KENNEDY.) I do not want to get away from the coal. I want to go back to it after a while. But since you touch the question of pooling, I want to ask you if it is not a fact that the consolidation movement which is going on in railroads at the present time is not making the question of pooling an obsolete one?—A. Yes. I was only saying on the whole that we who are simply interested in the general question are rather glad now that the pooling law did not pass, because the railroads have been forced into this position of consolidation.

Q. How have they been forced?—A. By the march of events.

Q. Are you familiar with the labor situation in the anthracite field?—A. No; not in detail. I could not express any opinion about it, except in a general way. I would like to have every man get enough to give him a fair living out of it.

Q. Are you in favor of arbitration of great disputes, like that of last fall in the anthracite field?—A. I am in favor of the principle of arbitration. As to exactly how it should be applied I am not quite certain or clear.

Q. What would you say to a condition brought about like this: Where there are three parties at interest, the mine owners and operators on one side, the miners on the other, and the public; where there is a cessation of work and the public suffers, and one or the other of the two first-mentioned parties is obdurate or stiff-necked and holds out, allowing the public to suffer, they themselves suffering more than anybody else, perhaps, do you believe that under those circumstances there should be some force which would compel the settlement of that difficulty, some legal force?—A. That is a tough question. If settlement could be brought about by the pressure of public opinion, of course that would be the best solution of it. That is not always possible. One solution that has often been suggested is that the labor union should be incorporated and be made responsible parties for their part of the contract, so that when you did make an agreement you would have some body you could deal with. I think everybody that is familiar with the situation is in favor of a union of the labor forces in some way.

Q. You think that as desirable as the union of capital?—A. Yes; they should in some way agree. I think it is also generally admitted that the workman has an ethical right to some consideration by his employer as a matter of business on the part of the employer. It is very difficult to say how that should be brought about. You can not give the business over into the hands of the trade unions. If you do that you have the position they have in Great Britain, where they have practically stopped all improvements in machinery. Where the dividing line should be drawn is a question which I have no offhand opinion on.

Q. You say the labor organizations should have some consideration at the hands of their employers. Do you not think they should have a full and equal voice in fixing the wages and the hours of work and the conditions under which they shall work?—A. I am not sure that the best plan is not a council of persons on both sides, who should discuss these matters without absolute power to fix terms. If the trade unions are wrong and insist upon their demands, they ought not to have their way; and if the employers are wrong and insist upon theirs, they ought not to have their way. Now, which is right is the question. It depends on circumstances. In some places it may be one way, and sometimes it may be the other. I should suggest conciliation, if it is possible, to save the question of arbitration.

Q. (By Mr. RIPLEY.) The statement is frequently made publicly, and has been made before this commission, that the several mining companies mine at a loss, but that they make up that loss by the profit on transportation. Will you say anything, without specifying names, as to the practice in keeping accounts between the railroad and the subsidiary mining company?—A. Why, the accounts ought to be distinct and the companies treated as separate affairs. As a matter of fact it can not be done in that way in the anthracite regions. If you will recollect, I said a moment ago that the railroad companies, in order to get tonnage, operated the mines alongside of their road at a disadvantage of, perhaps, 50 cents a ton, let us say. They are operating the mines at, say, a cost of \$2 per ton in order to get tonnage, while across the river, a mine is operated at \$1.50 a ton.

Q. Does that statement mean that there is an absolute loss; that is to say, that for each ton of coal the wages paid out, the railroad operating expenses, interest charges, etc., amount to more than the price which is credited by the transportation company when it takes the coal?—A. That might be true of some specific collieries. Of course you can not find out, because nobody can get at those accounts. I do not know whether the people themselves know. It might be true of some specific collieries, and I do not doubt that it is true at certain specific times of the year. It is an extremely difficult thing to do, to keep the accounts of a mine; it is exceedingly difficult to keep track of the operating expenses.

Q. Can you specify?—A. There is a certain amount of work at every mine that must be done, what they call dead work, and which has no direct relation to the amount of coal you are going to get out. They must fill out chambers, and make track, which work does not bear directly upon the sale of coal at the mouth of the mine. Now, it is a matter of opinion whether all of that labor should be charged to improvements of the mine or all of it to operating expenses, or half and half.

Q. It seems all of it should be charged to the mine, and not to the railroad?—A. Yes. You are asking, though, whether the mine is profitable. It all depends on what is the proper way to keep the accounts.

Q. (By Mr. C. J. HARRIS.) Do any of the companies take any account of the fact that the mines will be exhausted within a limited time?—A. Very few of

them indeed. In the anthracite field there is an absolute limit to the amount of coal you can get out of it.

Q. Have you ever seen estimates which in your judgment are reliable as to the possible life of the anthracite field at its present rate of production?—A. Oh, the estimates differs greatly. I have been told by the people, I am not an engineer, and can not say of my own knowledge, I have been told by the people that it will vary from 50 to 150 years.

Q. That 150 years would be, perhaps, the maximum?—A. Well, that is general opinion. It is exceedingly difficult to tell how much of the coal there may be. Some of the coal is all good coal, fine coal, and easily mined. Bye and bye we shall get into the more difficult operations, where it will cost more money to mine that coal undoubtedly.

Q. (By Mr. KENNEDY.) Have you any testimony to offer on the anthracite situation that has not been brought out?—A. I do not think so. It would require a discussion of detail, and I think in this particular the time is limited, and it would be well to confine the matter, with your kind permission, to general statements of this kind. Of course these are general statements, and the facts vary in each case, as you will readily understand, according to each railroad and each property.

Q. (By Mr. RIPLEY.) Have you any knowledge, acquired not from particular sources but from the press and other ways, of the nature of the sale of the Pennsylvania Coal Company to the Erie Railroad?—A. No; I only know what the street has said—what has been published in the papers. I take it, however, that it is a part of the same general plan—community of interest.

Q. I refer particularly to the financial method of effecting that purchase.—A. Why, somebody with a whole lot of money had to arrange for it and take the financial responsibility. It is so tremendous a transaction that the ordinary man is lost in it.

Q. You have no statement in that connection that would be useful, without violating any confidence at all?—A. No; I think not. I think it is a step in this community-of-interest idea, which I have just said, to be completely successful should be merged into ownership. It does unite two properties.

Q. Have you a knowledge, acquired from public sources, as to the price that was paid for the securities?—A. Nothing; only what the newspapers have said.

Q. May I ask whether that price, as you remember it, was high, as compared with prices prevailing in previous years? Or, putting it in another way, without specifying any particular company, where these consolidations take place are prices as a rule rather above the average of a long term of years, or not?—A. I should say, on the whole, they are slightly above. Usually the holders of large amounts of stock are unwilling to sell at market prices. Let us take for example the case of the Central of New Jersey. The stock of that company has not been, perhaps, quite as high as the price paid; but that company owns most valuable possibilities, including terminal lands on the Hudson River, which are now unused; and it would be perfectly proper for the owners of that company to say that if they sold out to somebody who could use those facilities they should be allowed for them.

Q. Might it not depend, however, as to the expediency of the price paid, on whether that purchase was made, as is said, at the top of the market—that is, when average prices are high all through the range of public securities—or whether it were made at a period of public depression?—A. Of course the price of stock is an important factor, but the question when the circumstances will allow you to make use of a property is an equally important factor.

Q. The point I wish to get at is this: Whether consolidation effected at a market where a very high range of prices prevails would entail a heavy burden upon the capitalization of that purchase in future years when the business becomes less?—A. That is the business of the financial people to determine; and as they are long experienced in the business, it is fair to assume that they see their way clear to make a profit out of the investment. If I may turn for an illustration from the anthracite field for a moment back to the trolley companies, which is a common case: Two companies are operating in different sections of a city. Somebody comes along and gets an option to buy them out. Maybe the stocks are selling at par. Those people see that by putting them together they will create traffic, and render the stock worth 150. They can well afford to pay 100, what it is worth to the owners, with the idea of getting 150 for it. That is a perfectly legitimate transaction.

Q. Suppose we assume two railroads coming together; assume they can make the stock worth 150 where it was 100 before. Does not that imply that the 50 is going into the pockets of the people effecting the consolidation, instead of the service?—A. If you take it in that way it might be so; but the history of all railroads is that, in spite of it, the public will get the benefit in increased train service. Take the case of the Central of New Jersey. Let us suppose—I do not know anything

about that, but let us assume for a moment that the people wanted a very large place on tide water, where they could handle a large amount of coal. The tide-water facilities of the Central of New Jersey would give them something they never could get without it. Let us assume that for a moment. Now, they could well afford to pay 15 points above the market for such a privilege as that; and that would result in the long run in this very reduction of price that we have been talking about.

Q. (By Mr. C. J. HARRIS.) In the case of most of these recent recapitalizations of coal companies, are they not very largely overcapitalized, in comparison with their real value?—A. I think you will have to ask some stockbroker about that. It is a question what you mean by real value.

Q. I supposed you had in your business actual estimates of the real values of many of these companies, and could give them without going into details.—A. There is no such thing as "actual value," considering these companies.

Q. There ought to be, ought there not?—A. No; it is impossible, if you mean by actual value the reproduction of the roadbed and the cars, etc. It would require a very accurate examination, and no one would have a right to an opinion without an examination. I question whether you can build a road into the anthracite field for less money now.

Q. The intent of the question is to determine what price should be charged for a certain commodity. The question of the value of the plant and of the company's interest on it would also have to be taken into consideration, would it not?—A. I do not think so. I do not think that the value of the plant is a consideration for the legislature. I do not think that it is a very important consideration for the investor, and perhaps I may be talking hearsay, but I think if the legislatures would keep in mind the investor they would help to solve a great many of the problems of the consumer. In other words, if a man is going to rob the community, let us say, by coal or freight or whatever else, he does it with the object of making money; and undoubtedly the only way he can make money is by unloading that stock on the public at high prices. Now, if you can have a statement or some means, by examination of the affairs of that company, that show its great earnings are on a false basis, and destroy the possibility of that man selling his stock at an exorbitant price to the investor, you kill the motive.

Q. Suppose the cost of the railroad is fairly represented by its bonded indebtedness. It has besides its bonds large amounts of preferred and common stock. Now, then, in the making of its rates of freight, what proportion should be given to preferred and to common stock, which has no standing, you might say?—A. I do not think that that, if you will allow me, is a correct statement of the industrial situation.

Q. If you will excuse me, that has been taken into consideration by the Interstate Commerce Commission.—A. I am aware of it, and think they made a very serious mistake.

Q. Why so, if you please?—A. I am familiar with a great many businesses. I have had occasion to know something about them, not only recently, but extending over a number of years. I find it is the universal opinion of people making large investments that, considering the risks of their business, if they can not make 12 or 13 per cent on the actual investment, they would better lend out their money on bond or mortgage and go out of business, and let somebody else take it that can do it. That is the general situation among all the industries of the country. Take a mill: A man that can not make 12 per cent on the cost of the mill would better go out of business. That is the general condition of the community. Now, if you ask that man to come to New York to arrange for a corporation to take over his mills, he wants to issue bonds and stock. What can he issue bonds for? Only for the value of his mill. What shall he do with the rest of his earning capacity? He has got to issue stock for it. You are forced into this condition: Here is the mill, worth \$100,000; it is earning \$12,000. He can not issue bonds for more than \$100,000, and 6 per cent on that is \$6,000. What shall he do with the other? Issue common stock on it. There is no other way to do it. In the judgment of the majority of the financial people that is a perfectly legitimate transaction. Nobody is deceived. The mill is legitimately earning \$6,000 over the face of its bonds. The only way to do this is to put bonds on for \$100,000, and stocks for \$100,000 more. Of course that stock is called water, but I do not think that is a correct term to apply to it. That is a capitalization of the earning capacity of the mill, which is represented in our financial scheme by common stock. Whoever receives common stock finds written all over it the contingent value of that property. It is a perfectly legitimate transaction. The only thing is, like everything else, when a man goes to organize that mill he may put \$200,000 on it, owing to the difficulty of valuing it and the ease with which formerly any amount of stock could be put on it. You can not do it now.

Q. The price in the market, I suppose, would regulate that?—A. You can not do that in Wall street to-day.

Q. (By Mr. CONGER.) Would it not be possible to issue all stocks and no bonds?—A. Oh, certainly; but there is an economic difference. You can borrow money at 4 or 5 per cent if you are earning, say, 6 per cent on \$200,000 and your stockholder is getting 6 per cent dividend. Now, if you can turn around and issue \$100,000 at 4 per cent, your stock is getting 8 per cent, don't you see? In other words, the financial point is that there are two classes of people in the community—one which wants a safe investment and is willing to take a low interest; the other wants more, but is willing to take a little risk.

Q. In financing these corporations, both industrials and railroads, do the present laws, in your opinion, sufficiently protect investors as regards the representations that may be made or that should be made in the prospectuses of these concerns?—A. On the whole, no. I do not know that they do. As a matter of fact, Wall street has had some bitter experiences lately, and there is a much greater protection in the conservatism of Wall street than there is in the law.

Q. Can you cite an example of one of these experiences that you mention that Wall street has had?—A. I think it would be better to let it go as a general statement, if you do not mind, because some of these things I would not want to refer to particularly. I need only ask you to look at the quotations of some of the industrial stocks that were floated in 1899.

Q. (By Mr. KENNEDY.) You made a comparison between what Wall street is doing and what the law is doing?—A. I meant by that that it was a very difficult thing now in Wall street to form an industrial combination, let us say, except on the most conservative lines; so that while the law does not protect the investor any more now than it did two years ago, you can not get a banking house in Wall street to issue an uncertain security. The banking houses won't do it, and the investor would not buy it. Therefore there is more protection just now than through the law.

Q. You mean to say that the States which have branched out liberally in their laws in imitation of New Jersey receive no comfort and support from Wall street now, do you?—A. No. There is no complaint about the laws of New Jersey that I know of. The rule is, "Let the buyer beware."

Q. (By Mr. CONGER.) Now, touching those laws of New Jersey for a moment, inasmuch as you have spoken of them, do you think the rights of the individual shareholder there are sufficiently protected?—A. In this sense, as I say, you are notified that you must beware of the matter. There is no pretense to keep the people from buying common stock when they ought not to, or anything of that sort.

Q. Under the laws of New Jersey, at the present time, under which the corporations are organized, is it not possible for the management of a corporation, being in the saddle, so to speak, to so continue without actually holding a majority of the stock?—A. Not when anybody wants to turn them out; no.

Q. Are there any regulations or methods by which a stockholder can learn all the names and addresses of the several stockholders—can learn who they are?—A. I believe so. It is hedged about, you know. The difficulty is that somebody will buy a few shares of stock in order to make trouble for them. At least that is what they are afraid of. The genuine stockholder can generally get all the information he wants. What the corporations are afraid of is the man who, from ulterior purposes, buys up stock and then asks for the books in order to create sentiment against them.

Q. It is customary for these large corporations, just before the annual election, to send out blank proxies all over the country, is it not?—A. Yes; they are absolutely dependent on that system for an election.

Q. Do you know whether the lists of any of these corporations can be seen by any other shareholder than the officers?—A. I would refer you to some of these companies' lawyers for it, the exact legal situation; but a legitimate stockholder can get a reasonable amount of information if he goes the right way about it.

Q. (By Mr. RIPLEY.) Including the names of the other stockholders? That is the vital point.—A. I won't express an opinion on that point, as I am not a lawyer. Last year there was introduced into the State legislature of New York a law, which it is understood was prepared in a measure by Professor Jenks of your commission, and which was intended to cover that point, that there should be an office kept where the stockholders' books should be kept on view.

Q. (By Mr. CONGER.) My question was to lead up to that one—whether your experience would lead you to favor the enactment of some legal requirement by which a shareholder should have the right, upon demand, to have the use of a list of his fellow shareholders?—A. There are a number of instances in New York State in which the corporations which are themselves shareholders are apparently not

treated well. Perhaps it would be well if we could have a recast of the corporation laws so as to cover not only that point you speak of, but a number of others, some of them for and some of them against the corporations. This bill of a year ago was intended to allow the corporations to do honestly and legitimately what, for example, they can not now do, provided they would make a clean breast of what they were doing. That was the gist of the bill. It was the old idea of publicity through an examination of the affairs of the company by qualified experts.

Q. (By Mr. RIPLEY.) You speak of the laws of New York prohibiting the holding of stock of one corporation by another.—A. That is the way I understand it.

Q. Such holding, however, is permitted in the laws of New Jersey, and is the essence of the anthracite coal financial situation?—A. Certainly.

Q. Would that be true of Pennsylvania also?—A. I am not qualified to speak. I do not know the laws of Pennsylvania; but I think not.

Q. (By Mr. KENNEDY.) Is it true that the transfer books and lists of stockholders and other books of these great New Jersey corporations, which are supposed to be in the offices in New Jersey, and should be there under the law of New Jersey, are actually in New York City?—A. No; they are over in New Jersey.

Q. Is it not true, or is it true, that at one time they were not there, and when an investigation was supposed to be under way great express wagonloads of them were taken from New York and put in those temporary offices in New Jersey?—A. I do not know about that. Most of the corporations I know of are law abiding. They have their records and offices in New Jersey. Some of them have directors there. I know that special cases have arisen, under the old condition of things, where they held the corporation's books there. I mean they had small offices; the clerks are not there, you understand, but enough of the corporation machinery is there to satisfy the law. The president has to be where the business is going on—in New York City, you know—but the stock books are usually kept in New Jersey, and so far as I know the corporations do carry out the law faithfully. I never knew anything to the contrary.

Q. (By Mr. RIPLEY.) Do you know of some that have been lax in that matter?—A. No; I do not.

Q. (By Mr. CONGER.) You said a few moments ago that you thought the legislatures should look out for the interests of the investors, and in that way they would be serving the consumer as a rule. Would you think it an unreasonable requirement that the names and addresses of the shareholders in a corporation should be provided for the use of all members before an annual election?—A. I don't think there would be so much objection to that requirement if you would couple with it other conditions which a corporation desires. In other words, you have taken just one point in a very big corporation question. The way to do that, in my judgment, would be to recast—if you are speaking, for example, of New York City—all of the corporation laws; not only that, but other things.

Q. What other things?—A. Holding of stock, for instance. I believe you have a process to get at the stock books of corporations in New York.

Q. Is it not practically impossible under the New Jersey laws for stockholders out of harmony with the management of a corporation to learn of the holdings of other members in that corporation to the end that they might put up another ticket for officers and directors?—A. I have had the people speak to me about that matter a number of times. They have always, I think, without exception told me that a bona fide stockholder could go into the office and get all the information he wants, but they do not want Smith, Jones, or Brown to get a list and put up a game by which he would have to be bought out at the cost of a number of thousands of dollars. Now, if you can devise a scheme by which a stockholder can get all the information he ought to have and so the speculator can not take an advantage of it, I think that is all you can ask for, and I think every corporation will immediately accede to it.

Q. Do you think the purpose or intention of the man who is a bona fide shareholder should be taken into consideration when he applies for a list of his fellow shareholders?—A. Certainly; there is the difficulty. I may be wrong about it, but as a matter of fact, officers of corporations have again and again stated to me on that subject that the people who desire to look at their books and make a row about their affairs are the people who do not own any stock, according to the records. There are a great many people in the city of New York who make a business of going around and trying to obstruct something or other, by reason of which obstruction they shall be bought off. Obstruction is considered in Wall street a legitimate thing if it can be done fairly. The right should be hedged so that it is not possible for speculators to take advantage of it. That is the crux of the whole controversy.

Q. As to the financial reports of the different corporations, do you think that those are made in sufficient detail at the present time to the shareholders? In other words, how far into detail should financial reports of corporations be made to the members thereof?—A. That is a question on which I have been obliged to give a good deal of thought. Practically, my experience is that when a partnership is turned into a corporation it does not lose at all its business position. It has changed its form, but its business position is the same as before. But nobody asks a partnership to give undue information. Just the moment, however, it becomes a corporation information is asked for. Men do not wish to give away their secrets any more under those conditions than they do when in a partnership. There is the conflicting situation. A railroad is quite different. It does not make any difference what the New York Central shows in its accounts; nobody is going to build a road alongside of it. But an ordinary small corporation is put to a serious disadvantage by showing what its sales are and what it earns, that somebody around the corner can use to his advantage. It has once or twice been the case that the Audit Company of New York has examined the affairs of these corporations, and certified that the earnings have been so much, without giving details. That has been suggested once or twice as a way out of that difficulty. The people then would believe the earnings were fair, that is to say, would have confidence in the statement; and, on the other hand, there would not be a statement of all the secrets of the corporation. The Pressed Steel Car Company is an instance immediately in point, which has just been issuing its bonds on such a statement.

Q. Is it or is it not a fact that charges are frequently made to assets that should go to operating expenses?—A. It sometimes is the case.

Q. Is that, in your opinion, done at times with honest intent, or in ignorance, or sometimes with fraudulent intent?—A. I am very glad you asked the question, I am glad to bear testimony from practical experience to the fact that the great majority of the people, as merchants and traders, in this country are honest. I am glad to make that statement. They are honest. They differ slightly among themselves as to what their profit is. That is the difference. They very often, with the best intentions, but in ignorance, make statements which are not, commercially speaking, correct, but which they honestly believe.

Q. These mistakes in bookkeeping then are frequently made in ignorance rather than with fraudulent intent?—A. Yes. The result to the investor is the same. There is a saying in Wall street that they do not know which is worse, a knave or a fool. A knave they can guard against; but the fool—they believe his statements because he is honest.

Q. You spoke of the inspection of accounts. How far would you favor governmental inspection of accounts of railroads?—A. I should rather not favor the examination of accounts of railroads by the Government itself.

Q. Why not?—A. Because the inspection would have to be made by a bureau, and there would be a suspicion of politics in it, and various things like that. My own opinion would be that public opinion, if possible, should force the railroads not merely to an audit, but to an examination—more than an audit—by some disinterested party who was an expert in the different lines, and whose name should be filed at Washington, with a bond, let us say, and who should do other business besides that.

Q. Do you think this political flavor you object to now attaches to governmental inspection of national banks?—A. No; but the case is different. In the first place the banks are not examined to the extent that we are speaking of with respect to the railroads. There is a misapprehension in the minds of a great many people that the banks are really examined by the examiner. It is not so. It is not his business to detect thieves. Of course if he can find them out incidentally, he does it. His business is to see that the law is not violated—to protect the depositors.

Q. Is it not a fact that he does inspect national banks to the end that he may know that the assets that they claim to be there are there?—A. Certainly; but those assets would have been, say, \$50,000 more if somebody had not robbed the bank.

Q. Would you favor the inspection of accounts of railroads by the Government to the extent that national banks are inspected?—A. I think not, because it can just as well be done in another way, and to the avoidance of trouble. The Government would of course employ the best people. It is the same idea as the stock exchange. Once in a while there is a movement to ask the stock exchange to examine the properties that are listed there, but it is not the stock exchange's business to pass upon the solvency of corporations; it can not be possible.

Q. You say it could be done in another way. How could it be done?—A. By having persons, specialists in their line, to examine those railroads. We are doing it all the while, and no suspicion attaches to our examination.

Q. Is your audit company engaged to inspect the accounts of corporations at regular intervals?—A. *Certainly. Sometimes one corporation is inspected every month, another one is every six months, another one every four*

Q. And does the certificate of your company have a recognized financial standing in Wall street?—A. It is incorporated in financial underwritings on the street to the extent of millions of dollars.

Q. You would favor this private auditing of accounts of those corporations by private auditing companies like yours rather than by the Government?—A. That would be the idea, hedged about by anything you please of course—by penalty in a bond, if you like, or whatever penalty that be required, because I think the possibility of losing money is, after all, the best safeguard.

Q. The Interstate Commerce Commission now has the right or prerogative, and I think exercises it, of prescribing the method of keeping the accounts of railroads.—A. Oh, yes; but that does not insure the accuracy of the accounts. It is a very good idea, and has done excellent service to the community by bringing the railroads to a uniform basis. I think everybody appreciates it.

Q. Now, in the absence of this system of auditing accounts by these private audit companies such as yours, would the inspection and auditing of these accounts be desirable, particularly if it were confined to the quasi public corporations like railroads?—A. I should rather prefer, if there was to be a law on the subject, that a report of some corporation, let us say like the Audit Company of New York, should be filed with the Interstate Commerce Commission for example, certified—any prescription as to the information, or something of that kind, to be obtained from the commission; and let the Audit Company of New York, as I say, file a bond or anything you like with the Interstate Commerce Commission for the faithful performance of those duties. I do not believe in increasing the Governmental machinery unless there is some real advantage in so doing.

Q. If this system of auditing accounts by private audit companies like yours should become general, naturally competition would grow up, would it not, between rival audit companies?—A. Unquestionably.

Q. Is it not a fact, or is it not presumable, that if the accounts of railroads were to be inspected by the Government, uniformity in the accounts would probably be a result through such Governmental inspection, while that uniformity would not naturally be secured from the auditing by separate and different audit companies?—A. On the contrary, I think the uniformity of the present Interstate Commerce Commission would be adhered to by everybody, and carried through; in other words, in the classification of accounts, my idea is that the Interstate Commerce Commission would control.

Q. You would not favor the enlargement of that Bureau to the point of inspecting?—A. No; I would not; because the accounts are so delicate that the service requires somebody conversant with the Street. For instance, what is solvency? Who is going to answer the question?

Q. (By Mr. RIPLEY.) Can you give an example showing the difficulty of answering that question—a hypothetical case?—A. I have in mind a company in the West—manufacturing company—who, let us say, did not make a dollar, but had a great many more current assets than liabilities. Should you consider that they were solvent or insolvent? There was a dispute about the question, as I happen to know, on that very point. There is no question at all in my mind that they were perfectly solvent. A man is solvent as long as he can pay his debts, whether he is making any money or not. I only instance that as a question that came up. That requires persons to be most carefully in touch, not only with the business to know what it really is—not the commercial situation alone, but the Wall Street situation, for, after all, all these things run into finance sooner or later.

Q. (By Mr. CONGER.) The Government inspectors of national banks have so far been able to satisfactorily determine whether a bank is solvent, have they not?—A. It is an easy matter; anybody can do that. I do not mean to say the work is not hard, but the theory is easy.

Q. You mean to say the bank's assets are in money and they do not have to believe any deception?—A. Oh, no. We have examined a great many banks, and our examinations go very far beyond what any bank examiner's does. That is no reflection on the examiners, however, for they are not hired to do what we do.

Q. How far would you carry the legal requirement of inspection—to what class of corporations?—A. I think that perhaps the United States Government should limit itself, until the question is put in another shape, to the corporations you spoke of—the transportation companies. This law that your own expert, as I see according to the public report, had something to do with, required that the corporations of the State of New York should come under it and should also be

audited. His idea was publicity. The idea of that law was to give the corporations a chance to do legitimately what they would have to go to New Jersey to do now, at the same time giving them the power to show their hands.

Q. You think the laws of New York should be revised so that one corporation could hold stock in another corporation?—A. The opinion here is that the laws of New York should be revised on several points; that is one of them.

Q. Is it a fact that the laws of Massachusetts prohibit a corporation organized under its laws from holding stock in another corporation organized under its laws?—A. Yes. The laws of New Jersey, Delaware, and West Virginia do allow such holdings. (Give the corporations a chance to do anything, if you only know what they are doing. That is the whole secret of the business.

Q. (By Mr. RIPLEY.) You have spoken of the Interstate Commerce Commission's accounts. Does the publicity they enforce, and the uniformity, apply to any other branch of the accounts of railroads except the income account? That is, is it quite uniform in the several departments of railroad finance?—A. You can not get the detailed information; that is given to the commission, and they hold it privately.

Q. But do they secure, as far as you know, such detailed information as was contemplated in the origin of the Interstate Commerce Commission?—A. I do not really know about that. They do not give out all the information—only the substance of it. I do not know what they get.

Q. I would like to ask you to make perfectly clear the difference between an audit and an examination.—A. An audit is an examination of the books as they stand. That is a very important thing. It must be done by special experienced experts, because it is the foundation of all knowledge. You must know what they have been doing. But there is still a further thing behind the audit—that is, whether the figures represent the commercial facts. I do not know whether that expression is very clear to you, but what I mean is this: Take one instance. It is not customary for a railroad company to set up what we call the depreciation account, but it is customary in factories. The railroad is supposed to renew enough equipment in every year to keep itself going just as long as it needs any such thing. I do not myself think that is the best course, but it is the custom. That is all we can say about it. Now, the railroad company, if it should by any chance wish to make large earnings, can simply stop repairing cars, and practically that information, so far as the audit is concerned, would be to that extent misleading. Now, nothing but the examination of the affairs of the company outside of the books would show its condition, because the books would be correct. The most dangerous set of books I ever saw in my life were absolutely correct, but they did not represent the facts. There are practically two subdivisions in this matter: One is the books themselves, so that the information of those books shall be correctly recorded, and that is not at all a simple matter; and beyond that there is such a thing as an examination of the affairs, so that the report will represent the facts behind it.

Q. Do I understand you to say the bank examiners do nothing practically in the way of auditing?—A. I did not mean to say that. I really think the public clamor against examiners is hard on them, and they do a great deal of that sort of work, undoubtedly.

Q. (By Mr. CONGER.) Early in the testimony you said that as a consumer of coal you had no objection to and, as I remember, practically approved of the consolidation of the anthracite interests that is now going on?—A. Yes.

Q. Now, what is your opinion of the necessity, or lack of necessity, of Government inspection of accounts of that combination if it should be formed? Do you think there is any need of it?—A. I think that the whole railroad situation would be made better by such an examination. I really think if there is anything behind the combination they want to conceal, it ought to be known. But as far as I am familiar with their affairs I think there is nothing in them that they really need be ashamed of—nothing except some little instances that happened, but I do not think there is anything of consequence they ought not to reveal. Therefore I agree that it would be better in some way to be known either directly or through some general act of Congress, which should give to the Interstate Commerce Commission the power to have these companies audited by outside auditors, who should file bonds with them, leaving them in their charge. For example, that might be possible, and I think it would be better for the coal companies just the same as the other companies to do that.

Q. Now, we have pending in the industrial world at the present time the organization of a mammoth steel trust. Do you think that government examinations of the accounts of a corporation of that magnitude would be advisable?—A. It is a gigantic undertaking to examine a company like that. It is not hard either when

you think about it, because the constituent companies are to be kept alive. In that case, as I understand it, it becomes a question of examining a certain number of constituent companies.

Q. We frequently hear publicity advocated as a remedy for the trust evils. Do you agree with others in advocating publicity as a remedy?—A. As a general fact, I do. The question as to how much publicity and covering what points, of course, is a matter that might be discussed, but in general, I think that the publicity of the essential facts would not hurt.

Q. In the term "essential facts" I suppose you would include profits made, would you not?—A. I would, certainly.

Q. To the end that, if the profits were exorbitant or very large, if that term would be preferable, competition might be thereby encouraged?—A. Precisely so, only I think a number of years ought to be covered. Now it may sound strangely to you, but it is a fact in my own knowledge that the panic of 1893 did not affect manufacturers in this country until two or three years afterwards, and the worst years our manufacturers ever had were 1896 and 1897, and not 1894. Rather strange fact, is it not?

Q. How do you account for that?—A. Panics are financial and they only reach business afterwards. It takes time for a panic in Wall street to reach the Western manufacturers. Now, then, if you are considering the enormous profits of the steel companies for the year 1900 or the year 1899, you ought in fairness to take into account the loss of 1896 and 1897 or lack of profits, whatever it may be. Now, if all those facts can be set in a group and if the companies are wrong, the people can find out the fact. But on the whole they are right and fair as a rule in their methods, and I believe in the long run the American people will deal justly with them. I believe in the fairness of the American people.

Q. Do you think the Federal Government or the State governments should undertake the inspection of the accounts of these corporations?—A. Not directly. I think if they provide for inspection it would be all they should do just now.

Q. But you do think they should provide for it?—A. It would be fair to do it if they could have changes and rely on them—for example, the change of the laws of the State of New York. Now, the law of the State of Pennsylvania was well intended, but just now it is the stumbling block in the way of a reduction in the price of coal.

Q. You refer to the constitutional provision of Pennsylvania against railroad companies owning coal land?—A. Yes; but at the present time we are making history so fast that we have gotten away beyond that.

Q. Some have advocated a Federal incorporation law. What have you to say on that point?—A. I think the first thing to do is to straighten out the States on the question of corporations.

Q. Do you think that the incorporation of these companies should be done under State statutes rather than Federal statutes?—A. That is a very large question.

Q. Well, we are getting some very large corporations, you know.—A. Some persons have really advocated Federal corporations simply to escape State laws which are unreasonably severe. They do not advocate Federal laws that I know of on any other ground than to escape some of the arbitrary laws of some of the States in which they are compelled to do business.

Q. Might not uniformity be a desirable object?—A. Yes. It is a question simply—a constitutional one—whether it is in strict accordance with the theory of our Government that Federal authority should step in, even under the guise of interstate commerce, and charter companies inside of individual States. I do not like to go beyond myself in thinking about the question of home rule if I can help it.

Q. Is it not a fact that these large industrial corporations, as a rule, are organized in New Jersey, and many of them operate nothing in New Jersey except an office in an 8 by 10 room?—A. Certainly; but they have to do business in different States.

Q. True; but in what way do the States have the advantage of home rule while this New Jersey scheme is operating that they would not have in operating under the Federal system?—A. Well, the Federal statute raises a series of general questions, you know, which do not apply as between one State and another. But I have really no opinion on that.

Q. Going back to the matter that was mentioned early in the testimony in regard to some of the experiences which Wall street had passed through with some of these industrial corporations, should there be greater regulation as to representations that are made in the prospectuses put out when these companies are organized?—A. That might very well be if the whole corporation law is recast. The stock ledger and various things ought to be considered.

Q. If that were to be done, what would you suggest as some desirable features to incorporate in that law?—A. You know the English law is on that subject that the men who put prospectuses out are responsible for the statements financially. They are responsible now theoretically under our law for any statement made; but in England the responsibility is specific and direct.

Q. Would you favor making it more specific, as does the English law?—A. Yes; on the ground that if, as I say, the whole corporation question is taken up in that broad and liberal spirit, something of that kind might do. You hear a great deal of talk nowadays about making directors responsible. It is impossible. You know if we did that, we would not have many directors. They can not be responsible for what might happen two years from now, so that would be a fact to be very carefully guarded.

Q. Do you think, under the present line of prospectuses that are issued and put out, that they go into sufficient detail as to the powers, authority, and duties that are imposed upon officers and directors of the corporation to be organized?—A. The powers and duties of the officers are not of so much account with an investor as are the other matters. Now, we are slowly minimizing and working out that problem in New York on Wall street without legislation. In other words, a banking house that should continue to put out wrong prospectus would not continue in business very long. We are working that out so it is not really as necessary now as it was twenty years ago, because we are simply working it out for ourselves. I think that the bankers would welcome a reasonable provision in that respect.

Q. How is that problem being worked out—by force of public opinion or rules being adopted on the street?—A. If Smith, Jones & Robinson are my banking house, and they bring out a corporation or a manufactory and issue bonds, and I buy the bonds of that concern and it goes to pieces, we are not likely to buy any more bonds from that house.

Q. It is done by public opinion?—A. By public opinion, certainly.

Q. Are there any rules?—A. They are judged by their success.

Q. Are there any written rules laid down by Wall street?—A. No; excepting that the information must be given. The difficulty about making rules is that they vary in each case. It is very difficult to set down rules. You want to know essential facts in each case. In one case the question may be whether the plants are worth anything, and in the next whether the patents are worth anything, and in the next whether the company has any hold upon the raw material. It is impossible to put down fixed rules for such a thing. It depends on the company itself.

Q. I was wondering whether the rules of the Stock Exchange made any requirements that might or should be enacted into law.—A. That is a case where they are going on without law. They require the furnishing of a specific amount of information in the Stock Exchange.

Q. Might not it be well for the statutes to make the same requirements?—A. I do not think anybody in Wall street would object to a reasonable provision on that point. They say that law is a crystallization of the opinions of a community. Wall street already has an opinion on that subject, so I do not think they would object to the crystallization of it.

Q. (By Mr. C. J. HARRIS.) Does the Stock Exchange require an audit of accounts of companies represented there?—A. No; but it requires certificates of an audit company as to the precise information furnished at the time of listing, but not afterwards.

Q. Would it not be a good idea to have it every year?—A. That is a question brought up every year. The objection is that the Stock Exchange is not anything but a body formed to make trading easy. It is not a body to fix the value of things. That must be done by the members who trade there.

Q. (By Mr. KENNEDY.) Is it all legitimate trading that is done there?—A. That is a hard question. May I ask what you mean by legitimate?

Q. Actual buying of stock.—A. Oh, yes; the moment they catch a man bucketing he is turned right out. Oh, yes; they are most rigid about that; they are themselves most rigid chasers down of bucket shops. Of course, you understand what I mean by bucket shops—places where there is no buying and selling. If you lose so much money you might just as well bet on a card table. They turn right out those who do that.

Q. It is the buying and selling of stock that is the representative of the actual material thing?—A. Oh, yes; no doubt; they are very careful about that.

Q. (By Mr. C. J. HARRIS.) Are you familiar with the recent railroad combination which controls the Pacific Railroads?—A. Only what I have seen in the papers.

Q. Does it control all lines to the Pacific coast?—A. No, not at all; the Atchison, Northern Pacific, and Great Northern are all separate.

Q. Suppose this combination goes on indefinitely; will that lead to monopoly, as you mentioned, in the anthracite coal business?—A. It might very well do so. I anticipate this movement of consolidation of railroads will continue. I do not think we have at all seen the end of it.

Q. What will be the result on the public, the shipping and traveling public, the people who live along those lines?—A. I think it is in the direction of progress. I think before we get any reduction of freight rates we must have economies which will enable those reductions to be made without impairing the earning power of capital. That is what we are all striving for. I do not myself have any fear of the future about that. In fact, the next generation can deal with it if it is necessary; at present I have no fear. I think anything that would enable the New York Central to do business more cheaply will benefit Utica, for example, that can not get out any other way.

Q. Well, so far as the combination has gone, do you find in your experience that this combination tends to reduce prices to the consumer, or does it tend, as was suggested here by you a few minutes ago, to pay more dividends on more classes of stock?—A. Well, the reason for these combinations is selfish. It is the hope of profit that makes the world go round, and if these people did not think they were going to make some sort of profit on them they never would go into combinations, even though the result might be a benefit to the community in the long run. Now, the first effect of a combination of railroads might be to steady the tariffs. You understand there is a good deal of rate cutting going on. They quote 15 cents a hundred where really they get 10 cents of a large shipper. The effect of a combination of large companies would first of all be to steady and make uniform rates which would prevent the uneven and rapid fall in freight rates which has been going on in the last twenty years. It can not prevent a gradual fall of rates, because circumstances are such that commerce in this country is out for low rates, for example, on exports. Now, there is a tremendous field which this country will have to more or less occupy in the future. To do so they will have to have low rates.

(At 10.45 a. m., February 21, 1901, Mr. Greene was recalled as a witness and testified as follows:)

The WITNESS. Before answering any question that the commission may like to put to me, I would like to state that by some mischance I have been radically misquoted in the papers, and as the matter does me considerable injustice, and is in some cases directly opposite to what my sentiments are, I would like to put before the commission some corrections of some of the misstatements.

(The witness here submitted corrections of newspaper accounts.)

Q. (By Mr. KENNEDY.) Is that the only statement you have to make?—A. That is all.

Q. I desire to ask you 8 or 10 other questions on transportation before you go on to the subject of industrial combination. In the first place, I would like to ask you why, generally speaking, railroads give lower rates for exports than for domestic shipments?—A. I do not wish to take the time of the commission to go into the whole question of the relation of exported merchandise to home merchandise except to say that exports have a very important relation to the prosperity of the country. Where, as in our own country, the production is at the moment or may be at any time in excess of home consumption, those exports must be sold abroad or the men must be discharged, for example, and the community lose the benefit of that production and the railroads the carriage of that freight. Therefore, it is considered legitimate to sell those goods at a lower price abroad than in the home market, within reasonable limits, or for the railroads to carry them at a less price. That is not a new idea, because a company that manufactures in New York, if it has a surplus of goods on hand, will sell them at a less price in Chicago than in New York. It is not confined to different countries, by any means. It is a condition of things that prevails at times in every city of the United States, and, so far as my experience goes, it does no practical harm because it continues for a very short time. It is an evil, but I do not think it needs to be corrected by legislation; it corrects itself. I am only speaking now of the importance, as I understand it, of the question of exports. I may add also, if it is in line with your question, that the question of the cheapness of production of these exports and the cheapness of carriage is a most important element in what, so far as one can see, is the coming circumstance of business in the United States. We have before us a possibility of manufacture and of trade which is so great that one almost hesitates to consider it possible, particularly with reference to foreign trade.

Q. Is this practice of American railroads with respect to exports somewhat analogous to the export duty of foreign governments, on sugar for instance, and other products; export bounty, I mean?—A. I suppose that is bound up in the

whole general question of protection, which I would rather not discuss. It is too big a subject.

Q. (By Mr. C. J. HARRIS.) Are you familiar with the import rates in here?—A. I have not been for three or four years.

Q. That is, rates by which goods are shipped from England into interior points of this country for perhaps even less than the prevailing rate from New York City to those interior points?—A. That is a most difficult question and there is no consensus of opinion as to the right and wrong of it ethically. The railroads consider that they are at liberty to take freight, let us say, from Liverpool to Chicago by way of New York, at a rate that will enable them to get the business away from the road from Liverpool to Chicago by way of Montreal. In order to do that they take it at a less rate than is made from, say, Warsaw to Chicago. As a practical question the tendency of the times is always to reduce the domestic rate toward that foreign rate.

Q. The duty of the railroad to the shippers plainly demands that they shall give the same rate to all, does it not, that there should be no variation?—A. Under the same circumstances. The question is, of course, whether the circumstances are the same.

Q. When the rate is less than it would be if shipped directly from New York, there is a discrimination that is hardly just.—A. Not exactly; not in the sense of the interstate commerce law. There the proportion of the through rate is not considered. The Lake Shore road will take a less proportion of the rate from Chicago than it will from Rochester, let us say, or some place of that sort. That is not considered a discrimination. It is the total of the rates that the interstate-commerce law takes notice of. If the rate from Liverpool to Chicago is less than the rate from New York to Chicago, it is a question. The tendency is to reduce the domestic rate toward the foreign rate. It is a difficult ethical question.

Q. (By Mr. KENNEDY.) In line with my former question, I would like to ask you whether the railroads in making these cheaper export rates are a great instrumentality in keeping the balance of trade in favor of this country?—A. There is no doubt about it. This possibility of great trade expansion that is before the United States would be greatly helped or greatly hindered. I will say greatly helped, by the fact that these large industrial combinations will be enabled to produce goods more cheaply and that the large railroads will be able to carry that freight more cheaply.

Q. Will not the railroads themselves thus enable the manufacturers to undersell European manufacturers in their own market? Are they not at the same time promoting foreign immigration to this country?—A. I should say so; yes. I think that the prosperity of this country is the direct reason for immigration. In fact, immigration statistics prove it. There was a great falling off under the panic of 1893, when business was poor.

Q. I would like to ask you whether, when the community-of-interest plan in railroads shall be carried to a successful conclusion, it will eliminate the expensive ticket offices on Broadway and whether it will effect other economies?—A. No doubt something of that kind would be the result. How far that result would take effect from community of interest is just a mere matter of guesswork. But if the time should ever come when community of interest itself should give way in its turn to an absolute combination of the different roads, there is no doubt that the changes in the employment of various railroad officers of the different grades would be very serious. The industrial combination has already decreased the number of traveling salesmen, and there is no doubt the same effect, if it should ever come to that, would be the result in any railroad combination also. I would call the attention of the commission to the fact that while in the industrial world we have had actual combination in regard to absolute ownership of plants, that absolute ownership has only extended in a small way as yet in the railroad world.

Q. Would you care to say anything about the principle of the long and short haul? That was not discussed yesterday, I believe.—A. Oh, I think not. I think the railroad men acknowledge, as a general thing, the justice of that principle. It is only the applicability of it in certain cases that is at times discussed. I think the general principle is acknowledged to be correct.

Q. I should like to bring up the question of classification, and ask you if community of interest would tend to bring about uniform classification, and whether that is desirable or not?—A. I should say the tendency would be that way, but the difficulty is the situation is so different. For example, in the South it is theoretically all right, but practically a very complicated matter, indeed. In making the classification the difficulty of the situation is that we sometimes forget that classification is only another method of fixing rates. If sugar, for example, is carried for 10 cents and you put cotton in the same class as sugar, it must be carried for 10

cents. Cotton goods may be, under stress of circumstances, carried for one rate from New York and for another from Atlanta. There is the difficulty in the classification.

Q. The tendency is toward uniformity, is it not?—A. The tendency is, as the country settles down, toward a regular basis throughout the whole country; but as long as there is a diversity of circumstances there is difficulty.

Q. I would like to ask you if the very largely increased earnings of railroads which we hear about from time to time are the result altogether of good times, or have the better methods in the management of railroads had anything to do with the change?—A. If we compare the earnings and other statistics of railroads with the statistics of the same companies before 1893, let us say, for example, there is an enormous difference. The railroads know how to run their business very much better. They have learned a lesson. My father used to say that the man who did not learn by experience was a dull scholar; and the railroads have been compelled to learn how to increase train loads in a way that 10 years ago was thought impossible. So that undoubtedly the two elements enter into the present prosperity of the railroads. One is that the country is prosperous and freight is being shipped; the other is that they know more about business.

Q. (By Mr. C. J. HARRIS.) What do you say of the low bond rates as affecting the prosperity of the railroads?—A. The question before was on the earnings from operation—the question of what remains for the shareholders. Now, of course, that share is increased by the fact that the railroads can borrow money at low rates of interest, because what is saved in interest is added to the surplus over fixed charges, which goes to the shareholders.

Q. What would you say was the rate of interest on the bonded debts of railroads now as compared with 1890?—A. It is not possible for me to make a fair comparison, but it is certainly not more than two-thirds. It is practically a 7-per-cent basis as compared with a 4, let us say. You can ascertain that for yourselves. The old bonds, for example, of the Chicago, Milwaukee and St. Paul Railroad bear 7 per cent. The bonds of the New York Central system bear something over 7 per cent. They can be refunded now at 3½ per cent.

Q. (By Mr. RIPLEY.) You stated yesterday, did you not, that some degree of earnings should be the basis of capitalization?—A. Yes. I would like to put that thus: That it is taken to be the basis of capitalization.

Q. And seems to be a fairly good working basis?—A. Yes.

Q. In your judgment, then, does a decrease of operating expenses, with the same gross volume of business, justify a corresponding increase in capitalization?—A. I have a very strong opinion on that general subject which may be at variance, however, with that of the community. I think it is a great deal better for a road to pay high dividends than it is for it to water its stock.

Q. Will you state your reason?—A. I do not mean "water its stock," but increase its capitalization, because in Wall street it is considered legitimate to make the two correspond. The sentiment of the community is against high dividends. Therefore, in order to cover that, the people who manage these affairs have thought that they are compelled to increase the capitalization so as to make the rate of dividends about the same as before. But as a matter of public interest, however, I think it would be better to increase the dividends, because then they could fall back. If you increase the capitalization and pay 1 per cent and then fall back, then there is trouble.

Q. A road has a certain volume of business; it preserves that same volume of business, we will say, at the same rate, but is able by economy of operation to reduce very largely its expenses, consequently the net returns become larger. Would it seem to you that that increase of net return would justify a corresponding increase of capitalization, or is a portion of that increase of net return the just portion of the public, which they should receive through a reduction of the rates?—A. It is not a question of abstract reasoning; it is a question of fact. The first result of an increase of that description is that the net earnings of the company are larger, and if they can increase their dividends for the time being it is better to do so, because the inevitable tendency of things is to share that increase with the public.

Q. What is going to insure that sharing of economics with the public unless there be some governmental jurisdiction?—A. That again is a very large question. My private opinion is that the public will share in the benefit of that in the long run.

Q. Would the possible combination of a great number of competing lines possibly change that situation?—A. Maybe. Let us suppose there is a combination of different railroads, so that the expenses of these roads are reduced. Not merely a community of interest; but let us suppose—a preposterous thing—the New York

Central, the Pennsylvania, the Erie, and the Delaware, Lackawanna and Western all combine in a big combination. Let us suppose the aggregate earnings of these companies are increased one-third on the total volume of business. Let us suppose this great steel combination goes through, and they turn around and produce goods very cheaply and send them abroad. What is the result? The result is that they begin to send the goods abroad in great quantities and ask the railroads to ship them and they take them. The local industry will say, You are giving the exporters great advantages. Why can't you give them to us? First they will say no, and then will say yes. The result is the gradual falling in the rates toward the level fixed by the cheapest of all. If that was not the result all history would be against us. I give you that as a case.

Q. In other words, do you mean that the growth of great industrial combinations, coexistent with the growth of great railroad combinations, is going to stand as a safeguard against each other?—A. In the long run; not immediately. The managers of these enterprises are business men. They are after profits, just the same as anybody else is. I am only speaking of the inevitable tendency of these things in the long run.

Q. (By Mr. KENNEDY.) What effect will industrial combinations having the power to prevent overproduction and the railroads aiding in the exportation of our surplus product have, if intelligently and properly used, in averting hard times?—A. A very great influence. It probably has not escaped the attention of the commission that one reason why we have hard times in the United States is because the energy of the American people carries them at times beyond the line of prudence. In other words, if we were a phlegmatic and stagnant sort of people, we would not have such panics. Now, any power or any force which can hold back the American people and keep their energy within bounds will have a very strong tendency to prevent panics—at least to the extent that we have seen them heretofore. My own idea is we will not again see a panic of the intensity of the panic of 1893 for that very great reason, because of the evolution and because of our greater knowledge of what produces these panics. So long as the American people are so progressive there will always be good and bad times. We all have the faults of our virtues, you know.

Q. Have you anything to say about the penalty that is now imposed upon the railroads for giving rebates—the railroad officials—and would you suggest any change in the interstate-commerce law in that respect?—A. No; I do not know that I have any suggestions to make just at the moment. The railroad people who are to appear before you can give you a better idea from their experience, perhaps, and better suggestions than I can.

Q. You could not say whether you think good results would come from changing the penalty from the officials of the railroad to the corporation itself?—A. The railroad men with whom I have talked think it would be a good thing to do that. Generally speaking, I am in favor of a penalty upon the corporation; but I think that these combinations, with the help of the Interstate Commerce Commission possibly, in some way will reduce that evil to such an extent that the rebate question will not be a burning one.

Q. (By Mr. RIPLEY.) Is it true that the principal reorganizations of railroads seem to come in periods—together?—A. Oh, yes. They are dependent on the fluctuations in business the same as any other business concerns.

Q. Can you state any general relationship between such a period of reorganization—frequent reorganization—and the depression and the prosperity of business which falls in with this largely?—A. I should say that they were intimately connected, and that the same reasons that would bankrupt a number of concerns in a manufacturing business would make hard times for the railroads that carry their product.

Q. As a rule, do the railroads with a heavy capitalization seem to be more subject to reorganization than those which operate on a narrower basis?—A. It all depends on the volume and stability of business. The New York Central is capitalized almost as heavily as the average English railroads, but that does not prevent it from being very secure. But a smaller road with one-third the capitalization might be dangerous. It all depends on the situation of the company and the kind and volume of the business it carries.

Q. Have the principal reorganizations of the past 5 years, such, for example, as the Southern Railroad, the Richmond Terminal, the Wisconsin Central, the Baltimore and Ohio, etc.—have they, as a rule, resulted in cutting down the volume of the common stock or preferred stock or bonds?—A. They have, as a rule, I should say, resulted in cutting down the bonded indebtedness beyond a doubt; but in quite a number of cases they have resulted in an increase in the stock in the sense of preferred shares being put ahead of common stock as a sort of semiobligation of the company.

Q. In other words, the total volume of stock plus bonds has not been cut down, as a rule, by such reorganizations?—A. Probably not.

Q. From a financial point of view does that seem desirable or is it merely a necessary result of the circumstances?—A. It is a necessary result of the circumstances, not an evil, for the reason that the bondholders are creditors of the company and the stockholders are partners. So that, from the point of view from which you are speaking, I should say the duplication of stock is not so serious a question as would be the duplication of bonds.

Q. I understand you to say, then, that the possibility of issuing new bonds at a lower rate of interest is the principal advantage that follows from such reorganization?—A. And the exchange of your bonds into preferred stock, which, while it has no legal claim upon the earnings, has a moral or ethical claim on the prosperity of that company, if such prosperity should come from the prosperity of the country at large.

Q. Is it not true that a good many of the reorganizations, or rather of the financial difficulties which have made reorganization necessary, have been the result of rather excessive issues of securities?—A. Undoubtedly.

Q. Is it not, then, anomalous that the remedy applied for the evil of excessive capitalization should be a still further increase of such issues?—A. No; because the safety is in the change in the kind of obligation.

Q. It is not an evil, then, in your judgment, to any degree?—A. I did not say to any degree.

Q. The volume is not as important as the character of the securities?—A. No. It is important that the stock should be fairly representative of the earning capacity of the company, but that is not as important as that the bonds or loans of the company should be within a reasonable limit, because that means bankruptcy.

Q. By whom is reorganization of these properties usually undertaken: by self-constituted or by official committees? Will you explain?—A. The usual way is for the large bondholders who are affected to get together and decide who they will get in. It looks on the face of it as if it were a self-constituted committee, but if you will examine into it you will find it is largely the result of efforts of people who either own the securities in question or who control them, as you say in Wall street. Perhaps it is somebody who is known as a competent man, and has the confidence of someone else, and can get the securities from that somebody else. They very often act in connection with a friendly receiver. I mean friendly in the sense of not an enemy to the interests of all concerned. They get together and state the situation. They find out what the road can do: where, by casting off certain branch lines or taking on others, they can in the long run increase the earning capacity in case of a return to good times, and where they can get the money. That is a very important question. All these things are taken together. It is a very onerous task, indeed. They have to decide on what bonds should be scaled down and what bonds should be exchanged for preferred stock in equitable proportion.

Q. Is reorganization always undertaken in that spirit, or is it possible for a bare majority of the favored security holders to so administer affairs through a reorganization committee that the minority stockholders can be injured thereby?—A. Practically, no. The stockholders are very rarely in question. It is the creditors, and there is always a large proportion of the minority who are willing to carry the case to the courts. A reorganization is not a foreclosure in the sense that a foreclosure on my house is such. It depends on the practical good will of a vast number of persons concerned. It is a practical matter; there is very little opportunity to do gross injustice.

Q. You suggested in your testimony yesterday, didn't you, a disposition on the part of the courts to extend the protection thrown around the minority stockholders?—A. I think there is such a tendency.

Q. Would you suggest any change in the law of corporations which would seek to do that, not by recourse to the courts but more directly by statute?—A. I should say not. The prominent corporation lawyers are somewhat alarmed about this tendency that I speak of. Perhaps the most recent case is that of the Monon Railroad, where the reorganization of that property was almost upset by the courts on the ground that a combination of bondholders and shareholders before the foreclosure was a wrong to the general creditors of the company. Now, the theory upon which American transportation interests are conducted is that, upon the whole, justice in the long run is secured by having the majority rule. There is no other way to conduct affairs. These corporation lawyers are all disturbed at this tendency. Therefore I should say the tendency itself is enough without helping it—without any further legislation.

Q. Will you speak concerning the effect of many of these reorganizations upon the community?—A. That is a very important question. The railroad enters into our

business life to such an enormous extent that anything that would diminish the capacity of the railroad to do business well and cheaply would be a loss to the community as a whole. Therefore the courts have always, in my judgment, wisely determined that the first thing to do was to preserve the public service of the railroads, which would be lost if a system is made up of half a dozen roads with all kinds of different obligations. If each little road should carry its own little train of cars, it is unquestionable that the service of the roads as a whole would be seriously impaired. Courts endeavor to keep all these together practically until the different interests have a chance to figure out a compromise.

Q. Is it not true that in many of the most important reorganizations large numbers of systems have been cut off? I refer, for instance, to the San Francisco branch of the Atchafalaya, Topeka and Santa Fe Railroad and its relation to the main line of that road. Or a better example would be the Baltimore and Ohio and the Baltimore and Ohio Southwestern. Was not that cut off?—A. No; it was taken right into the system entirely. It was a separate railroad; now it is to be taken into the system. The only effect of the Baltimore and Ohio deal is to make a system out of what was a community of interests.

Q. You do not recall, then, any example of a reorganization which has been effected only by cutting off important parts of the system?—A. They do not cut off important parts. Some branches are feeders and some are suckers, and the object of a reorganization is to retain all the feeders and cut off the suckers.

Q. But the reorganization committee determines which is a feeder and which is a sucker?—A. That is true.

Q. And might not ownership by members of that committee in the several feeders and suckers, as individual interests, operate sometimes to cause injustice?—A. Undoubtedly the ownership is a factor. If a very powerful house should own the bonds of a branch road or control them, the reorganization committee would think twice before they cut that road off.

Q. Can you suggest any remedy for that difficulty?—A. I do not think so; any more than it would be the business of the State of New York to save a corner grocery from bankruptcy if the other man got better canned peas than he did.

Q. Have the courts thrown any protection around the minority holders of securities in such branch lines?—A. Oh, certainly. The minority holders, if they wish to come before the courts, have a perfectly fair way. In fact, the conduct of the courts throughout all these trying times of receiverships, and through this new idea of friendly receiverships has been in that direction. In speaking of friendly receiverships, I refer to cases where the managers of the road take pains to see that someone is put in as receiver who is not inimical to their interests. Anyone can see that that practice, which has grown up lately, may be subject to great abuse. It is to the honor of the courts of this country that there is little complaint of practical injustice or anything of that sort arising from these circumstances. I think the best men acknowledge it and appreciate this fact.

Q. Suppose that the volume of securities, through the incident of reorganization, to be largely increased, the quotations from these securities in the market will show lower, will they not, by reason of the increase in volume?—A. Yes; but not proportionately. I think it is the greatest argument in favor of what in common talk we mean by stock watering that there is.

Q. (By Mr. RIPLEY.) Will you state a little more in detail respecting that point?—A. Suppose a company is paying 10 per cent on its stock. That stock at par of \$100 is worth 150 in the market. Now, they double the shares paying 5 per cent; those stocks may sell for \$90 apiece, or, let us say, 180 instead of 150. There is, therefore, effected by doubling of that stock an absolute increase in the selling value of, let us say, 20 or 25 points. Now, here is a pretty curious state of things, which is that the public have got their mind on the rate of interest.

Q. You would not, then, attribute the condition so much to any financial arithmetic as you would to human nature?—A. That is all. It is psychological, and being psychological, there would seem to be no way of curing it. I might call your attention to that very same thing that is going on in conservative England.

Q. You refer to the railroads?—A. The railroads, I mean.

Q. And does not this decrease in the value of securities, even though it be not commensurate with the increase in volume—does that not invite control for speculative purposes?—A. To a certain extent; yes. I consider that overcapitalization has a great many incident evils, and if there is any possible way in which by the sentiment of the community it could be checked I think it wise and well to have that sentiment, but I do not know how it can be done by legislation.

Q. (By Mr. KENNEDY.) You said a while ago that you were opposed to Government ownership of railroads. Would you care to state your reasons for your opposition to that position?—A. No, I do not think it is advisable under any consideration. I think the management would be too political and would tend to

stop this fall of rates which is going on all around us, and which probably will continue.

Q. (By Mr. JENKS.) Your connection with the auditing business has made you familiar, I suppose, with the methods of carrying on the business of large industrial corporations, as with the railroads?—A. Somewhat so.

Q. I want to ask some questions particularly with reference to their capitalization in connection with what has been said. I suppose that the chief reason, perhaps, why corporations are considered more an advantageous form of business than partnerships is because the liability of the owners is limited strictly?—A. That is the essence of it.

Q. Would you say it should be a fundamental principle of a corporation organization in business that instead of the unlimited liability of the partners there should be invariably the liability by some fund in a corporation that has a fixed and ascertainable value always?—A. I think perhaps I could get at your meaning better if you would state it in the form of an illustration. Of course all property is subject to the debts, and the plant and what we call tangible assets are always subject to the debts of the corporation.

Q. Now, do you think that the capitalization should be such that the value of this property could be fixed and ascertained practically regularly at all times?—A. I think as a matter of policy that it would be well if corporation accounts were divided into actual values and good will. I have in a number of cases advocated it. I think it has a good effect in Wall street, because incidentally of course I am a believer in good will as a fair asset of a company if it is accurately valued.

Q. Do you think that the good will should appear in the capital at all unless that good will has been paid for?—A. It must be paid for if the company—if you will allow me to repeat an illustration I made yesterday in regard to a mill. I said yesterday that business men think that they ought to get at least 12 per cent upon their capital; that if they only get 5 or 6 per cent on their capital they might better get out of business and loan money on bonds and mortgages. They consider 12 per cent as the minimum return, and a great many of them get 35. In a hazardous business 25 per cent is not too much. Now, if a mill is worth \$100,000 and the owner only gets \$12,000 a year out of it, if he should sell that mill to any one of the combinations, how would that property be represented in the capitalization of the new company? The usual way, and it seems to me the only way, is to issue bonds or preferred stock, as the case may be, to the amount of \$100,000, on which, let us say, 6 per cent is to be paid, making \$6,000, and then on this common stock have \$100,000 to represent the other value of that plant. Then in that case if you were presenting it you would say: Plant, \$100,000; good will, \$100,000, and on the opposite side, bonds or preferred stock, \$100,000, common stock, representing the good will, \$100,000. Then there would be a perfectly clear proposition.

Q. You would say, then, that it is in the interest of the public regularly that this distinction be made clear between the actual and the tangible assets?—A. That is my personal opinion. I am not in accord with some people in Wall street on that question.

Q. Suppose that a company, by virtue of careful management of its business, contrived to make very high profits—we will say 25, 30, or 40 per cent—for a series of years. In the making of the statements in any way there, do you think you could distinguish between the good will, or profits made on good will or anything of that kind, and those based on tangible assets?—A. The distinction could be made if the people were willing to do it.

Q. May I ask you to indicate how far that should be done in the accounting?—A. The easiest way is to have the property appraised. Then you would have property, so much; accounts receivable, so much; cash, so much; material on hand, so much, and the total of what we call in Wall street tangible property, and that could be very well represented by one-half in bonds, because the bonds ought to represent the plant only; one-half in preferred stock, which would represent the current assets, and then the good will for the difference. But that, however, I ought to say frankly, is an academic question. I mean by that expression that Wall street is not yet ready to take it up.

Q. Suppose it becomes a practical question for the investor frequently?—A. It does, indeed, and it is with an eye to the investor that I am making this suggestion; and, as I said yesterday, if the public bodies would keep an eye on the investor a little more, and on the shipper a little less, they would, in the long run, reach the consumer, which is the same, for the reason that a wicked and unscrupulous man could squeeze a property to get extraordinary profits for the time being only, which he knows can not continue, that he may sell his interests in that property to some Wall street investor at higher than actual value. That is what you mean, is it not?

Q. In making up the annual report, then, you do not think that any very high earnings of that kind ought in any way to be represented by an increase in the capital on the books, by increase in the value of property as such, the tangible assets, at all?—A. That is my general opinion, but as a matter of fact, of course the fact that people always think they are being swindled if a corporation pays more than 6 per cent, and the further fact that an increase in capitalization does not increase the selling value, are too powerful usually for theory.

Q. Another question: In the capitalization of a plant, would you favor including the cost of promotion in any way?—A. The cost of promotion under the theory I am speaking of usually comes up after they all get through. Ordinarily these things are done too much in a hurry to figure out all these questions first, and we usually put them in one account—cost of property. Mark the words, "cost of property." That is the difference practically between the known assets on the one side and the total liabilities on the other. It is called "the dump account." Now, after that is on the books, then the property may be appraised, and that "cost of property" may be divided between the actual property and the good will. That disposes of that question, because the cost of promotion would go to good will.

Q. Do you think in the interest of investors it would be wise regularly at the time of the organization of the company to distinguish between good will, as you have practically defined it, and the cost of promotion?—A. I think that is the proper thing to do.

Q. But that is not the custom?—A. It is not always the custom, but some companies do it. A good illustration is the American Cotton Oil Company. Their property is divided there clearly between appraised value and good will—clearly.

Q. And is the item of cost of promotion put in also separately?—A. It must be if the appraisal is made properly.

Q. Included in the other, but is it appraised separately?—A. No.

Q. You yourself are inclined to think it would be wise to have that stated separately?—A. I did not mention that. I meant if the capitalization is properly and fairly accounted for on the one side then the difference between the value of the plants and the tangible assets can go into good will altogether, whatever it may be, the cost of promotion, the expense of organization, or anything else it may be.

Q. This good will that comes before the tangible assets is very frequently estimated in accordance with the profits that have been made from the business for a series of years before it was really taken over and put in—is it not?—A. Yes; and also upon the probability of business in the future.

Q. Now, this item of the cost of promotion, the pay of the promoter himself, and the pay of the underwriter, and so on, is something entirely different from that. He only seems to recognize earning capacity, and you are really capitalizing earning capacity?—A. That is what it amounts to.

Q. When it comes to the reckoning in of the cost of promotion, however, that does not seem to be capitalizing earning capacity, does it?—A. Generally; and as a practical matter the cost of promotion, the earning capacity—that is, the limit of the capitalization—is first fixed, and then the cost of promotion is taken out of that. As a matter of fact this theory does not always work that way, but that is what they try to do.

Q. In the case of the larger industrial combinations could you give the commission any idea as to the percentage of the capitalization as reckoned out? I do not suppose there is any regular rule to offer for this cost of promotion?—A. There is no percentage charge about it. The promoter goes around and gets the property for whatever price he can fix upon, and then it is capitalized at whatever the Wall street people are willing to take it for, and the difference, less the expense, is his profit. That is all that could be said about it, so far as promotion is concerned.

Q. In reference to the price of underwriters in that same connection?—A. The underwriting is usually considered as a part of the organization expense, and it eventually goes into good will; but those companies that are conservative make a separate statement of this organization expense and write them off by degrees.

Q. In the promotion of these newer and larger corporations, particularly those that are combinations of others, when the public is invited to invest in the shares, would you favor the issue of prospectuses in every case, giving in reasonable detail the conditions of the business?—A. Theoretically, yes. Everybody should have the information, and, according to the English laws, they have that over there, and perhaps if we had had that law here twenty years ago it would have been a great help to us and it might have saved us a good deal of trouble; but as it is now we have worked out our own salvation to an extent, so that the reputable banking house which brings out a combination has so much business interest in it that it is almost a better safeguard than a general law could give, because the banking companies must descend to particulars, and the difficulty of the case is that no general

law can be drawn which will specify what information is necessary in each one of these companies. Sometimes it is one thing and sometimes it is another, so that while it is a good thing, it is not essential. As I say, we have worked out the matter in Wall street, so it is not as necessary now as it was twenty years ago.

Q. You still think it would be desirable, however?—A. Yes; there could be no objection to it.

Q. Would you put it stronger than that? I ask if you still think it is a desirable thing rather than an unobjectionable thing?—A. Yes; I think it would be desirable. It would crystalize a custom.

Q. You speak of the influence of the banking houses. They of course protect themselves by their own investigations. Do they protect in the same manner people like the small investor?—A. Only in the sense in the way they protect their own reputations. While they disclaim responsibility for the future, which they naturally do, they have a certain reputation interest in the near future, and a great many of them actually live up to it by trying to fulfill the promises that they make to the investors at the time of the incorporation.

Q. Do you think that a greater degree of publicity of the kind you just have suggested, if it were enforced in this country or in this State, would hamper legitimate business at all?—A. I do not. It would not hamper—a reasonable degree of publicity.

Q. Perhaps you would be willing to define more clearly what you mean by reasonable degree of publicity?—A. The difficulty is that when a company is incorporated the shareholder has immediately a right to information in regard to his own company. At the same time he is unfamiliar with the details of that company; he does not know what is for the best interests of that company; that must be left to directors and officers. Now, if all shareholders who buy to-day and sell to-morrow should have knowledge of all inside information, there is no question at all that it would be serious in a great many cases to competitors of those companies, because the simple change of the form of a business from a partnership to a corporation does not alter the fact that that concern is in business exactly the same as before, and the same reasons for not giving up its business secrets which existed in the shape of a partnership apply to the corporation. The circumstances of the business are not changed by the style of doing it. On the other hand, there is that clear right of the shareholders. Now, what compromise can be made between those two? That is the main question. I have myself once or twice advocated that such a concern should be examined, say, by the Audit Company of New York, and that the results of that examination should be stated without details, as perhaps satisfactory to all concerned. Not long ago a company in New York was said to have been guilty of a breach of good business principles in making a certain contract, and the shareholders demanded that the whole matter should be laid bare before them. The company said that to do that would be very serious in their business, as they had very active and strong competitors, and it was compromised finally by an appointment of a small committee of shareholders who were instructed to investigate the matter and give their findings, but no details. Now, that is the same principle exactly. That is a practical case that happened here in New York not long ago.

Q. The finding should include a sufficient statement so that the real actual condition of the business should be understood, should it not?—A. Yes; I do not think there will be any objection to that.

Q. Could you perhaps state offhand the general items you think should be included in such balance sheets? Such a report, I mean, as could be made with safety.—A. Cost of property, including or not including good will, as the custom of the company might be; tangible assets, either in one lump sum or subdivided; the capitalization, subdivided; all the debts of the company, in one sum or subdivided; surplus of the company from the previous years; profits of the company for this year, on one side, and on the other—that is, debit and credit, you understand. I ought to say we have in several cases done that same thing. The Pressed Steel Car Company—I make mention of this because it is a matter no longer secret—is issuing a report with our certificate, based in just that way, and it may interest you to know also, since you are interested (it has nothing to do with this particular testimony, but it is right in the line of the commission, I think), they have just issued mortgage notes to the extent of \$5,000,000, payable in 10 years, and they guarantee that they will always have on hand certain things, and so on, which are intended to be a safeguard to the investor, and they have appointed the Audit Company of New York to ascertain whether these stipulations are being carried out, agreeing that its decision shall be binding. It is a new idea in industrial finance.

Q. You spoke of giving the tangible assets, subdivided. Can you, perhaps, mention the different items that you think could be distinguished? For example, would you, in giving the tangible assets, usually give the amount of stock on hand, the amount of material on hand, for example?—A. I purposely said either in lump sum or subdivided, according to the position of the company. There are times in the history of different industrial companies when to state the amount of raw material on hand would be a very serious drawback. I have in mind one or two companies now that would be seriously embarrassed. On the other hand, there may be fairly steady industrial companies, which have no objection to doing that; therefore I say it ought to be left to the company—to the good sense of the company. You can not even theorize about these things in exact particulars.

Q. To the good sense of the auditors?—A. Auditors, or good sense of the companies.

Q. Will you discuss in the same way, briefly, the subdivision of debts?—A. There is the same thing again. A company at one time may borrow very large amounts of money from the bank, and have very small amounts owing for material unpaid for. That might be a very important point for people to know. They might go around and whisper about their credit. At another portion of the year they might have had a very large amount of debts for goods purchased and unpaid for, and owe a very small amount to the bank. I think they ought to be allowed to state it or not state it, according to the circumstances of their business. It does not really affect the investor.

Q. What would you say with reference to the allowance for depreciation of the plant, and so on, appearing in accounts regularly?—A. I think it ought to so appear. It is, in my judgment, just as much a charge on the business as amounts paid for labor. It is in effect a distribution of a sum of money which inevitably will have to be paid sometime or other—that is, for the renewal of plant, machinery, and so on.

Q. Under the laws of Germany a provision of this kind is made. That out of the profits there shall regularly be reserved 5 per cent of the net profits in the building up of a reserve fund until that reaches 10 per cent of the fixed capital, and thereafter this reserve fund is to be regularly kept. Do you think that any regulation of that kind provided by law would be good? Is there any advantage in it?—A. That is not the American way. The Germans build things theoretically. There are so many diverse interests and so many corporations doing different things in the United States that a rule could not be framed that would be applicable to all of them. The difficulty of the situation is to determine what is the proper and fair amount to be charged off for depreciation.

Q. This question had to do, not with the charging of depreciation, but with the accumulation of a reserve fund.—A. It is the same thing. Now, as to that reserve fund, of course that could be set aside, actually set aside, or could be reinvested in the plant. Sometimes one thing is advisable and sometimes another. It would be rather foolish to set aside that reserve fund at 2 per cent and then borrow money to do something with; but at the same time there are circumstances sometimes—in steamship companies, for example, where a new steamship is staring you in the face—where it is well to put aside the actual money.

Q. A further provision of this kind has been suggested: That if the annual balance sheet shows that half the company's capital will be lost, there shall be immediately called a special meeting of the shareholders in order to submit the condition of the business to them as a whole and see what is to be done; and a still further provision suggested is that if at any time it appears that the liabilities exceed the assets, the managing board itself must at once institute bankruptcy proceedings.—A. I do not think the American people would like that.

Q. No question about that; the American corporation directors would not like it. I was going to ask the question from the point of view of business policy. Some of the opinions seem to be along this line: That while, of course, it is hard for the directors and hard for the company at times, still, in the interest of creditors, and, in the long run, in the interest of the general public, it seems to work well.—A. I do not think that; that is a hard question. This same publicity that you were just speaking of would, perhaps, so far as our diversified interests are concerned, meet the case but not the exact provision as to what should and should not be done; and I certainly think precise regulations of that character would work in Germany pretty well, but not in the United States.

Q. You are of opinion if there was an attempt made to make our laws as rigid as there, it might hamper this country in international production?—A. No question about it. We have our drawbacks, as I said before. We have industrial as well as individual faults; but it would be very unwise for us to hamper to any

unreasonable extent the great captains of industry who have now before them the opportunity to make the United States one of the great nations of the world.

Q. You have just made a suggestion as to the benefit that will come to this country or that has come to this country from having these large industrial combinations sell their products cheaper abroad than here. Do you think that in the interest of the public here they are justified in so doing in many cases?—A. I think it is the same in that as it is in the questions discussed yesterday in regard to the result of the combination of the anthracite region. The first result of that, for example, would be the possibility, of course, the absolute physical possibility, of raising the price of coal; but I think the ultimate result would be the lowering of it. It is no doubt the same way with exports. The first result is to create a great contrast between the export price and the domestic price, but in the long run it would have the result of reducing the price at which goods could be manufactured and sold to the domestic consumer.

Q. From the standpoint of interest to the public as well as the corporation itself and the wage-earners, is it desirable to get a market abroad even at lower prices?—A. I do not think the public at large realizes the importance of it.

Q. This frequent custom you speak of is, so far as your knowledge goes, practically universal in other countries as well as in this country in order to secure foreign markets?—A. Yes.

Q. It is simply a normal business condition?—A. Simply a normal business condition. It is more notably so in the United States over a very, very large extent of the country. When the New England manufacturer, for example, finds that he is getting overstocked and that the domestic market is not taking his product and he wishes to keep his skilled labor, he will go on manufacturing and sell that overplus in Kansas City in competition with a Kansas City firm at prices which may yield the Kansas City firm a profit, but which yield no profit to the New England manufacturer, and he would do that persistently. And that sort of thing is going on all over the United States. That is the reason the railroads are carrying so much business, and the moment the railroads should raise the freight rates they would dry up their traffic. So we go back to the same idea of enlightened selfishness.

Q. I should like to sum up your own general opinion in a word or two as I understand that general opinion in reference to this matter of promotion and publicity as regards the annual business of corporations, to see if I understand you correctly. You do think that in the interest of the investors and in the interest of the public it would be desirable when a company is organized to have in the prospectus or make public in some way the tangible assets distinguished carefully from the good will; you personally think that it would be desirable in the statement of the value of the good will to distinguish also the pay of the promoters?—A. No.

Q. You do not think so?—A. I do not think so.

Q. You think you ought not to divide the item of good will?—A. No; I do not.

Q. Distinguish the promoter and underwriter from the earnings that come from the business.—A. I might state, for example, if properties are bought for 50 and sold at 100 (you and I buy at that figure and the property is really worth \$100) it makes little difference to us whether the promoter has bought for 50 or 75. The main thing with us is, not how they were got together, but what they were bought out for.

Q. The other question is perhaps as to whether the value after all does not depend to a considerable extent upon what people can be made to believe it is worth?—A. Undoubtedly.

Q. Now, the question is if people are not frequently led to believe properties are worth a good deal more than they are worth and whether they would not know better if they knew what the profits of the promoter and underwriter were.—A. That might be true in certain cases, but there are a great many cases where such knowledge would have no relation to the facts. Let us suppose a city has two trolley lines, one at each end. The stock of these companies is worth par. Somebody comes along and buys both of these at \$100. They are worth par. He puts them together and puts in connecting lines between them, and the stock of those companies is then worth \$150. There is a case where the benefit of that stock comes naturally from combination. Now, it is of no consequence to the person who buys it whether he pays \$100 or \$125 if the concern, after running and with all these improvements, is legitimately worth \$150. And one of the most surprising things is the way a good trolley line will create traffic.

Q. Would you yourself consider the comparison a fair one between a trolley line of railroad or any other industry that has the element of natural monopoly in it

because a competitor can not go into the same locality with a corporation that is selling some article on the market of ordinary consumption—sugar, let us say?—A. No; certainly not, in a great many ways. I speak of that simply to show you what might be the case. To illustrate what I mean, there are conditions of industrial combinations where that principle will still hold good. The Pressed Steel Car Company is a combination of one company that had patents on the bodies and another company that had patents on the truck.

Q. In that case the element of good will is largely in patents?—A. Certainly.

Q. And that brings in the legal monopoly element again?—A. Yes. That, of course, we do not discuss; we all agree it should be so; but, of course, that does not prevent anybody else making cars out of another kind of steel. He has no monopoly at all. It is a fair and square business, a legitimate advantage.

Q. How far do you think, in all of these lines of business that we have been speaking of, particularly the industries, the interests of the investor in the stock or of the shareholders and the interests of the consuming public coincide?—A. I think they are more intimately related than appears at first sight. That is where I differ with a great many persons who have written or spoken on that subject. They seem to think there is an irreconcilable conflict between the two, as I said a moment ago. I really think, from my experience, that what keeps the investor posted as to the real value of his property will in the long run keep the company also from imposing on the consumer. In other words, as you said, some degree of publicity is a remedy for this without legislation.

Q. Would you say that the interests of the directors, the large majority stockholders, differ enough from those of the minority stockholders—I mean as a matter of actual experience in the industrial combinations as we find them to day in New York—so that the directors need to be put under more careful restriction of law than at present?—A. No; I should say not. There ought to be no difference between the interests of the majority and of the minority, and the theory of our directors is that they do represent. Of course, that theory is not always carried out, but that is the actual fact. I might also say, bearing on this point, if you will bear some little digression, I think the American principle of having companies run by the directors is a great advantage to us—more so than having the company run by the stockholders, as it is run by the British. I am opposed to the principle, which seems to be creeping into a great many of our organizations, of having the stockholders called together to declare dividends or something of that kind. I do not believe they can know the business as the directors do.

Q. Do you favor our American plan of having the business largely in the hands of officers, the president and two or three officers, instead of the board of directors as a whole, and having the board of directors really stand in the background, as I suppose they very frequently do?—A. That arises from the social stringency, the social condition. In other words, in England there is a large and important class of people who have made their money and who would like to be busy with important affairs. In the United States we are all busy. It is an easy matter to get a good business man in England to go on as a director of companies merely for the sake of having something to do, people who have independent fortunes. There are very few in the United States who have independent fortunes who are not engaged busily in business. The theory works out beautifully in England, and it will in time work out in the United States.

Q. Have you in your mind the difference between the American and the English and the German methods of doing business? Is it true that the American business man is willing to take individual responsibility; that is, that the president of a company is willing to go ahead and make a very important bargain and trust to his directors to approve of that bargain afterwards, whereas the English and the German business man hesitates to take individual responsibility in that way, but insists upon responsibility by the corporation?—A. That is a very important point. It is one reason for our tremendous success. I have heard several presidents of important corporations say they were obliged to violate the by-laws of their corporations by agreeing to an important contract before their board of directors had authorized it, but knowing their policy and their feelings, they were acting as they thought merely as their mouthpieces until such time as they could affirm the transaction.

Q. You think the American does take that responsibility, and the German and Englishman do not?—A. Quite true.

Q. And that is one reason for industrial supremacy in the United States?—A. Yes.

(Testimony closed.)

NEW YORK, February 18, 1901.

TESTIMONY OF MR. JAMES E. CHILDS,

(General Manager New York, Ontario and Western Railroad.)

The special subcommission met in the rooms of the Chamber of Commerce, New York City, February 18, 1901, Mr. C. J. Harris presiding. At 10.47 a. m. Mr. James E. Childs, general manager New York, Ontario and Western Railway Company, appeared as a witness, and, after being duly sworn, testified as follows:

Q. (By Mr. C. J. HARRIS.) Will you give us your full name, your address, and your occupation?—A. James E. Childs is my name, and my address No. 56 Beaver street, New York City; I am general manager of the New York, Ontario and Western Railway.

Q. Is your line engaged in the mining and transportation of anthracite coal?—A. It is.

Q. About what proportion of the anthracite coal business does your road do?—A. In 1900 it did 3.75 per cent of it.

Q. What part of the coal fields do you specially touch?—A. Scranton to Forest City—the Wyoming field.

Q. (By Mr. RIPLEY.) Does your line extend to Wilkesbarre?—A. It does not; it terminates at Scranton.

Q. We would like to ask you in regard to the way in which rates on anthracite coal are made up—how they are based.—A. The railroad tariffs in effect are: Buffalo, 82; Chicago, \$1.50. St. Louis, \$1; Tidewater, \$1.75. But nearly all of the coal carried by the Ontario and Western road is carried on a percentage basis.

Q. Have there been any changes in recent years in tariff rates on anthracite coal?—A. There has been but very little change, but there are occasional changes from year to year.

Q. You have mentioned certain definite rates, and then a percentage basis. What do you mean by percentage basis? Will you explain that phrase more fully?—A. When the Ontario and Western reached the coal fields in 1890 we made contracts with individual operators, agreeing to carry their coal to tide water on the basis of 40 per cent of the tide-water price. At that time the contracts allowed a part of the terminal charge to be paid by the individual operator. So that for coal transported to tide water we received 40 per cent plus 5 cents, which latter amount covered the expense of the trestle charges in New York. That arrangement continued in effect for some years, and then the individual operators sold their coal on cars at their mines at 60 per cent of the tide-water average price, eliminating that 5 cents terminal charge and other costs, like commissions, etc., of the transporting line. That arrangement has been in effect since and is in effect now.

Q. (By Mr. RIPLEY.) Could you give figures simply as an illustration? Suppose the tide-water price is \$4—A. (Interrupting.) I wish I could suppose anything as fine as that stretch of imagination.

Q. Will you give just one figure to show what you mean exactly?—A. The tide-water price is, say, \$3, and the price to the operator at the mine \$1.80 net, without discounts, rebate, or anything of that kind. They get their accounts settled on the 20th and 25th of the month.

Q. Is there not a 65 per cent basis under discussion among the railroads?—A. There is.

Q. That, however, is only provisional at the present time?—A. I believe it is. I have understood that the operators have agreed to it, but no settlements as yet have been made on the 65 per cent basis.

Q. Does that understanding apply to all railroads entering the field?—A. I think so.

Q. (By Mr. KENNEDY.) Mr. Childs, have you figured out how much the charge is per ton per mile for transporting anthracite to the seaboard, tide water?—A. It is all shown in the annual reports of the officers of the railroad company. I have a copy here that I can refer to. [Witness gets report and reads.] "Twenty-first Annual Report of the President and Officers of the New York, Ontario and Western Railway Company, with statement of accounts for the fiscal year ending June 30, 1900." No, it does not give the information in just that form.

Q. Is it about 24 mills per mile?—A. Oh, it is better than that. The average gross revenue per gross ton received by the Ontario and Western for the year ending June 30, 1890, was \$1.128 on all coal transported.

Q. Well, was it about 10 mills per mile?—A. Oh, no; we never got anything like that. The distance to tide water is 214 miles.

Q. (By Mr. RIPLEY.) That is not the shortest route?—A. That is to Weehawken. Then in the summer months we load coal in vessels at Cornwall, which is 54 miles shorter. The figures given are on the Ontario and Western distance to tide water.

Q. (By Mr. KENNEDY.) We have testimony to the effect that the charge averages. I think, 10 mills per ton per mile for the anthracite coal.—A. Oh, we never got anything like that. Our charge runs from 6 to 7 mills.

Q. (By Mr. RIPLEY.) Might not that be true of roads which make the shortest haul to tide water?—A. I think the shortest route to tide water is the Delaware, Lackawanna and Western; that is 145 miles. I don't know much about the details of the Delaware, Lackawanna and Western rate, but I don't think any road ever received any such rate as you mention.

Q. (By Mr. KENNEDY.) Well, I would like to have you explain, while on this head, if there is any difference between the rates for hauling bituminous coal and those for hauling hard coal. A great difference seems to exist; please explain it.—A. I do not know much about bituminous coal, and but very little about bituminous-coal rates.

Q. (By Mr. C. J. HARRIS.) In answering these questions we would not only like to have you answer in regard to your own road, but we want to get at the subject generally, what you know of the general practice.—A. I presume you want the facts. I do not know very much about any road except the Ontario and Western; the rest of it is all surmise. I prefer to have you get that information from some source more reliable.

Q. We want to get at the general customs and practice and methods of doing business in this line of your railroad and others; I wished to say that, so that you could speak generally if you wish to do so. Do you purchase the coal that you transport to western points as you do that you take to tide water?—A. The individual operators, the companies on the line, make contracts with the sales agents for a percentage of the price per ton in cars at the mine. They ship the coal all over the Ontario and Western under a contract. I will make that a little more clear: When we began in the anthracite region, the Ontario and Western was purely a transportation company, owning no coal mines and operating no coal mines. We then made contracts with certain individual operators. I know of early instances where we made loans for improvement and development of the properties, taking a contract for the transportation of the coal, so long as the coal should hold out in the mines, upon the then prevailing basis of 60 per cent, which I have already explained. Now, you ask what changes have been made in recent years—in the last 2 years. The Elkhill Coal and Iron Company absorbed six or seven of the smaller mines owned by individual operators.

Q. (By Mr. RIPLEY.) In what territory?—A. In this upper Wyoming territory. There is Richmond No. 3; Richmond No. 4; West Ridge; Ontario; Rush Brook; the Raymond, sometimes called the Forest Mining Company; Mount Pleasant, and the Johnson Coal Company.

Q. Those, in the main, ship over your line?—A. Those forming the properties of the Elkhill Coal and Mining Company. The Ontario and Western loaned money to the Elkhill company to enable it to purchase these collieries and to promote the development and improvement of them, making with the company a contract which secures to the Ontario and Western the transportation of all the mining company's coal, so long as the coal shall hold out in the mines, upon the current rates. The Scranton Coal Company was also formed a year ago last February in the same way and purchased the coal properties of the Lackawanna Iron and Steel Company's two large mines, the Pine Brook and the Capouse. The Ontario and Western Company made a similar contract with that company. That is in addition to the few individual contracts we have yet with individual operators, most of which were made in 1889 and 1890, and a few smaller ones since that time, all upon the same basis.

Q. What proportion of your tonnage, roughly speaking, would this absorption of these companies represent?—A. Over 80 per cent now. Less than 20 per cent of it comes from individual operators.

Q. (By Mr. C. J. HARRIS.) Does your company own and operate any mining companies as coal companies?—A. The company owns no mines and operates no coal properties except as stated.

Q. (By Mr. KENNEDY.) Are the same parties who are owners of the Elkhill Coal Company owners partly of the Ontario and Western Railroad?—A. No; the Ontario and Western Railway Company owns the majority of the stock of those companies.

Q. (By Mr. CONGER.) Does the Elkhill Coal Company and this other one you have mentioned ship any of its product over any other road than your own?—A. No; not unless it has what we call exchange coal. For instance, if we were long

of a grate and the Delaware and Hudson Company were short of that size, and we were short of egg and they long of that size, we would exchange car for car.

Q. Then to all practical purposes your railroad company operates a coal company, does it not?—A. Well, I am not a lawyer. I do not know that I want to go into the legal points of the case.

Q. I do not mean the legal standpoint. The railroad company owns the majority of the stock.—A. The Elkhill Coal and Iron Company has a charter running back 30 years or more, but it was secured for this purpose, and, as I said, the Ontario and Western Company loaned to that company money to enable it to purchase and develop these coal properties.

Q. And your probable purpose in doing that was to get coal for shipment, was it not?—A. To secure transportation was the primary object.

Q. Now, was there any economic or business reason or business condition that existed at that time as regards other railroads and other coal companies that practically forced your railroad company into this business?—A. Why, the reasons are purely economic. We built a branch line from our main line to Scranton, 54 miles, which was a very expensive line to build and to equip, costing in the neighborhood of two and a half to three million dollars. It runs from Cadosia to Scranton, and has many branch lines to the mines. We have invested millions of dollars in equipment in addition to the cost of construction of the line and branches, and it was essential, inasmuch as our bonds run for a long term of years, to secure, if possible, the transportation of coal to make that line profitable during those years. Contracts with individual operators running only for a few years could not be relied upon for traffic for any great length of time. We had some contracts that were to run during the life of the colliery covered by them, but many of the collieries are short lived. Some of them have already reached their largest output and are on the downward grade. The object was to secure the transportation of as much coal as we could at current rates, and that is embodied in the contract.

Q. Nearly all of the coal lines, so called, have been compelled to take practically the same steps for securing this transportation of coal, have they not?—A. I think as a rule they did that many years ago.

Q. And your road is simply following in the footsteps of the roads that have gone before in the same line of business?—A. Practically.

Q. (By Mr. RIPLEY.) Would it be possible for us to secure a copy of one of those contracts with all names stricken out, simply to indicate the general nature of them? Would you be willing to let us have one? Would you care to have one printed?—A. My impression is they are filed with the Interstate Commerce Commission at Washington. There is no objection to giving you copies, if you want them. (See copy, p. 505.)

Q. (By Mr. C. J. HARRIS.) About 20 per cent of the coal operators on your line are independent—that is, the independent operators produce 20 per cent of the product?—A. Yes, sir; nearly 20 per cent.

Q. And the railroad company buys their coal, allowing them so much?—A. Exactly the same terms as are given the coals of the companies.

Q. Sixty per cent?—A. Sixty per cent up to the present time.

Q. Do you have an agreement here with other railroads and other coal companies as to prices to be charged for coal?—A. I never knew of any agreement with any other company in relation to prices.

Q. The independent operator, if the price is raised here in New York, gets more for his coal at the mine?—A. Sixty per cent of the price, whatever it may be.

Q. If the price is less, he gets less?—A. That is right.

Q. (By Mr. KENNEDY.) Do the independent operators ever ship to tide water?—A. Oh, yes; a number of them have their own sales agents here in New York.

Q. Do they get cars as freely for their product as cars are given?—A. (Interrupting.) I do not know how that is on other lines. None of that on the Ontario and Western.

Q. They do, you say?—A. None of them on the Ontario and Western. As I said, they sell their coal that goes over the Ontario and Western on the 60 per cent basis at the mines. On other lines some of them have their own cars, and some of them have trackage arrangements, as, for instance, the Delaware, Susquehanna and Schuylkill, and have their own selling agencies here in New York.

Q. There is no independent shipping over your road?—A. No. Mr. Kemmerer is one of those men who sells his own coal. He elects to sell his own coal. He ships over the Ontario and Western.

Q. (By Mr. RIPLEY.) No company, then, actually owns the coal it transports?—A. The sales agents representing the Ontario and Western buy the coal at the mine and pay for it.

Q. You assume, therefore, all risk of accident and carriage?—A. Demurrage, commission sales, and all that sort of thing.

Q. Is that the usual practice on most of the roads?—A. Well, it is on a number of the roads.

Q. (By Mr. C. J. HARRIS.) What advance is there in the price of coal at the present time over last year at the same time, if any, at tide-water points?—A. The Ontario and Western's average at tide water in 1900 for prepared sizes—that is, everything above pea, was \$3.756. Our average from 1894 to 1900 was \$3.48. In December, 1900, it was \$3.75.

Q. What is it now?—A. I have not got the price for the last month. It has not been figured out yet.

Q. Is it an advance of 50 cents a ton or something like that?—A. No; about 25 or 30 cents.

Q. That is to say, February prices to-day compared with a year ago would be about 25 cents a ton higher?—A. Yes; 25 to 30 cents higher. Our tide-water average for 1899 was \$3.393.

Q. What is the cause of that advance?—A. It is supply and demand.

Q. Has the question of higher wages anything to do with it?—A. No; I think the scarcity of the coal and the demand for it makes it advance a little in price.

Q. (By Mr. KENNEDY.) When you say scarcity of coal are you referring to any particular field or to the entire anthracite field?—A. In the last year we had nearly two months, you know, of practical idleness during the strike, and a shortage of coal in consequence.

Q. (By Mr. C. J. HARRIS.) Were your mines affected by the anthracite coal strike last fall?—A. They were shut up. We didn't mine a pound of coal during the strike.

Q. Were there any advances in wages made?—A. Yes.

Q. How much was the advance?—A. It was supposed to be 10 per cent. The advance in wages together with the reduction in the price of powder made a 10 per cent advance.

Q. That, as well as supply and demand, would have some effect on the price of coal?—A. I do not know that it would.

Q. Why not?—A. You must sell coal at the price you can get for it. I don't think the question of what it costs has very much to do with it, but it ought to have.

Q. (By Mr. KENNEDY.) Is it true that the price of coal is fixed arbitrarily by the representatives of the coal companies? That has been frequently charged, and it has been said that supply and demand has nothing to do with it.—A. There has never been any agreement made for the price of coal.

Q. There has been an understanding, has there not?—A. No.

Q. Informally?—A. Not even that; no two companies sell coal at exactly the same price.

Q. The witnesses in 1892 before a committee of the House of Representatives were quite unanimous in their statements that there was an informal agreement.—A. Years ago sales agents used to hold meetings monthly, and I have attended some of them. The time was chiefly taken up by accusations. This and that one was accused of cutting rates, and as a consequence there was scrapping among themselves. But they haven't even held a meeting for about two years. The meetings never amounted to anything; they never succeeded in fixing a uniform price.

Q. There is a substantial similarity in the price, however, charged by all the different companies?—A. Yes. One company publishes a price and the other companies likely enough publish similar prices. When they come to sell coal, they don't often realize the price of those schedules.

Q. Is not the production of coal kept down in some of the fields?—A. Yes, necessarily at certain times when the market would not take the coal. With us loaded cars have accumulated to such an extent that we were unable to supply empty cars for the full working of the mines, and that meant a pretty serious restriction. Out of a total equipment of 4,900 cars I have had over 3,000 loaded with coal that there seemed to be very little demand for, and of course that condition restricted the supply of cars at the mine. In some cases that condition is relieved by storage.

Q. (By Mr. RIPLEY.) Does it pay to unload coal and store it and then reload it?—A. That is a mooted question. I have never in the past stored coal; never had a storage plant. The cost from waste and the cost of handling two or three times would amount in the neighborhood of 40 or 50 cents a ton. The quality of the coal is also affected by storage. We never can get as good a price for it after it has been stored.

Q. (By Mr. C. J. HARRIS.) Do some companies carry a large stock in store?—A. Nearly all of them do. In the last year I have been compelled to erect a plant, because at certain times when the cars get loaded up we are practically out of

business with one-half of our equipment, and if I can store that coal the market will take it in a few months, so I am just now completing a storage plant that will hold about 120,000 to 130,000 tons.

Q. (By Mr. RIPLEY.) Are you obliged to store because the demand is variable between different seasons of the year?—A. Yes; the output is in excess of the market usually for 2 or 3 months of the year. The excess often comes in February, March, April, and May, and my idea is that if I can store the surplus output during that period the market will take it in other months, when the demand is frequently in excess of the output, as it is in September, October, November, or it may be a month earlier, but it runs along about that time.

Q. If you could produce the year round up to your maximum capacity, how much percentage difference would the increased production make in your total output, approximately?—A. Well, I don't know; I can't make a guess at that.

Q. It would be very much larger?—A. Undoubtedly it would be larger.

Q. (By Mr. C. J. HARRIS.) Suppose your roads and companies should increase their output, say, 2 or 3 per cent from 3.70 per cent of the entire anthracite trade, you would run up so you would produce 5 or 6 per cent. Would there in that event be a protest from other anthracite coal companies?—A. I do not think so; we have been moving up within the last year or two.

Q. Are you not limited to a certain output?—A. There is no limit.

Q. As in relation to the whole anthracite coal trade?—A. We are not limited.

Q. Are other roads?—A. There is no agreement as to the percentage that these companies should take out.

Q. (By Mr. RIPLEY.) Was there formerly?—A. There never was; we never agreed on anything.

Q. What does "the table of allotment" mean as the phrase was used in former testimony?—A. Well, there was in 1896 an attempt made to allot tonnages and percentages, but we could not get inside of 100 per cent. It was never consented to and was never intended to be operative unless by unanimous consent.

Q. Your percentage of total production has increased very considerably in the last ten years?—A. Yes.

Q. Some roads have correspondingly decreased in their percentage, have they not?—A. They must have.

Q. Will you specify any of them?—A. I can tell you this: About 1896 we were getting about 3 per cent; we are carrying now, as you see, considerably more, and in coming years we will even exceed our present percentage.

Q. (By Mr. C. J. HARRIS.) What proportion of your coal goes West and what proportion goes East?—A. About one-half of our coal goes to tide-water points. We send some coal to Oswego, where we ship over the lakes to Canada and Western points, but we send very little coal to extreme Western points—Chicago, Milwaukee, and Duluth; that is, of late years.

Q. (By Mr. RIPLEY.) Do you purchase on the percentage basis for shipments West or anywhere else than to tide water?—A. To all points we ship to.

Q. Is it true that rates to New England are made up by a combination of two rates, one to some point on the Hudson River, or near it, and another the remainder of the distance?—A. Almost all coal we ship to New England is shipped by water.

Q. What roads ship over the Poughkeepsie Bridge?—A. We have shipped a little that way, and other roads do ship that way; but a very small amount goes by rail. The principal consuming points for anthracite coal in New England are near the coast. The manufacturing towns are near the coast, and the bulk of it goes by water from tide water points.

Q. Are any of the railroads interested in lines of barges so that they carry their coal to New England in their own carriers?—A. I think nearly all of them own barges.

Q. You therefore carry it and deliver it to New England in your own barges?—A. Certainly; we have barges, but we do not rely exclusively on them. We hire other vessels. We have barges of our own which we use for this shipment to Sound points and New England points.

Q. Does any particular proportion of the total output of coal go over any of the roads by rail?—A. Well, there is a small amount going over the bridge. There is some coal transferred by floats from New Jersey to points on the New Haven road, and which goes through in cars.

Q. The ownership by one company of a through line from the coal field to New England will affect that, will it not?—A. I do not think so. There are so many routes to reach New England points. All companies can reach all New England points. No one road could ever absorb the trade. You are speaking about the

making of rates via the bridge. It has been quite the rule recently for a rate from the mines to Highland to be on the same basis as the rate to Cornwall or Newburg, two old points they have been shipping coal to for many years on the west side of the Hudson, putting the coal to Highland at practically the same rates as at Newburg.

Q. You have nothing to do with rates on coal east of the Hudson River?—A. The rates are made by those roads. If an individual shipper went there and undertook to ship that way I suppose he would pay for carrying through to Highland just the same as to Newburg, and make his own arrangements beyond there; but, as I have said, the coal we ship there is coal purchased in the car at the mine, and nearly all of our New England coal goes by tide water.

Q. (By Mr. C. J. HARRIS.) I suppose the railroads can not compete with water transportation really, can they, taking Fall River and Boston?—A. Not for these near-by coast points, they never have been able to do so.

Q. Would there be any advantage in the railroads carrying it if they transported it on barges?—A. They have carried coal from Boston to other points within 35 and 50 miles. They send coal through to Boston by water and on from Boston to destination by rail.

Q. How much foreign trade is there in anthracite coal?—A. I never heard of any.

Q. None at all?—A. None, except in Canada.

Q. What do you say of competition in the anthracite coal trade from soft coal—bituminous coal: does that cut any figure at all?—A. Yes; it does with steam sizes to a certain extent. By steam sizes I mean the sizes we use to generate steam. The domestic sizes are egg, stove, and nut. The steam sizes are lump, broken, and the finer sizes below pea.

Q. If on account of the smoke nuisance they could not use bituminous coal in New York, they would be obliged to use anthracite?—A. They do use it; they have the smoke appliances.

Q. Would you say that there is really any competition to speak of that anthracite coal would have from the bituminous coal?—A. Yes; undoubtedly for steam purposes.

Q. What proportion would be steam coal?—A. Over 10 per cent.

Q. (By Mr. RIPLEY.) Is that proportion greater than it was formerly?—A. Yes; I think it has increased, because we are reclaiming more of the fine coal that formerly was thrown in the culm piles.

Q. Are any of these culm piles being worked over at the present time by any companies of which you have knowledge?—A. Yes.

Q. The old refuse heaps of many years ago?—A. Yes.

Q. (By Mr. KENNEDY.) Has not it happened in the past that when the price of anthracite coal was put up the advance was an inducement to the bringing in of bituminous coal, which displaced the anthracite to a certain extent?—A. Yes; undoubtedly, so far as steam sizes were concerned.

Q. Is there not a movement on foot now, in the interest of the anthracite coal production, to acquire interests in the bituminous fields to the end that the production of bituminous coal may be kept down in the interest of anthracite coal?—A. I do not know; that is beyond my ken.

Q. (By Mr. RIPLEY.) Has there been a relative increase in the demand for prepared sizes in the eastern part of the country as compared with the demand for steam coal?—A. I do not think the demand for domestic sizes has increased quite as much, as I said just now, as the demand for steam sizes. In fact, we are producing more of the steam sizes, and putting on the market fine coal that was formerly considered unsalable.

Q. Would not a decrease in the price of hard coal of prepared sizes for domestic use increase the demand for it?—A. Possibly.

Q. Have you ever followed the relation between the prices of coal and the amount which is used for domestic purposes, or the consumption of prepared sizes, which I suppose is mainly for domestic purposes?—A. Prepared sizes are chiefly for domestic purposes.

Q. (By Mr. C. J. HARRIS.) What is the maximum or limit to which you can put prices of anthracite coal and still do the business that you are doing now?—A. I do not know.

Q. You say there has been an increase of price of, say, 30 cents a ton during the last year, does that raise indicate any falling off in the volume of your business?—A. No; on the contrary, it has increased business.

Q. Business has increased with the increase in prices?—A. Yes; there has been a great demand.

Q. How far could that limit go?—A. I do not know.

Q. Suppose you raised it another half dollar, what would be the volume then?—A. I would not think it advisable to make that increase. I do not know what the effect would be.

Q. If the people had to have it they would have to pay the different companies what they charged, would they not?—A. I do not believe the price could be forced in that way; there are too many competing for the trade.

Q. (By Mr. KENNEDY.) Is there really much competition for the trade now?—A. Oh, yes, it is very lively.

Q. Well, has not "the community of interest" plan gone to such an extent that there is really very little competition?—A. I have not seen any effect of it on the trade.

Q. Do you dread such an outcome?—A. No.

Q. Do you anticipate it?—A. I do not know what to anticipate. There are a good many strange things done on Wall street.

Q. (By Mr. RIPLEY.) Is your road affected by this community of ownership, so far as you are willing to state?—A. It is not.

Q. (By Mr. C. J. HARRIS.) The demand for anthracite coal in Western cities, such as Chicago and St. Louis, is relatively very much smaller than in Eastern cities, is it not?—A. Yes; in proportion to the population.

Q. They would not use more than a tenth, would they?—A. Probably not. A larger amount of soft coal is used in the West for domestic purposes than in the East.

Q. Anthracite coal is considered rather a luxury there?—A. Yes. In the Northwest they burn corn.

Mr. KENNEDY. Wheat, sometimes.

Q. (By Mr. RIPLEY.) Will you say anything respecting the possible competition of coke for steam purposes in New England, for instance, with the anthracite, or steam sizes of the anthracite?—A. I do not know anything about that.

Q. It has not affected your business as yet?—A. I have not seen anything of it. Referring again to the matter of prices, the Ontario and Western's tide-water average 1894 to 1900 was \$3.48. That covers the period of seven years. In December, 1900, it was \$3.75.

Q. (By Mr. C. J. HARRIS.) You said there had been a 25 or 30 cent advance. That is about the same?—A. Yes; that is about 27. I did not have the exact figures.

Q. Has your railroad been in the hands of a receiver in recent years?—A. Not in twenty years or more.

Q. (By Mr. RIPLEY.) Since what time?—A. It was reorganized in 1880, I think. That was before my connection with the road. I came on later.

Q. Can you state from hearsay what were the conditions which led up to that receivership without specifying names at all?—A. Why, it would take a good while to explain that. I think in the first place the roads were built chiefly on town bonds, and when it was built it was called a road "without debts or traffic." After reorganization it was sold out for four million and some odd thousand dollars, and it had on it over fifty millions of bonds.

Q. It was sold for four millions?—A. Between four and five millions.

Q. What is the present capitalization, including stock and bonds?—A. About fifty-eight millions.

Q. Of course great improvements have been made in the line of property purchased, etc., representing part of that difference?—A. Oh, yes. That large volume of stock is accounted for by the fact that the purchasers of the road, in the reorganization, offered to allow the holders of bonds to take common stock if they would pay an assessment of 20 per cent, and nearly all of them came in, thus increasing the capitalization about fifty millions.

Q. More than was expected at the time?—A. Yes.

Q. By reason of the operation of the plan?—A. I do not think the reorganizers of the road expected them to come in, but they did.

Q. Fifty millions was the figure at the time it was reorganized?—A. Yes. The practical investment of the road at that time was an investment of two millions in preferred stock.

Q. Does it so remain at the present time virtually under the control of the preferred stock?—A. Yes; except that most of the preferred stock has been taken up in exchange for bonds.

Q. (By Mr. KENNEDY.) How many stockholders are there?—A. Oh, there are a great many. I would not undertake to say; about one-third of the stock is held by foreigners.

Q. Is the controlling interest of stock held in a few hands?—A. No.

Q. (By Mr. RIPLEY.) You say that the preferred stock practically controlled the road for a long time; does it do so at the present time?—A. The preferred stock is represented by a trusteeship, a voting trust, and will be until it is all taken up. Nearly all is in now.

Q. What proportion of the total stock and bonds, roughly speaking, would that preferred stock represent?—A. I can not say. I will give you a copy of the annual report. I would not like to answer all those questions from memory, but you will find it all in the financial statement of the report.

Q. (By Mr. C. J. HARRIS.) Have you had any strikes on your system recently?—A. Nothing except the coal strike referred to a while ago.

Q. Any on the road itself?—A. We have not had a strike on the road for 15 years.

Q. Do you know anything about the conditions of labor in your coal districts?—A. Having nothing to do with the practical operations of the mines I know very little on that subject except in a general way.

Q. (By Mr. RIPLEY.) What is the price of labor at the present time?—A. I do not want to go into that, because I am not familiar with the operation of the mines.

Q. Your road, as you said before, does not operate any mines directly?—A. No. That you do not is, however, rather exceptional among the coal roads, is it not?—A. No; I think it is practically the same thing on other roads.

Q. (By Mr. C. J. HARRIS.) I suppose your railroad company could not operate a coal mine as a railroad company; your charter would prevent it, would it not?—A. I think so.

Q. (By Mr. RIPLEY.) Will you make any statement respecting the alleged attempt in 1893 to combine many of the anthracite coal roads, especially respecting the reasons for which that combination failed? I refer to the attempt made under the leadership of Mr. McLeod.—A. I think Mr. McLeod's scheme failed because he bit off more than he could chew.

Q. What did he specifically try to do; can you state?—A. He tried to effect the consolidation of several railroads under one management.

Q. By direct lease or purchase?—A. By lease of the Jersey Central, the Lehigh Valley, and the Philadelphia and Reading. Then he branched out into New England and took the New England road and the Boston and Maine, and there he met his Waterloo.

Q. Will you make any statement respecting the causes that led up to the purchase of the Pennsylvania Coal Company by the Erie Railroad? Was it particularly with reference to the proposition to build an independent line to Kingston from the anthracite coal fields?—A. I think you had better get that information from the Erie Railroad Company. I presume that road will be represented here.

Q. (By Mr. C. J. HARRIS.) What chance would an individual operator on your line have to-day in the production of anthracite coal? Do these companies own nearly all the coal lands contributory to your road—these companies which you have mentioned?—A. The Elk Hill and the Scranton Company; yes. Nearly all the coal is shipped over our road.

Q. Those companies have taken up about all the coal lands that are there. There is very little lying about that an independent operator could get if he wanted it?—A. There are occasional sales. The ground is pretty much covered in the older regions, particularly in the Wyoming district.

Q. As a general proposition, would you say that the coal roads control about all the coal mining property tributary to them?—A. No; there is a large field down in the lower region. It is pretty well taken up in the Wyoming territory. There are large tracts of anthracite coal that have recently been offered for sale down in the lower region, in the neighborhood of Pottsville.

Q. Owners would have to have branch lines built to them?—A. Yes, from nearby railroad lines; that is, in the Reading territory.

Q. What would be the facilities for a man to open up. Suppose he was 15 miles away from your line, would it be possible for him to build a branch to connect with you?—A. If he had a large tract of territory, a good coal, we would probably build a line to him for the sake of getting the transportation, and give him the usual form of agreement, which is just the same in all instances.

Q. (By Mr. KENNEDY.) Is your company working all its coal lands, or has it a large reserve of lands to be worked in the future?—A. I suppose these two companies that I speak of have in the ground in the neighborhood of 50,000,000 tons of coal. Over half of it is owned in fee; it will take a good many years to mine that coal.

Q. (By Mr. C. J. HARRIS.) What was your tonnage last year?—A. It was in the neighborhood of 2,000,000. Last year it fell off on account of the strike. Year

before last it was 1,891,000 tons. In the month of January the output was 227,000, so that we shall probably put out in the neighborhood of two and a half or three million tons a year now.

Q. (By Mr. KENNEDY.) Where railroads have such large tracts of coal lands that they are not working, they are paying royalties upon part of it, you say?—A. All of ours is working, practically.

Q. I thought, according to the testimony, that practically these others were yours, the lands of these companies you speak about.—A. I say all of the mines owned by these two companies, the Elk Hill Mining Company and the Scranton Company, are practically in operation to-day.

Q. How much have you in sight?—A. In these two companies, about 50,000,000 tons.

Q. And your yearly production is about 2,000,000 tons?—A. Something over that.

Q. There must be a great many mines that are not actually worked?—A. My dear sir, they could not work the whole field in the year. Of course it costs a great deal of money to start operations, to put up your breaker, put down your shafts, and lay your tracks. You could not undertake to do it unless you had 500 or 1,000 acres to start with. Then it takes twenty-five years to exhaust the coal.

Q. It has been charged that some of the railroad companies own great tracts of coal land that they have acquired in fee and obtain royalties thereon, and that they can not work for 50 years.—A. That is not true so far as the upper region is concerned. It can be said of the Reading, probably, because during Mr. Gowan's time he did buy large tracts. The upper region is generally divided up into small tracts under different ownership.

Q. (By Mr. C. J. HARRIS.) If you take a company that owns large bodies of coal land that won't be worked up for 50 or 100 years and with a capitalization of \$30,000,000 or \$35,000,000, if it sells its present output of coal so as to pay dividends on that immense mass of property that is going to come into use 50 or 100 years from now, is not that an unnatural price of coal?—A. I do not think you have the right view of that condition. The company has a large amount of money there and usually it puts out bonds for a long period, and it would be the part of prudence to have coal enough to last as long as the life of the bonds, because you must pay your interest and the principal.

Q. (By Mr. KENNEDY.) I would like to ask you the number of days in the year the miners in your mines work?—A. I have not the data as to the number of days with me. It is a matter of public record. It is published and printed by the newspapers, and you can get it almost anywhere.

Q. Have you any knowledge upon the point as to whether the miners of the independent producers work as many days in the year as those in the mines of the railroad companies?—A. It is not true so far as the independent miners on the Ontario and Western are concerned that they work fewer days than others. If there is anything of that in the other field, you will find it, because the number of days worked in each mine is shown by itself. The statement is made by the inspector, who is an officer of the State, and it is printed. That shows you the days worked by individual operators' mines, as well as the mines which are indirectly controlled by the railroads.

Q. Has there been any attempt made to secure the control of your road for the community of interests or a consolidation?—A. If any attempt had been made I probably should not know of it. I do not know of any.

Q. What is your opinion about that; do you think the public and the stockholders of the Ontario and Western would be benefited by a community of interests?—A. I can not answer that question.

Q. Have you no opinion about it?—A. No; I do not know anything about the probable result of such a thing.

Q. Do you know the sentiment of the officials of the Ontario and Western in regard to that question? Are Mr. Morgan, Mr. Rockefeller, or the Vanderbilts stockholders in your road, or do you know?—A. I do not know.

Q. (By Mr. CONGER.) They are not represented on your directory, are they?—A. Mr. Depew is on the board.

Q. (By Mr. KENNEDY.) That would indicate a Vanderbilt interest?—A. I do not know that it does necessarily. He took the place on the board of his brother-in-law, who was a director for many years and died. I do not think he has any large block of stock. We do a great deal of business in connection with the New York Central. We interchange a large amount of traffic and rely upon that road for our western connection. Our working with them has been very close and very satisfactory. We use the same terminals at Weehawken, and have trackage rights over the West Shore from Cornwall to Weehawken. With two companies working so closely together it is only natural they should have representation in the board of directors. I do not think the connection means anything more than that.

Q. You do not know that the attempt has been made to bring that road into the community of interest scheme?—A. I do not.

Q. (By Mr. CONGER.) You ship part of your coal west? I think you testified that you did.—A. We ship some of the coal west via Oswego. We have a trestle on the lake and load the vessels there. It goes through the canal to Chicago, Milwaukee, Duluth, and other western points, as well as to Canada.

Q. Many of the other coal roads, I suppose, have termina's at Buffalo?—A. Yes; we have shipped via Buffalo, too. That goes over our line to Oneida and then over the New York Central to Buffalo, and is loaded into vessels at the dock in Buffalo.

Q. How does the price at Oswego compare with the price at tide water?—A. It varies a little, but on the whole it is about the same.

Q. Do you know about how the price of coal at Oswego compares with the price at Buffalo? Is it the same?—A. No, not the same; it is a little less.

Q. At Oswego?—A. Yes; a little less, the difference being about what the rate is going through the Welland Canal to the West.

Q. If a dealer in coal from the Western States should go into Buffalo or Oswego with the idea of purchasing coal, and should go to the various roads or selling agents who had it for sale, would he probably be quoted the same price, or would he get different prices from different dealers?—A. I think he would find it would pay to "shop."

Q. Is it a fact or is it not a fact that the price among the different dealers there is usually about the same?—A. Yes, practically.

Q. Yet you think there is no agreement between the roads?—A. One company might be long of a certain size and might shade the price a little to get rid of it. There is always a little variation in prices.

Q. How much of a variation, approximately?—A. Five to 25 cents a gross ton.

Q. You testified earlier this morning that so far as any actual agreement is concerned your road is not a party to it.—A. (Interrupting.) Agreement in relation to what?

Q. Agreement as to the selling price of coal at any of these terminals.—A. I testified that there was no agreement as to price.

Q. I wanted to ask whether you thought it probable or even possible that such an agreement does exist between some of the other roads, those who handle a large output—larger proportion of the total output—like the Reading and the Lehigh Valley?—A. No, I do not think it is. It would not be effective unless all were in it.

Q. Might it not be possible that those roads controlling 85 or 90 per cent of the total output could make a practical combination on price?—A. No; they could not do it without taking all the interests in. Two million tons could set the price for the whole fifty million.

Q. (By Mr. C. J. HARRIS.) Would not 85 per cent of the coal trade set the price for the whole production?—A. No; the lesser quantity could make the price.

Q. (By Mr. CONGER.) Take tide-water prices, for instance. Suppose the roads controlling 85 per cent of the total product should make an agreement to put the price at \$3.50, where it had been \$3 before; would not your road, putting out 3½ or 4 per cent of the total product, be willing to take the extra half dollar?—A. Certainly, we should be glad to get what we could. On the other hand, suppose there is a very dull period and a road that was not in the combination would shade that price and take the trade, could not that road compel the others to meet its price? I think it could.

Q. (By Mr. C. J. HARRIS.) Have you anything to volunteer?—A. Nothing more.

(Testimony closed.)

EXHIBIT IN CONNECTION WITH MR. CHILDS'S TESTIMONY.

Agreement between New York, Ontario and Western Railway and producers of coal.

[NOTE.—This agreement is identical with one submitted by Mr. E. B. Thomas as being in consideration by the Erie Railroad. Mr. Thomas denies knowledge as to whether the agreements on all the anthracite roads are identical, but Mr. Childs thinks all are alike.]

This Agreement, made and executed in the city of Philadelphia, Penna., this ____ day of ____, nineteen hundred ____, between ____ (hereinafter called the Seller), party of the first part, and ____ (hereinafter called the Buyer), party of the second part, Witnesseth:

FIRST. The Seller hereby sells, and agrees to deliver on cars at breaker to the Buyer, all the Anthracite coal hereafter mined from any of its mines now opened and operated, or which it may

hereafter open and operate on the premises intended to be covered by this contract, and any which shall be reclaimed from culm banks on said premises, viz:—

Shipments to be made from time to time as called for by the Buyer. The Buyer to give, on the twenty-fifth of each month, notice of the quantity as nearly as practicable Buyer will require for next month, and arrange to take the coal in as nearly equal daily or weekly quantities as in its judgment the requirements of the market will permit. The Buyer to use its best efforts to find a market for the Seller's coal so as to enable the Seller's collieries to be worked as many days as practicable, with due regard to the general market conditions, and to give orders for shipment which will enable the Seller to work its collieries as many days in each year as other collieries work similarly situated.

The Buyer agrees that it will not discriminate in favor of its own mines, or any persons, firms or companies with which it has contracts to buy coal, but that the quantity to be ordered monthly shall be a just proportion of the entire quantity of coal agreed to be purchased by the Buyer, measured by the colliery capacity of the respective Sellers. It being understood that so far as practicable the quantity ordered shall not be less than a just proportion of all the Anthracite coal which the requirements of the market may from time to time demand. The colliery capacity shall be determined as of the First of January in each year by the parties hereto, and, on their failure to agree, the President for the time being of Girard Trust Company shall select a suitable expert for this purpose. Should any market change take place affecting the productive capacity of the colliery, either the Buyer or the Seller may call for a new determination of the colliery capacity as of the beginning of any quarter of the calendar year.

SIXTH. The Buyer agrees to pay and the Seller agrees to accept the following prices for said coal, when prepared in accordance with the standard hereinafter set forth, and delivered 1 o b railroad cars at the breaker:

For all sizes above Pea coal, sixty-five (65) per cent of the general average free on board prices of said sizes received at tide points at or near New York, between Perth Amboy and Edgewater, computed as hereinafter provided.

For Pea coal, fifty (50) per cent of the general average f o b price for Pea coal at said tide points at or near New York when the said price is Two Dollars and Fifty cents (\$2.50) per ton or less, and for each advance of ten (10) cents per ton in the said f o b price above Two Dollars and Fifty cents (\$2.50) the proportion paid the Seller shall be increased one (1) per cent, until the percentage paid for pea coal reaches sixty-five (65) per cent.

For Buckwheat coal No. 1, forty (40) per cent of the general average f o b price at said tide points at or near New York when the said price is Two Dollars (\$2.00) per ton or less, and for each advance of ten (10) cents per ton in the said f o b price the proportionate price paid the Seller shall be increased two (2) per cent, until the said f o b price reaches Two Dollars and Fifty cents (\$2.50), after which the proportionate price paid the Seller shall advance one (1) per cent, for each ten (10) cents advance in the f o b price above Two Dollars and Fifty cents (\$2.50), as in the case of Pea coal above mentioned. Provided that nothing herein contained shall oblige the buyer to pay for Buckwheat No. 1 coal a rate higher than for Pea coal.

For all sizes smaller than Buckwheat No. 1 the Seller shall receive Twenty-five (25) cents per ton f o b railroad cars at breaker, and for each ten (10) cents increase in the general average f o b price above One Dollar and Thirty cents (\$1.30) a ton at tide, the price shall be increased five cents per ton; but it is understood that the Buyer shall have the option to decline to take these smaller sizes in excess of the proportion taken from the Buyer's own collieries and operations.

It is also agreed that if at any time, through changes of sizes of meshes or screens or of conditions of trade, the sizes smaller than Buckwheat No. 1, as described herein, shall be marketable at tide at the same prices as Buckwheat No. 1, the scale of prices on a basis of forty (40) per cent, when the general average f o b price at tide is Two Dollars (\$2.00) per ton or less, shall be substituted for the flat price at mines herein provided for during the continuance of such conditions.

And it is also understood and agreed that the Seller shall have the right to sell and dispose of on its own account and at such prices as it shall see fit the excess of the sizes of coal smaller than Buckwheat No. 1 when and as often as the Buyer refuses to purchase said excess of smaller sizes in accordance with the option hereinbefore contained.

THIRD. The general average f o b prices herein referred to shall be determined by a disinterested expert accountant satisfactory to both parties, to whom the Buyer shall furnish, not later than the 8th of each month, a statement of the quantity of each size sold during the preceding month, and the amount realized therefor by the Buyer at tide on all sales of each size of coal from the region, and the accountant each month shall make a true average price for each size sold at tide of all the coal from the same region, and the average prices thus obtained shall be furnished by the accountant to the Buyer and Seller, by whom they shall be accepted, subject to the right of appeal to the Arbitration Board, in the settlement between Buyer and Seller. All statistics given such accountant shall be treated by him confidentially, and the resulting averages only shall be given by him to Buyer and Seller.

It is understood that when the words f o b price occur herein the actual f o b price received is meant, without any deduction for commissions, demurrage or any other charges.

FOURTH. It is understood and agreed that the Seller shall have the right to sell or dispose of, at retail, on its own account, coal for use and consumption of its employees and others in the immediate neighborhood of Seller's colliery, provided that the coal so sold and disposed of shall not in any event be loaded into railroad cars, but shall be hauled from the Seller's colliery breaker by wagon.

FIFTH. Payments shall be made monthly in cash. A partial payment of at least one dollar (\$1.00) per ton shall be made on or before the twelfth (12th) of each month, and the balance on or before the twentieth (20th), for all coal delivered by the Seller under this contract during the preceding calendar month. Provided, that if default shall be made by the Buyer in any payment aforesaid, the Seller may, at its option, declare this contract forfeited by giving notice of such default for a period of at least five (5) days, and of its intention to terminate this contract, unless payment shall be made in the meantime; but in case of a like default of payment in the next succeeding month this contract may be peremptorily terminated by the Seller without such notice.

SIXTH. All coal shipped under this contract shall be subject to inspection under the direction of a Chief Inspector to be appointed by the Buyer, whose duty it shall be to see that the said coal, as well as all other coal coming under his jurisdiction, conforms to the following standard, viz:—

First. The coal shall be practically free from dirt as it leaves the lip screen before entering the car. Second. The coal shall be well sized and made through and over the following square screen meshes, or their equivalent, viz:—

Broken through a mesh 4" square and over a mesh 2 1/2" square.

Bgg through a mesh 2 1/2" square and over a mesh 2" square.

Stove through a mesh 2" square and over a mesh 1 1/2" square.

Chestnut through a mesh 1 1/2" square and over a mesh 1" square.

Pea through a mesh 1" square and over a mesh 3/4" square.

Buckwheat No. 1 through a mesh $\frac{1}{8}$ " square and over a mesh $\frac{1}{4}$ " square.

Buckwheat No. 2 or Rice through a mesh $\frac{1}{8}$ " square and over a mesh $\frac{1}{4}$ " square.

None of the above sizes shall contain an admixture of a larger size sufficiently great to render the coal objectionable, nor respectively a larger proportion of any smaller sizes than is usually present in good merchantable coal, and it is specially agreed that neither Egg, Stove nor Chestnut coal shall contain more than five (5) per cent. of larger sizes; that Chestnut coal shall not contain more than ten (10) per cent. of Pea and five (5) per cent. of Buckwheat No. 1; nor Pea coal more than fifteen (15) per cent. of Buckwheat No. 1 and five (5) per cent. of Rice, nor Buckwheat No. 1, more than fifteen (15) per cent. of Rice.

Third. The sizes above mentioned shall in no case contain more than the following percentages of refuse (consisting of slate, rock and fire-clay), viz.:

Broken, one (1) per cent.; Egg, two (2) per cent.; Stove, four (4) per cent.; Chestnut, an average of not more than five (5) per cent., and at no time to exceed a maximum of seven (7) per cent. Pea, ten (10) per cent.; Buckwheat, fifteen (15) per cent.

Nor more than the following percentages of bone (containing a proportion of fixed carbon ranging between forty (40) and sixty-five (65) per cent.), viz.

Broken, two (2) per cent.; Egg, two (2) per cent.; Stove, three (3) per cent.; Chestnut, five (5) per cent., Pea and Buckwheat coal shall not contain such proportion of said bone as to reduce the price below the average market price of those sizes.

SEVENTH. If the conditions of the trade shall at any time or times require a higher standard of preparation than as aforesaid, the Seller shall prepare the coal so as to conform to such higher standard, provided, however, that the Seller shall be reimbursed for any increased expense involved; and, if the parties hereto shall not agree as to the amount of such reimbursement, the question shall be referred to the arbitration board as hereinafter provided. All coal shall be inspected at the breaker.

EIGHTH. When the inspector is making a test for impurities in the coal, he shall, whenever possible, take the sample from the coal as it flows from the chute into the car. If at any time the first test is unsatisfactory to either party the inspector shall make two other tests of the coal in question, and the average of the three tests shall be final. If at any time it is necessary to test a car after it leaves the chute, a sample shall be obtained by taking equal quantities of coal from the middle and each side and each end of the car in order to ascertain the average quality of the coal tested in that car. In case the inspector shall condemn coal which is believed by the Seller to be up to the standard, the Seller shall in that case make complaint to the General Superintendent of the Buyer, and, if it is found by him to be up to the required standard, the coal shall immediately go forward, and the instructions to the inspector shall be so modified as to remove as far as practicable cause for similar complaints hereafter by the Seller. The cost of all inspections shall be equally divided between the parties hereto, except that the Chief Inspector shall be paid by the Buyer.

NINTH. It is understood and agreed that the Seller will ship to the Buyer all the coal mined and prepared at the said colliery or collieries (with the exception of coal required in the Seller's mining operations and the coal retailed at the breaker as heretofore provided), prepared according to the standard hereinbefore recited, and, in case any coal is condemned and rejected by the inspector on account of its preparation, the Seller will re-prepare the same until it conforms to the required standard.

TENTH. A ton of coal under this contract shall consist of twenty two hundred and forty (240) pounds, and all coal shipped by the Seller under this contract shall be weighed either upon scales at mines, tested and approved by the Buyer and by the weigh-masters approved by the Buyer, or upon the weigh-scales of the Railway over which it passes on its way to market, and the amount of coal in each car shall be determined by the certificate of the weigh-master at said scales. An allowance for waste shall be made of such amount as is currently allowed by the Railroad Company transporting the coal, but not exceeding one (1) per cent.

ELEVENTH. The Seller will convey and manifest said coal to such points and parties as the Buyer shall from time to time direct, and will furnish and send to the Buyer and to the consignees named by the Buyer, and to such other parties as the Buyer may direct, such copies of manifest and such notice relating to coal shipped as the Buyer may direct, and the Seller will generally do and perform all acts usually and properly attendant on and connected with the mining and shipping of coal from the said colliery.

TWELFTH. If, by reason of any strikes among the employees of either party, or by reason of injury to the works, buildings, fixtures, railroad, terminal facilities or other property of the Railway Company or Companies by which the coal is transported to market, or of either party hereto, or of unavoidable delays or obstructions in the mining or transportation of the said coal, either party shall be unable to respectively furnish or take the coal as herein agreed, such party shall not be liable for non-fulfillment of this agreement during the period of such disability, provided every reasonable effort be made to resume operations at the earliest practicable period.

THIRTEENTH. The percentage of the various sizes of coal to be delivered under this contract shall be the same as the average produced at the several collieries operated by the Buyer in the same region.

FOURTEENTH. In the event of any disagreement as to the quantity to be ordered, or the actual price of coal at tide, or any other question to be decided under the terms hereof by arbitration, it shall be determined by a Board to be known as Permanent Board of Arbitration, which shall consist of three persons, one person selected by the Seller—viz.,

the President of the Buyer company to be the second person; and

the President for the time being of General Trust Company to be the third person. The name of the person to represent the Seller shall be inserted in this agreement, or, if not named before its execution, shall be endorsed in writing on this Agreement, and when and as often, by reason of death, resignation or vacancy, or for any cause, another person shall be selected, the name of such person shall likewise be endorsed hereon, which endorsement shall have the like effect as if the name had been originally inserted in this agreement. The Arbitration Board to have full power over costs of reference, and to decide by whom they shall be paid.

FIFTEENTH. If by reason of changes in trade or colliery conditions the Seller is unable to operate its mines without financial loss on the basis of this contract, and the Buyer declines to modify this agreement, the Seller may submit the questions involved to the said Board of Arbitration, and, if the Board decides that the Seller cannot operate its mines without loss on the basis of this contract, and if the Buyer and Seller cannot agree on a modification of this contract, then this contract shall cease and determine.

SIXTEENTH. It is also understood and agreed (anything herein contained to the contrary notwithstanding) that if at any time or times the average l. c. b. price at tide for sizes of coal larger than Pea coal shall be less than Three Dollars and Fifty cents (\$3.50) per ton, then the Seller may at its option temporarily suspend mining and cease all deliveries hereunder until the said average price shall reach Three Dollars and Fifty cents (\$3.50) per ton; provided, however, that two weeks' notice of

intention to stop deliveries shall in such case be given by the Seller to the Buyer; and, if any question arises as to price being less than \$3.50, it shall be submitted to the permanent Arbitration Board.

SEVENTEENTH. This agreement shall inure to the benefit of and be binding upon the executors, administrators, successors and assigns of the parties hereto respectively.

IN WITNESS WHEREOF, the parties have caused their respective corporate seals, duly attested, to be hereunto affixed the day and year first above written.

Signed, Sealed and Delivered in the Presence of

By

President.

Attest:

Secretary

By

President.

Attest:

Secretary.

NEW YORK CITY, February 18, 1901.

TESTIMONY OF MR. FREDERICK E. SAWARD,

Editor The Coal Trade Journal.

The special subcommission met at 2.30 p. m., pursuant to the motion for recess, Mr. C. J. Harris presiding. At that time Mr. Frederick E. Saward was sworn as a witness, and testified as follows:

Q. (By Mr. C. J. HARRIS.) Will you give us your full name and your address, and also state your position?—A. My name is Frederick E. Saward; my address, No. 41 Park Row, New York City, and my position is that of editor of *The Coal Trade Journal*.

Q. For how long a time have you been engaged in this work and been familiar with the coal trade of New York?—A. I have been publishing the paper for 31 years.

Q. Will you go on in your own way and state what the situation in regard to the use of anthracite coal is in New York?—A. I should think that the greater city of New York uses about 7,000,000 tons of anthracite coal in a year. The coal is brought to tide-water docks on the Jersey side by the different railroad companies coming from the coal regions. The Pennsylvania Railroad goes to Perth Amboy; the Lehigh Valley to South Amboy; the Reading to Port Reading; the Jersey Central down to Port Johnston, Elizabethport; the Delaware and Lackawanna to Hoboken; Delaware and Hudson and Erie to Weehawken. Those lines comprise the carriers. The individuals that you have lined out in black there [referring to a map] ship their coal over those several lines accordingly as they are situated most favorably in those regions that are marked out [referring to the map]. The lines go to those several shipping points. The Lehigh coal naturally flows down to Perth Amboy and to Port Johnston. The product of the Schuylkill district runs to Port Reading. The northern district pulls into Weehawken, Hoboken, and during the summer season to Newburgh.

Q. Who are the largest producers of anthracite coal for this market?—A. I think the Reading puts in the largest portion of the coal, of the harder coal; the two Delawares, the Erie, and the Pennsylvania Coal Company what we call free-burning coal.

Q. How is this coal marketed, by the independent operators or by the railroads?—A. By both. The railroad companies have their wholesale agents here in town, and some of the individual operators sell their coal to what are known as commission houses in the trade for sale again.

Q. Do the railroads buy coal of the independent operators and ship it and sell it themselves?—A. In a large degree; the coal that is called independent is now sold to the several railroad companies at the collieries.

Q. There are independent operators who do not sell to the railroads?—A. There are a few; yes.

Q. Who are some of them?—A. John C. Haddock is one of the largest.

Q. (By Mr. KENNEDY.) On what line does he ship?—He ships over the Delaware, Lackawanna and Western.

Q. Is he given cars freely to send as great production to tide water as he desires to send?—A. Perhaps that would be better answered by himself.

Q. (By Mr. C. J. HARRIS.) Do you know of any complaints among independent operators of failure to get plenty of cars for shipment, or anything of that nature?—A. No; I guess not. Practically, in the coal trade there is always a season, both

in hard and soft coal, when there is complaint that cars can not be had in sufficient number, and all that sort of thing, but that is soon over; that occurs usually in the fall of the year. Soft coal people ship to the lakes and to the seaboard; anthracite people ship to the West, and all that sort of thing; so they can not get cars enough. That is not a subject of general complaint in ordinary times.

Q. Would you say what proportion of the anthracite coal used in New York, or shipped to New York, comes from independent operators?—A. No; I could not answer that question offhand.

Q. Is it not a very small proportion?—A. Oh, yes; naturally, it is a very small proportion. The independent operators, taken in the aggregate, possibly represent one-fifth of the production, of which part is sold directly by them to the companies. That leaves a very small proportion that is independent.

Q. (By Mr. CONGER.) Can you tell what the economic or business reason is for these railroads going into the coal business? In other words, why is not coal produced by independent operators, the same as wheat is grown or lumber manufactured or any other of the great products or great items of railroad transportation produced?—A. Well, a reply to that question— that takes you back to ancient history, the history of the industry.

Q. Can you give that in a short way, if there is any salient reason for it?—A. I should say that in the last thirty years, or nearly, it has not been practicable for many individuals to go into the coal business as producers of coal. In those early days, when the mines were little bits of what we call rat holes—little bits of properties that produced perhaps 100 to 150 tons of coal a day—individuals were in business, a great many of them men of small capital. The business did not require very much capital. They soon played out, and, in order to furnish transportation to the railroad companies that were built into the districts, the railway companies themselves, or their friends, or mining companies, went into the securing of these properties round about, which you see there [pointing to map], in order to have traffic forever for the railroads that were built to carry on the business.

Q. (By Mr. C. J. HARRIS.) Are most of these anthracite coal lands now already owned by the different coal roads or the subsidiary companies?—A. Yes; very largely indeed.

Q. They virtually control the situation, do they?—A. They virtually control the situation; to put it that way, yes.

Q. (By Mr. KENNEDY.) Do the railroads in the soft-coal fields control the bituminous production and output to such a degree as the anthracite production is controlled by the so-called coalers?—A. Yes; I should think even more so.

Q. The soft coal coming to New York over the Pennsylvania Railroad, for instance, is that coming in as the property of the Pennsylvania Railroad or of the independent operators?—A. Of the independent operators. The Pennsylvania Railroad does not operate any collieries at all.

Q. Well, soft coal would come in over other railroads to New York, would it not?—A. Soft coal is coming to tide water over the Baltimore and Ohio, Chesapeake and Ohio, and Norfolk and Western and producers mainly in the soft-coal districts pool their issues; then they come to market, and the coal is sold by one concern in town.

Q. Then the coal comes in, not as the property of the railroads, but of the producers?—A. Of the independent producers, not of the railroads; they have but one general agency. The Norfolk and Western has one; the Chesapeake and Ohio has one.

Q. Have you in your mind the figures for the transportation of coal—hard and soft—in mills per ton per mile?—A. No; we do not concern ourselves with those facts in the coal trade in our paper any more. That is a thing that has gone by. We used to have at one time what you might call schedule rates of transportation of hard coal; but, as has been said, the bulk of the coal is the property of the railroads. They make the division as they see fit. The coal of the individual operators which is still brought to tide water is carried on the basis of 40 per cent of the tide-water price, so that the individual operator is just as anxious to get a high price for his coal as one can be. The proposition that they made last year, when they had that independent road under way, that they were going to be friends of the public and sell the coal for \$2.50, was simply to get a right of way, that is all. They are interested in getting a high price for coal. Forty per cent of \$4 is \$1.60; that leaves them \$2.40 for the coal at the mines. Forty per cent of \$3 is \$1.20; they get \$1.80 on that basis.

Q. I have been informed that the rate for carrying hard coal to tide water is something like 10 mills per ton per mile, and that the charge for carrying soft coal is 2½ mills per ton per mile. Now, you should be familiar with that subject. Can you say whether there is any such difference as that between the charges?—A. One hundred and sixty cents, the average for 100 miles, is 10 mills—a cent a ton a mile,

isn't it? That is a mathematical calculation easy to be proven. The soft coal that is brought to tide water is carried for less money; but they are two different items, and they do not enter into competition at all.

Q. Is it true that they do not enter into competition at all?—A. It is.

Q. Is it not true that in the past, when the price of anthracite coal has been put up to a pretty high rate, that soft coal has been induced to come in for that market?—A. For what purpose?

Q. Well, for general purposes.—A. It is not used for general purposes. You do not burn soft coal in your house. Some of the minor grades of anthracite coal have latterly been pushed as steam coals. Up to within a few years those were all thrown on the dirt bank, as they call it. Now we are going through the problem of reclaiming the dirt bank, or shipping as much as we can of the product of the mine to market, without sending any to the dirt bank. Those junior sizes are brought into the market and sold for a price.

Q. (By Mr. CONGER.) They compete with the soft coal, do they not?—A. They generally sell for less money. I do not see that there is any competition in that when soft coal is worth \$3.50 and they sell that for \$3.

Q. Was it not proposed to use soft coal in the city of New York in manufacturing at the time of the strike?—A. Soft coal was used; soft coal is used in this town; soft coal is used here constantly; a large amount of soft coal is used here. Soft coal can be burned here or anywhere else without making a smoke nuisance of it. The health code does not say anything about the nuisance of soft coal; it is only that it shall not be used so as to make it a nuisance to anyone. That is all that the section in regard to the burning of soft coal is: that it must not be used to make a nuisance. Soft coal can be burned. Soft coal is burned all over the United States, you might say, without being a nuisance.

Q. Do you know what percentage of the product of the output of the anthracite mines is now used for steam purposes?—A. Perhaps 25 per cent.

Q. Would it be as high as 40 per cent?—A. No. I don't think it would. We used to take about 40 per cent, but in the changes of the trade we are gradually making domestic coal of pea coal that used to go into these small sizes and be thrown away or used for steam at the mines. Trade is changing continuously.

Q. Well, if soft coal is used generally for steaming purposes, and some of these junior sizes of hard coal are sold to a man who uses it to make steam with, does it not come into competition with the soft coal?—A. I do not consider that they come into competition at all. I think they both have their use and value. I do not put them parallel, coming into competition with each other.

Q. Do you think there is any connection between the prices at which the two kinds of coal are sold?—A. The prices are regulated by the demand. That is all that you can say. Last fall the junior coals were in very, very short supply, owing to the strike. The strike lasted 6 weeks, our stock of small coal was eaten up.

Q. Did not that circumstance increase the consumption and, naturally, the price of soft coal?—A. It made a demand for soft coal, and in some instances the price was advanced.

Q. What is the present price of the domestic sizes of this hard coal at tide water; do you know?—A. About \$4.25 wholesale.

Q. And the roads get 40 per cent of that amount for the haul?—A. The railroad gets 40 per cent.

Q. (By Mr. C. J. HARRIS.) That means delivered on the other side of the river?—A. Yes.

Q. What other terminal charges are there to get it to New York and Brooklyn?—A. The terminal charges are covered by the rate of freight, as it is called, for the boatmen, whose boats go to the Jersey side and bring the coal over to New York and Brooklyn.

Q. About how much would that charge be a ton?—A. About 20 cents.

Q. (By Mr. CONGER.) You say the present price is about \$4.25?—A. About \$4.25 wholesale; yes.

Q. Do you know what it averaged last year approximately—is it higher now than it was a year ago?—A. No, I think not. I think I could make the statement that practically the average to-day is about the average of last year.

Q. Is it higher now than it was a month or two months ago?—A. No; two months ago there were some spot cargoes of coal selling for \$5.50.

Q. Is it higher now than it was—say, five years ago—in 1895 or 1896?—A. Yes; I reckon it is, and it will be higher.

Q. Have there been many changes in the past five years in the price of this coal at tide water?—Yes; prices have changed very much, indeed, even within a year—in a year's time, that is; not within the past year, but within twelve months' time, you know.

Q. How wide has the fluctuation been?—A. Fifty cents at least, possibly 75 cents.

Q. Not more than 75—there has been 75?—A. I think so; say from the spring prices to the winter prices.

Q. That change in the price has been on account of seasons particularly?—A. On account of the seasons. They all sell at low price in the summer.

Q. How low a price have you ever known at tide water for coal?—A. Two dollars to \$2.25.

Q. You have known it as low as \$2 and \$2.25, as against \$1.25 now?—A. Yes.

Q. What reason do you give the commission for that radical change in price?—A. To reply to that question it is necessary to go back to the date of the auction sale in 1876, in Hanover Square, when they sold 500,000 tons of coal. The price began to go down, and the people had the coal at their own price. Coal was sold within half an hour after the sale was over at \$1.50 advance by the people who bought it there. So that sale is no criterion. [In 1879 there was another low range of sales at auction.]

Q. That price, then, of \$2 was an extraordinary price?—A. You asked how low coal has sold. Coal has sold as low as \$2 a ton in this harbor, but a comparison between that price and \$1.25 would hardly be fair.

Q. What would be a fair comparison between the price now and that of twenty years ago?—A. I think they sold coal for \$6 twenty years ago, during the whole season.

Q. Six dollars at tide water?—A. Yes.

Q. Perhaps I should have said twenty-two years ago; that was after this low period, or the period of low prices.—A. That was the period of low prices, due to overproduction—throwing too much coal on the market.

Q. In your opinion the low prices of twenty-two years ago were occasioned by overproduction?—A. Yes.

Q. (By Mr. C. J. HARRIS.) What was the average price of the coal at that time compared with now, leaving out this—this auction sale; this one item?—A. Well, I venture to say we were getting from \$4 to \$5 a ton.

Q. About the same as now?—A. Yes.

Q. Has there been an improvement in the use of machines in mining that would lower the cost of mining since then?—A. No; on the contrary the expenses are greater.

Q. Do they use any coal machinery in mining in anthracite mines?—A. No.

Q. The price of powder has materially declined since that time, has it not?—A. Yes; we thrashed that question over last fall. The price was \$2.75 some 20 odd years ago. Powder can be had now for \$1.50 a keg.

Q. Is powder an important item in anthracite mining?—A. No, not a very large item. They use something like 1,500,000 kegs of powder, and about 4,000,000 pounds of dynamite; they get out about 60,000,000 tons. We are working coal at greater depths to-day than 15, 20, or any other number of years back. We have more water to pump; we have thinner seams.

Q. (By Mr. KENNEDY.) You said the low prices of this period you spoke about, when coal was sold in Hanover Square, were due to overproduction. Is the production regulated now so that there is no overproduction?—A. Do not think there is any regulation to-day at all. Sometimes I wish there was. It would keep the trade in better shape. Trade is always in better shape when the production is even and the price is even throughout the year. If that could ever be done, if we could divide the tonnage into 12 monthly proportions, we should have trade in very much better shape. We are producing to-day at the rate of something over 60,000,000 tons a year. Last month and December we have been running at the rate of 5,000,000 or 5,250,000 tons a month. Well, the market won't take 60,000,000 tons of coal, so there must be some months during the year when we must reduce that production. Now, if you call that regulating the coal trade, there you are; that is all I can say.

Q. Can you say how much difference there is between the price of coal now and the price in the recent years of depression—1893 to 1896 and 1897?—A. I think the market is in very much better shape so far as prices are concerned, but I think that condition is entirely due to the increased demand for coal.

Q. I wanted to know if the price went down to anything like it was at this period you spoke about when the auction sale occurred; if it was so low or if it remained comparatively steady and strong during those years of depression.—A. If we had again a period of depression, the price would be reduced, I have no doubt. In 1893, 1896, and 1897, it was pretty slow business everywhere.

Q. How much fluctuation is there in the total consumption of coal between those years, for instance, as between a poor year—1893-94-95—and a good year preceding or following?—A. That is, in the consumption of coal for domestic purposes?

Q. Yes.—A. That is an economic question, isn't it—a social economic question? It is very interesting, too. I have looked into it a good deal myself. I should think about 15 per cent.

Q. (By Mr. CONGER.) It might be well if Mr. Saward would say what the total consumption is now, approximately.—A. We are working to-day at the rate of 60,000,000 tons a year; that is, of anthracite coal. That is the production.

Q. And what do you estimate will be the consumption?—A. If we have a continuance of the demand of these last three months, it is all going to be burned up. There is no stock on hand anywhere to-day. In addition to that you must understand we are producing about 180,000,000 tons of bituminous—just about three times as much.

Q. Yes; but you testified that the consumption of bituminous coal, in your opinion, at least was not affected by the consumption of anthracite coal.—A. It is not. One does not affect the other, practically. I only gave you that fact so that these gentlemen might not think that anthracite coal is "the only thing." We get something else besides anthracite in the United States. We have 240,000,000 tons of coal this year, which beats Great Britain by about 15,000,000 tons. We have the greatest country in the world to-day in coal production, as we have in almost everything else.

Q. Do we export any of this anthracite coal?—A. Our best outside customer is Canada, which takes about 1,500,000 tons.

Q. I was referring to the European trade.—A. Across the water? No; we do not send any anthracite to Europe.

Q. Do we have any export trade in soft coal?—A. We have. We are increasing very largely in soft coal. You can not send any anthracite abroad till you send people over there with stoves, and show them how to burn anthracite coal.

Q. You testified the price now at tide water was about \$1.25 a ton?—A. Yes.

Q. Is that price practically uniform for the same grade of coal between the different producers or people who have it to sell?—A. I understand it is. That is the price.

Q. And the price is the same with all of them, practically?—A. For that grade of coal. There might be some discount—a few cents.

Q. How is that price fixed?—A. A man comes to the office who wants to buy five cars of coal. "What is the price?" he asks. The price is given him. He won't give it. He then goes down to Tom Jones and inquires, "What is your price?" Perhaps he is told \$4.25. He then goes back to the first man, if he feels like it. There is no such thing as fixing the price.

Q. The dealers will ask the same price, it seems?—A. Certainly they do, because each knows that his coal is worth the same money as the other man's.

Q. Do you think there is any union of action there—any agreement between them?—A. I do not think there is any agreement between them. They understand the value of their product. One man is not going to sell his for less than the others, because he says his is just as good as the others'. I do not think there is any cut-iron agreement, or anything of that kind.

Q. Is there any tacit understanding?—A. You will have to ask some of the gentlemen connected with the business for that information. If they have any understanding, I do not understand it to be so—that there is any tacit understanding. Some of these gentlemen connected with these companies, if they were brought before you, might answer the question yes or nay.

Q. (By Mr. KENNEDY.) I have often read in the New York papers that there was an anthracite-coal trust, and I have heard people testify to that effect. You should be an expert in that subject, conducting The Coal Trade Journal, and I should like to ask you whether there is an anthracite-coal trust or anything that partakes of the character of a coal trust?—A. I do not know that there is.

Q. Would you say that there is not?—A. Who are these gentlemen who testify that there such a thing as a coal trust?

Q. Well, an independent producer is the gentleman I have reference to.—A. What is the definition of the word trust?

Q. I will call it combination. I know your technical point there.—A. No; I do not want to ask you any questions there at all. I only want to use that means to enlighten you as well as some of the others who say that there is such a thing as a coal trust. Now, in order to have a trust or agreement there must be parties to the agreement.

Q. (By Mr. RIPLEY.) Is it not true that a large number of the coal-carrying roads are owned by the same people?—A. It is true that a very great many of our rich people to day are interested as shareholders in the various anthracite coal-producing and coal-carrying companies.

Q. Are not the same men directors in a number of these companies?—A. To a considerable extent. You will find that the Vanderbilts and the Rockefellers, one and another, are interested in these various companies.

Q. Can you state which of the companies apparently have the same men as directors, so far as your knowledge goes?—A. You will have to get Poor's Manual and work up those details from that. I could not tell you offhand.

Q. Is it not a fact that the Lehigh Valley, and the Erie, and the Reading, and the Central of New Jersey are supposed to be more closely united than the other roads?—A. There is where you get community of interest, in that several people are in those various enterprises; yes. If that is what you call a trust, combination, there you are. I do not call it so. As I said before, I have known this trade about 40 years, and I have been running the paper 31 years, and I have seen trusts or combinations, one thing and another of that sort, too often. I do not call this anything like a trust or combination that we have to-day. It is not like we had—a little bit of ancient history—in 1874. Then there was a meeting; an agreement was come to that such and such things should be done, and if other things were not done there should be a penalty. That agreement went to pieces of its own weight in 1876.

Q. Was there not another attempt in 1886 or 1887?—A. It ran along from 1886 to 1888.

Q. Yes, and was there not another attempt made in 1893?—A. No, no; 1891 and 1892.

Q. Under the leadership of what road?—A. Mr. McLeod tried to bring about a combination.

Q. And what was the cause of the failure?—A. Invading the territory of some of the other railroad magnates when he crossed the Hudson River.

Q. Will you give in somewhat greater detail your opinion in the matter as to the cause of the failure of that attempt to consolidate the anthracite coal roads?—A. I do not think it received the financial support that Mr. McLeod expected; I think that was the primary reason.

Q. If there had been sufficient financial support at that time, such a combination might reasonably have taken place?—A. That was a combination that ran the price of coal up \$1.75 a ton inside of 5 months.

Q. What was the relation between the roads, which took place in that combination; was it in the nature of a purchase or a lease?—A. Those were leased roads at that time.

Q. What has taken place recently between the Reading Railroad and the New Jersey Central? Have you any knowledge respecting that point?—A. As I understand it people connected with the Reading Company have bought sufficient shares in the Central of New Jersey to acquire the commanding interest there.

Q. Has it been an actual purchase? Have they bought stock, or have they actually purchased the road?—A. No; bought shares of stock.

Q. But leading virtually to the purchase of the road?—A. The transaction might lead in that way. The man that owns the stock owns the road, if he has enough of it.

Q. In other words, would this meet the situation—that in 1893 they attempted to combine by leasing, and in 1901 they attempt to combine by purchase?—A. Several of these people have increased their holdings in all these other lines, and in that way secured the control.

Q. (By Mr. CONGER.) Such a community of interest between these railroads might be a very good reason for asking the same price for coal, might it not?—A. That would be. There will be no higher price asked for coal. It would be the greatest fallacy for these gentlemen to attempt to get any more money for coal than the prevailing price.

Q. In other words, you think the present price is high enough?—A. The present price is a fair price. The present price is a profitable price. At the present price there is no danger of a decreased consumption unless they strike a bad year. If they are so unfortunate three or four years hence to get back some of those bad years like 1893 to 1896, the consumption of coal will be decreased from natural causes; but there is nothing in the situation from the trade standpoint to warrant any advance in price, and there are very good trade reasons for saying the price should not be higher.

Q. (By Mr. KENNEDY.) Perhaps economic reasons will prevail, but if this community of interest scheme is carried to a successful conclusion, will they not have it in their power to put on arbitrarily the very last penny that the public will stand for coal?—A. Now, I think I have answered that question in my own way. "The very last penny that the public will stand for," you put it in that way. Now, I said, for very good trade reasons they should not increase the price beyond what it is at the present time. So that I think you are putting it in one way; and I put it in another. I would say no to that question; there is not any probability of such a course.

Q. You say they would not have the power?—A. They might have the power, but they would not exercise it.

(By Mr. RIPLEY.) What proportion of the total tonnage is produced by the Reading road, can you say, approximately?—A. Of last year's tonnage it was about 21 per cent.

Q. Is that greater or less than its proportion of the tonnage 10 or 20 years ago?—A. O, I think the Reading was running about 20 per cent even in those days.

Q. Did it not run as high as 43 per cent on paper at one time?—A. No; 42 per cent when they had that Jersey Central-Lehigh Valley lease, was it not? Not the Reading of itself.

Q. Has not the allotment to the Reading, made 10 years or so ago, been at least as high as 30 per cent or 33 per cent?—A. No; I have no such recollection; I don't think you could find confirmation of that opinion in the statistics.

Q. Testimony to that effect was offered in 1892 before a committee of the House of Representatives.—A. That allotment must have included the Lehigh Valley or the Jersey Central. That is, when those roads were leased, you know.

Q. Was there then any change in the relative proportion of the coal produced or shipped by the different roads?—A. There has been very little, indeed, in the last 10 or 15 years.

Q. Have not some new roads come into the territory within the last 10 years?—A. Yes; we have the Ontario and Western, and the Delaware, Susquehanna and Schuylkill. Those are two new roads.

Q. Would the Erie and Wyoming Valley come in there?—A. Oh, yes; the Erie.

Q. The Erie and Wyoming Valley?—A. That is a part and parcel of the Pennsylvania Coal Company.

Q. Yes, or was it sold at the time the Pennsylvania Coal Company was sold to the Erie Railroad?—A. I understood so.

Q. And is operated by the Erie Railroad?—A. Yes; operated by the Erie.

Q. You say the relative proportions of coal shipped by these roads is not changing much at the present time?—A. It has not changed very much in all these years.

Q. Suppose one of the roads were to ship more than the usual or customary percentage, what would happen? Suppose, in other words, that the Reading roads would begin to ship 30 per cent of the total output?—A. Thirty per cent, being entitled to 21 per cent?

Q. What do you mean "being entitled to 21?"—A. That is the proportion of the tonnage; that is the way it works out.

Q. Do you mean anything specific by "being entitled to 21 per cent?"—A. The coal shipments are divided up into percentages.

Q. Is that division made at the present time?—A. Their proportion is, they say, 21 per cent.

Q. Who says 21 per cent?—A. Well, I say that is the way it figures out. If you take last year's production, their tonnage is 21 per cent of it.

Q. Is the Reading Railroad producing up to its maximum capacity? Could it not produce much more coal than it does at the present time?—A. You would have to ask Mr. Luther, of Pottsville, that question; I wouldn't answer it.

Q. Your statement is, then, that this proportion of tonnage to each road is purely a result of chance?—A. Not of chance at all. It is controlled by what they do in each year.

Q. Whom do you mean by "they?"—A. The several companies.

Q. They come together, then, and agree upon allotments?—A. No; there is the production last year of 47,000,000 tons; out of that the Reading gets 10,000,000 tons. That works out something like 21 per cent, and the others work up to their several percentages.

Q. But it could produce more?—A. It could produce more; it has the colliery capacity.

Q. You think the anthracite properties generally could produce more coal than they do?—A. Yes; they could all produce more.

Q. Suppose any one of them should attempt to produce more than the allotted proportion what would happen? Would there be any safeguards for the other roads? Suppose, in other words, one of the roads should attempt to double its output in a given year?—A. Don't ask such foolish questions as that. Why should they attempt to double the tonnage; they can't sell more than so much coal?

Q. So much is sold as a total in a year, but one company might increase its proportion of that total, might it not?—A. Do you mean to ask whether a given company has the capacity for doing more?

Q. Certain of the roads have come into the field in the last ten years and have built up a trade of their own, have they not? You mentioned the Ontario and Western.—A. They have taken care of the increased tonnage that has been demanded.

Q. (By Mr. CONGER.) You say these roads could produce more coal; why don't

they do so?—A. Because they can't sell at a profit. Why, it is like that chapter in Henry George's Political Economy where a man sells 100 things for one price, and if he increases the quantity by 10, the increase has an effect not only on that 10, but on all the rest. I have noticed it many times in the last number of years when they produced too much coal.

Q. (By Mr. KENNEDY.) It would look as if there was an agreement, then, if some of them did not produce up to something like their maximum producing capacity, to keep the production down?—A. I gave you information on that point. I said that during this month and last we have run at the rate of 60,000,000 tons a year, and when it comes summer time we will have to reduce. We can not sell 60,000,000 tons at any price in this market.

Q. (By Mr. RIPLEY.) What do you mean by "their tonnage," referring to the Reading company?—A. Their proportion or percentage that has been divided in the course of years, 20½, 20½, 21½, 20½, or what it averages for 5 years.

Q. Does the Pennsylvania Railroad participate in a proportionate arrangement of that kind?—A. Never.

Q. Why not?—A. I do not know.

Q. Can you give any answer why it does not?—A. Simply because it has been a free lance.

Q. Free lance against what?—A. Against the rest of them.

Q. Has their proportion remained fairly constant?—A. I think so.

Q. About what figure?—A. About 10 per cent: 9, 10, 10½, 11.

Q. Is it not true that at various times when the companies did agree formally upon prices, that the Pennsylvania Railroad refused to accede to such an agreement?—A. I think you will find they have always refused.

Q. Always stayed outside of any agreement? The agreement, then, between roads as to such allotments and of prices which were formerly made does not exist?—A. I do not know of any agreement at the present time.

Q. But there was one formerly, say 10 years ago?—A. Yes; we have had several in the last 30 years.

Q. (By Mr. C. J. HARRIS.) Has there been an increase in the price of coal—an unusual increase in the price of coal in the last 5 months—1 or 5 months?—A. Eliminating that period of the strike and shortly after it. No.

Q. Are prices about where they were last winter at this same period of time?—A. I think so.

Q. I should like to ask if you know anything about the condition of labor in the anthracite mines?—A. At the present time, since the resumption of work after the strike, labor has been better employed at the anthracite mines than at any time during the past 20 years. There has been more constant labor, the wages received have been better, and the outlook is for a continuance of such good conditions during the present year, with the possible exception of a little less demand during the summer months of July and August, as usual.

Q. (By Mr. RIPLEY.) Have you any data as to the cost of the production of coal at the mine mouth in different parts of that territory?—A. No; I have not. I have seen so many statements in the last 30 years that it is hardly worth while to make an answer to that question.

Q. Are not some of those figures published in the companies' reports?—A. I think there are figures published in these reports; but if so, you can divide the amount of dollars of the cost by the number of tons produced and thus get a certain figure as to the cost per ton.

Q. You have reason to suppose they are reliable?—A. I think all such reports are misleading, whether a man makes his price \$1.10 or \$1.64, or any other price. It is so because I do not think that they charge up against the mining cost all the items that should go to it.

Q. You mean, in other words, that certain items which are charged against the mining cost really belong to the railroading cost, or vice versa?—A. No; I think it would be directly the other way, that certain items have gone into the improvement accounts that ought to go to the actual cost account.

Q. Will you specify, not by name or particular company, but by naming the item for the sake of the record?—A. In some of these statements when you find people inclined to talk about what they have done in the past years, and so forth and so on, they make the cost all the way from \$1.10 to \$1.64. I have seen other people make it from \$2.10 to \$2.46. One might be a first rate year and the other a bad year; one man would charge up one thing to an account and another man nothing to this account.

Q. Can you state what proportion roughly of the cost of coal is due to labor at the mine mouth—a mere approximate figure?—A. A ton of coal in a car underneath the breaker ready to be shipped to market, what proportion labor is getting out of that price, whatever it may be?

Q. What proportion of the cost of producing goes to wages?—A. Eighty-five per cent.

Q. And what increase in the price of coal has taken place since the strike last year?—A. Increase in price?

Q. The price of coal is higher at the present time than a year ago.—A. Higher than it was before the strike?

Q. Yes.—A. September was a low time. We had gone through July and August, and the strike was started on the 17th of September; we were at a low ebb of prices. Then we had a strike and the strike put up the prices.

Q. How much?—A. Two dollars. Coal sold here at \$6 owing to the scarcity, etc. People bought it at \$4 or less, and sold it again at \$6; but after the strike was over and there was a resumption of work and tonnage came through rapidly the price was perhaps 50 cents a ton better than it had been during the months of July and August.

Q. Better than it had been during the corresponding months of preceding years?—A. No; I do not think quite up to that point.

Q. Is it higher this February than one year ago at this time?—A. I think it is.

Q. By about how much?—A. Twenty cents or 25 cents. On the general conditions, I will say about 25 cents better.

Q. And what proportion of that increase of 25 cents is due to the fact that wages are higher?—A. Take 85 per cent at the mine; the increase in wages was from 13 to 16 cents a ton; so I am not very far out of the way. I said 85 per cent; you might modify that a little. But you know in addition to the wages of the miner you have a great many other items that go into the cost per ton. Now, here is a question of employment in your plan of inquiry; "the number of children employed;" who said there were any children employed?

Q. (By Mr. C. J. HARRIS.) Well, what do you say—are there or are there not?—A. The law of the State of Pennsylvania says that no one should go below ground who is less than 14 years of age.

Q. Well, are there children employed over 14 years of age?—A. Below ground? Boys? Yes; but very few. They are simply door boys.

Q. (By Mr. CONGER.) Considerable of this hard coal is shipped West, is it not?—A. No. You can not say "considerable;" 10 per cent is not considerable.

Q. Is that all that is shipped West?—A. Yes, sir.

Q. Is not Buffalo quite a market?—A. 2,000,000 tons are the figures for the year.

Q. Are you familiar with the prices of coal at those Lake Erie ports?—A. Yes, sir.

Q. Summer prices there are usually lower than late fall and winter prices?—A. Yes.

Q. About a third difference, is there not?—A. The same difference that prevails round about here: 50 cents a ton is the range.

Q. Usually 50 cents a ton?—A. Yes.

Q. Now, about what time does that change, or the increase in price, usually take place—the 1st of October?—A. The 1st of October, call it, last year; but we had a strike last year.

Q. That interfered with the regularity?—A. Yes; upset the regularity.

Q. Is it or is it not a fact that when the increase from summer to winter prices on coal takes place it takes place with all dealers and all producers on the same day?—A. No; I am sorry to say it does not. There are a lot of "suckers" out there that don't change their price. They have a lot of old orders on their books.

Q. (By Mr. KENNEDY.) Don't the dealers in the distant cities receive word upon the same day—all of them—that the price has changed?—A. Oh, yes; there is a circular issued—a circular that prices are so and so. Why, there is some coal going up there now that they claim was sold last summer.

Q. (By Mr. CONGER.) Who makes this claim, the dealer?—A. The dealer.

Q. Is this dealer you refer to acting independently or acting for a producer of one of the railroads?—A. I guess he is acting for himself. He does not give the producer a chance. He claims he has contracts at last year's prices which are still good.

Q. Is it or is it not a fact that on a certain day all of these producers raise their prices to the wholesalers and to the jobbers? Is it not usually the case that the increase from the summer to the winter price takes place with all producers at a fixed day?—A. Circulars are issued by one and another, and if you are a dealer in town, the first or second mail after the first of the month you are apt to get a half dozen circulars and the prices quoted will be all alike.

Q. How can you explain this uniform action if there is no agreement?—A. Oh, I don't know. It is the advance in civilization, I guess. Possibly it is the hypnotism that prevails—the unity of minds; all think alike. I do not know but there is a telephone that might be used by somebody to ask, "What are you going to ask for coal? I have my circulars all at the printer's, and I am ready to send

them out. I am going to ask so and so." "All right," might be the response: "I will ask the same."

Q. (By Mr. KENNEDY.) Community of interest fellows, they are?—A. Yes; there is a mutuality of interest.

Q. (By Mr. CONGER.) You would not call that a combination, however?—A. No; I would not call that a combination. I'll tell you why I would not call it a trust or anything of the kind—because there might be somebody who would say, "No, I won't put up my price; buyers all go somewhere else." Such things have been known even within the last twenty months.

Q. (By Mr. RIPLEY.) Can you specify a time at which that happened within the last twenty months?—A. No: I do not recall a specific time at which that happened, but as a general thing there have been times when dealers wanted to put the price up and it would not pay to put it up.

Q. That is, those who wish to raise the prices have to keep at level with those who refuse to raise?—A. With those who refuse to raise.

Q. And has the Pennsylvania company always refused to go into such an arrangement?—A. Yes; I think the Pennsylvania has always been on the outside, as the saying is; but there are shippers down here who have coal to sell, and they generally come pretty near the market.

Q. (By Mr. CONGER.) This communication by telephone or wireless telegraphy, whatever you might call it, answers the same purpose as the combination would, does it not?—A. It seems to be a wonderful invention; it beats writing on a piece of paper and putting a signature to it.

Q. In what way does it beat it?—A. No record kept.

Q. In other words, if there were a record kept, would it be an illegal combination, conspiracy, or something of that kind?—A. So construed by a good many lawyers in Congress, you know.

Q. It might be conspiracy in restraint of trade?—A. It might be.

Q. But if it is done by telephone or wireless telegraphy it is not? That is the advantage, I suppose.

(No reply by the witness.)

Q. If this uniformity of action did not take place, in your opinion would not the price of coal be less? In other words, there probably is not free competition at all times now, is there? They do not cut each other's throats very much at the present time?—A. No; they are not cutting each other's throats. It is a good thing they are not. If there was not some understanding as to what this coal should sell at, the consequence would be ruin—ruin to the State of Pennsylvania, to the principal industry of the State, and to the mining and shipping of anthracite coal. The railroads would go into bankruptcy, once more in the hands of receivers. The Reading has been in the hands of the receiver several times within my knowledge, simply on account of that free and open market that people are talking about.

Q. You do not believe in a free and open market?—A. At the time coal sold at \$2.00 that was a free and open market. We had a combination then, but the parties to it could not agree. Some fellow was shipping more than his tonnage. They said, "All right; we will find out what the market price of coal is," and they put it up at auction. They found out what the price was. It was only that price for half an hour. As I said, it afterwards sold—the same coal—at an advance of \$1 and \$1.50, and the market price of coal that day was not really \$2.00, but \$3.50.

Q. I will have to ask you what was the market price that day?—A. It was the average price obtained for the whole lot—nearer \$3.25 than anything else.

Q. Your idea is that the fact of these coal roads going into the hands of receivers, as many of them did a few years ago, was caused by competition, by this free and unrestricted competition we hear so much about, and that this competition is not a good thing?—A. Not a good thing. How many times has the Reading been in the hands of a receiver in the last ten years?

Professor RIPLEY. I should say, on a guess, you are right in your estimate of five or six times.

Q. (By Mr. C. J. HARRIS.) Was that condition entirely caused by the low price of coal?—A. I think so. Coal was their principal tonnage—anthracite coal.

Q. But was not the road overcapitalized?—A. It has not paid a dividend in a great many years, so it would not be from paying out dividends.

Q. The road might be overbonded or overstocked?—A. As long as it doesn't pay any dividends, why, you can't say it is due to that cause. If they had been paying, as some of these people were paying, 10 per cent dividends, 12 per cent dividends, long years after they ceased to earn such, then you might say that it was due to that sort of thing that they failed.

Q. (By Mr. RIPLEY.) Are there not a number of these roads that hold territory

for future development, and which they are not mining at the present time?—A. Not a number of them.

Q. Not a number of them? For instance, the Reading Railroad in the Schuylkill region. Is it mining from all its extent of territory?—A. That company has coal for 100 years.

Q. When was that land purchased?—A. In the seventies, I think.

Q. And it has been undeveloped, a large part of it, since that time?

(No audible response by the witness.)

Q. What has paid the interest charge on carrying that amount of undeveloped property?

(No response by the witness.)

Q. Has that holding been an influence in putting this road in the hands of a receiver—the carrying of such a large amount of undeveloped land with a debt on which it has to pay interest?—A. You must say they issue bonds to pay for that property? If they issued stock they would not have to pay any interest, would they?

Q. I asked you the question.—A. I am asking you another.

Q. Did they issue any security, either stocks or bonds, for the purchase of those coal lands?—A. They must have issued bonds for it; they must have issued something for it.

Q. And is not that land carried at the expense, to some degree, of the present consumer of coal? In other words, is not the present consumer of coal paying the carrying charge on the investment for the next one hundred years?—A. You might say yes to that question; then the next thing to be answered would be, How much does that amount to per ton? or else it is not a fair question.

Q. Have you any means of judging?—A. No, I have not; but I should think it was not very much.

Q. Can you state what the debt of the Reading Railroad is at the present time, approximately?—A. I think its stocks and bonds approximate about \$150,000,000.

Q. And can you state about what proportion of the total coal territory of the Reading road is being developed and worked at the present time?—A. I can not; because it is working out some of its territory every day and every year. Understand, coal does not grow; we've got to have it for the future. Ten years hence some people up in the northern district won't have a pound of coal; then you will be glad the Reading has it.

Q. Are there any other companies carrying undeveloped coal lands at the expense of present earnings?—A. To a very small degree. The Reading has by far the greatest bulk.

Q. When was that purchase of land made as a whole?—A. I think it was made in the early seventies, under Mr. Gowan.

Q. Were any further purchases made to any large extent under the management of the years 1890 and 1893?—A. Very little indeed; very little.

Q. Is that coal in the southern territory as accessible, and can it be mined as cheaply as coal in the Wyoming region?—A. No.

Q. And for what reason?—A. The coal lies deeper.

Q. Is it of equal quality?—A. The best quality of coal in the world is right around there in the middle of that green patch [referring to map].

Q. In the Schuylkill region?—A. Yes; there's hard, bright coal down there.

Q. And why was the development of individual operation so much less marked than in the northern territory? You say the coal is of better quality?—A. The operators came in afterwards, after this lower territory had been acquired.

Q. But it is impossible for any coal lands to be procured in that southern territory at the present time: they are all bought up?—A. The Reading bought out the individual operators down there.

Q. And it carries those lands at the present time as an asset?—A. Yes; I think it has a good one. I would like to have it.

Q. I agree with you perfectly. The question is as to what pays the interest on the debt contracted for it?—A. The interest cost per ton is not very much on that.

Q. (By Mr. CONGER.) How much would it be, a few cents or a dollar?—A. A few cents.

Q. How much would it be approximately?—A. I should say not 5 cents a ton.

Q. (By Mr. KENNEDY.) Then the public pays that charge, on each ton of coal—5 cents?—A. You might say they pay that, and might economize in some other way to offset it. You can't run a scheme cheaper than the Reading is running its business.

Q. (By Mr. RIPLEY.) You say the debt of the Reading is approximately \$150,000,000?—A. I think so.

Q. At 4 per cent the interest would be about \$6,000,000 a year?—A. Yes.

Q. What is the total coal output of the Reading, approximately, at the present time, the total tonnage hauled?—A. Do they carry coal altogether?

Q. No; I ask concerning their shipment of hard coal?—A. They carry about 15,000,000 tons of coal of all kinds.

Q. And you say that \$6,000,000 a year is required to pay the interest charge on carrying the lands?—A. That is what you said; they have a debt of \$150,000,000; that includes a lot of stock that does not pay any dividends.

Q. I was simply trying to get at the relative burden.—A. According to that you have 50 cents a ton on hard coal; but what else do they do? They carry 12,000,000 passengers; they carry 30,000,000 general freight; they carry about 5,000,000 tons of bituminous coal; so you can't throw all that expense on the hard-coal business.

Q. (By Mr. KENNEDY.) You made a statement a while ago that I think was a little bit astonishing to most people, perhaps, that there is no such thing as competition between soft and hard coal?—A. Yes.

Q. Did you read an article in the New York Times a week or ten days ago, by somebody writing under the nom de plume of "J," on that subject?—A. I said in my paper that he was a "jay" in more ways than one.

Q. (Continuing.) I wanted to ask if there was any truth in the statement the writer made that the great magnates are acquiring an interest in the soft-coal roads so as to control the production of anthracite coal?—A. Yes; I know the fellow that wrote that story. It is one of those things the air blows back and forth.

Q. Would you care to say whether you believe the interests of the public and the coal producers will be subserved by a community-of-interest arrangement between the different coal roads, by which they will have an understanding as to what the production shall be?—A. I think the interests of the public will be conserved far better than they ever were before. Put that on record to the fullest degree. We will have more regularity, better and more even conditions than we have had.

Q. (By Mr. CONGER.) Do you think the public would have to pay a lower or a higher price for coal?—A. I have covered that. I said it would be no higher.

Q. No higher than at present, you said?—A. The present is not a high price for coal.

Q. By what standard do you measure when you say that the present is not a high price for coal? Would not the public be better off if it could buy for \$3.25 instead of \$4.25?—A. How many tons of coal do you burn a year? It does not amount to anything—all those things have come up from time to time. The present is not a high price for coal compared with the price of 5, 10, 15, or 20 years ago. The price will probably be reduced after the 1st of April for the summer trade.

Q. You think the present price of coal is not high compared with its cost?—A. I do think so; it is not a high price.

Q. (By Mr. KENNEDY.) I would like to ask if there are anthracite deposits to any considerable extent in other parts of the country than Pennsylvania?—A. No.

Q. Are there anthracite deposits in Colorado?—A. Yes; I think there is some coal in Colorado. I think they dug out some 90,000 tons last year.

Q. Do you think the area is very small?—A. It is very small, indeed.

Q. (By Mr. RIPLEY.) Does any anthracite coal go to the Pacific coast?—A. From here?

Q. By water?—A. Occasionally a cargo. Omaha is about our farthest western point.

Q. (By Mr. C. J. HARRIS.) Have you any further observation or testimony that you would like to give us before you go?—A. No; I think not. I think we have run along on this subject pretty thoroughly. We have not followed these questions, but still, at the same time, we have given the essence of answers that might be made to them, although not in categorical order. The anthracite trade is an enormous trade, and it has gone through a great many hardships since the time that we mined, say, 10,000,000 tons of coal a year. Some people have made a great deal of money; there have been a great many other fortunes lost; people hung on too long. The best man to-day in the trade is the land owner. He sits by and does nothing, and gets his 25 cents a ton royalty. That is very largely paid in that upper district there where you see all those patches [referring to map].

Q. Is labor adequately compensated in the anthracite region?—A. I think so. I talked with men above ground and under ground during that last strike. I made it my business to be there and talk with them, and as long as they get full work at good prices they are satisfied.

Q. (By Mr. KENNEDY.) Have they full work?—A. That is, work such as they are getting to-day.

Q. (By Mr. RIPLEY.) They don't work six days in a week, ten hours a day?—A. They tell me they can't work six days in a week and stay at it many weeks at a time. Coal mining is hard work; they don't want to work three hundred days in a year. They can't do it. Two hundred and fifty days is about right.

Q. Do they work two hundred and fifty days?—A. They have not averaged two hundred and fifty days, but they probably will now.

Q. (By Mr. KENNEDY.) Have not two hundred days been about the average?—A. Two hundred, two hundred and ten; some two hundred and fourteen; some even more than that number; others less. Some of them ran down as low as one hundred and seventy-four, I think, last year, and others ran up to two hundred and forty-four.

Q. Do you look with approval on the work done by the United Mine Workers' in that region within the last year?—A. I think they were very largely right, very largely right. Mitchell did what nobody else could do, that all of these presidents never were able to do—brought about absolute cessation of work in order to restrict the production. All the joint agreements ever made never brought about such a result as he brought about.

Q. How does his work tend to restrict production?—A. Didn't he order the men all out? He got them all out—150,000.

Q. Do you mean to say that the railroad presidents have tried to do that in the past and could not succeed?—A. They tried to agree among themselves that they would not work this week or that, and there was generally some "hocus pocus" above ground or below, and days they were supposed not to be shipping they were getting coal ready, and when it came time to ship they shipped as much in one day as ordinarily in two.

Q. Do you believe in arbitration in disputes between labor and capital?—A. Yes; I have advocated it thoroughly for the last thirty years.

Q. Do you think when the interest is largely public, as in an affair of that kind, that both sides should be compelled, if they will not do it voluntarily, to arbitrate their differences?—A. Where does the public come in in that?

Q. Is not the public a great sufferer when the production of a great article like coal is shut off and the prices go sliding skyward?—A. It is.

Q. Has it not a great interest then?—A. I don't think the public had very much interest in this last strike. I think the people to fight it out are the people most directly concerned. They don't want to bring in a third party.

Q. Is not the third party the entire American people in matters of that kind? Did not the prices go up 25 cents a ton on the people as a result of that strike?—A. The price went up 25 cents a ton as a result of the strike. That means that labor is the cause of the increased cost to the American public.

Q. (By Mr. RIPLEY.) But the companies receive the same return that they did before?—A. Net.

Q. Net or nit?—A. I think so. [Laughter.]

Q. (By Mr. KENNEDY.) I would like to get your opinion as to whether both sides should not be compelled to arbitrate if they will not do so willingly?—A. Why, I don't think you could legislate on that subject.

Q. They have legislated on it in New South Wales, have they not?—A. Compulsory arbitration would not be worth a stick at all. You have got to take the men on both sides. I have seen them, the operator on this side of the table and the men on that side of the table, about the right width so they couldn't hit each other, and they generally stay there for about three good sessions. At the first meeting they may almost come to blows; the second they sober down a bit; and the third time they straighten it out. Mutual concessions are made on both sides of the table, and the thing is done and carried forward and made good for a year or two. They had a session at Indianapolis during the current month; there were 200 people present there representing the soft-coal interests of the country. The dispute is all settled pleasantly for another year.

Q. I don't know but that I gather the idea from what you said that the railroad presidents were much gratified to have Mr. Mitchell bring about that shut down?—A. I think they are gratified at the result.

Q. Did they have any gratification during the strike and previous to the strike over the prospect?—A. No, they did not; it was the contrary, a good deal of bad feeling.

Q. Could not the result of that strike have been advantageous to the men as well?—A. Yes, it has been of great advantage to the men; they are getting more money, and they are getting steady work, and they were relieved of some of those conditions that existed there in regard to the powder charge, and so on.

Q. Are practically all the anthracite miners in the union at the present time?—A. I think Mr. Mitchell claims now he has about 80 per cent of the actual workers in it. There are about 140,000 people altogether. Of course there are a great many boys that naturally would not drift in, can't, on account of age; so if you take 80 per cent you have practically all the mine workers in the anthracite district.

(Testimony closed.)

NEW YORK CITY, February 19, 1901.

TESTIMONY OF MR. JOHN C. HADDOCK,

Independent anthracite-coal operator.

The special subcommission met at 10.50 a. m., Mr. C. J. Harris presiding. At that time Mr. John C. Haddock was sworn as a witness and testified as follows:

Q. (By Mr. C. J. HARRIS.) Mr. Haddock, will you give us your full name and your address, and state the position you occupy?—A. My name is John C. Haddock, my address in New York is No. 1 Broadway, and I am the president of the Plymouth Coal Company.

Q. How long have you been engaged in the anthracite-coal business?—A. I have been identified with the business since 1866, and engaged in the mining of coal since 1878.

Q. We would like for you to go on and give to the commission, in your own way, the position of the independent anthracite-coal operators. I would ask you, first, about what proportion of the anthracite-coal mining is done by the independent operators?—A. It is a very difficult thing to determine just what is an independent operator. I make that answer, not with any desire to evade your question, but in order that we may treat the matter accurately. The independent operator—I mean by that, the operator who mines his coal and sends it into the market, selling the coal himself or having the coal sold for him—represents to-day a very small percentage of the anthracite production. I think the majority of the independent operators or mining companies dispose of their coal under purchase contracts to the various railroads tributary to their operations. So, if you wish to know how much coal is mined by all the independent mining companies—I mean companies without any railroad ownership—that is one thing; and how much coal is being shipped to the market and sold by the independent operators, that is quite another thing.

Q. (By Mr. CONGER.) Suppose you give us, Mr. Haddock, those two different items. —A. If you will defer those questions, as they are questions involving facts and figures, I think it will be possible to get that information for you. Now, it will be simply a guess.

Q. If you could tell us now, approximately, your testimony could be submitted to you; and then if you desired to correct or submit the exact figures you could do that later.—A. Owing to the recent changes, it would be simply a wild guess. If you would let the matter rest that way, I think it would be much more satisfactory to you and more satisfactory to me.

Q. (By Mr. RIPLEY.) For instance, what are some of those recent changes?—A. Well, about two years ago the independent operators projected a new railroad from the Lackawanna regions to tide water.

Q. At what point?—A. I do not remember. I doubt very much whether that was given out—just what point. But they felt that it was impossible to get reasonable rates of transportation, and that there was enough in the prices asked for the carriage of coal to justify the building of a new road, and they secured a charter and made a rather vigorous attempt for the road's construction. They had a certain amount of tonnage pledged to it. If I remember aright, it was known as the New York, Wyoming and Western Railroad.

Q. (By Mr. CONGER.) Was that road ever built?—A. No; the parties who had pledged tonnage to the support of it sold their properties to what is known as the Temple Iron Company. If I am advised correctly, the Temple Iron Company is a syndicate that has been made up of the various railroad companies—the anthracite carriers—and the road was not built; for the reason, of course, that this tonnage had been secured.

Q. (By Mr. RIPLEY.) Was that the road projected along the line of the Delaware and Hudson Canal?—A. No; that was a later effort.

Q. You will speak of that later?—A. It comes in this connection. When this enterprise that I have spoken of, namely, the New York, Wyoming and Western, was abandoned, then some of the remaining operators saw an opportunity of constructing another railroad to tide water, and they secured the bed, as a right of way, of the Delaware and Hudson Canal, and that enterprise received the cooperation of one of our strongest companies, that is, the Pennsylvania Coal Company, and that passed, you know, by a recent trade here into the hands of the Erie, and, of course, it was abandoned.

Q. (By Mr. C. J. HARRIS.) What was the object of these operators inaugurating new roads?—A. The object was to get through rates for transportation, or to get higher prices for their coal. Many of us looked upon the building of new roads

as an economic waste. We felt that it would be wiser and better, in the long run, for the trade to insist upon having reasonable rates for transportation.

Q. Were the rates that the railroads then in existence were charging unreasonable, in your mind?—A. Certainly. The fact that they were was the reason and the justification for the building or projecting of these new roads.

Q. (By Mr. RIPLEY.) Had those attempts anything to do with the present promise of an increase of the percentage, paid to coal operators, to 65?—A. Undoubtedly.

Q. That increase is contemplated, you understand?—A. Undoubtedly.

Q. And will go into force before a great while?—A. That I do not know. The presumption is that this higher price that the companies agree to pay for the coal will be inaugurated sometime in the near future.

Q. (By Mr. KENNEDY.) Could you dispose of your production to the railroads at 60 per cent of the tide-water price?—A. That is the price that has been paid for the coal generally, ever since what is known as the McLeod combination. Mr. McLeod, in order to satisfy the individual operator, who at that time were protesting very vigorously against the rates being charged for transportation, made arrangements, or rather the Reading Company at that time made arrangements to buy coal of the individual operators, paying therefor 60 per cent of the tide-water price—that is, on prepared sizes.

Q. Could you dispose of your production to them at that figure?—A. I presume that I could.

Q. Do you find it more profitable to bring your coal here in their cars and dispose of it yourself?—A. I would have received better results had I disposed of the coal to the company.

Q. (By Mr. C. J. HARRIS.) When I asked you what proportion of the coal is mined by the independent operators I wanted to know, in a general way, something of what the force of the independent operators is—whether it is 10 or 20 per cent at the present time, or 3 per cent; whether it is of considerable magnitude or very small. I did not want the exact percentage. I wish you would state to the commission now about the amount of coal.—A. (Interrupting.) It has been claimed that the independent operators or mining companies represent about 30 per cent. But those figures, you understand, are subject to correction.

Q. Another thing I want to bring out is this, Are the independent operators growing fewer and fewer each year?—A. Oh, yes.

Q. And the present tendency is for the coal to be mined by the coal companies affiliated with the railroad companies?—A. Yes.

Q. And that becomes more and more the case every year?—A. That has been the record of the past.

Q. (By Mr. CONGER.) Mr. Haddock, what was the percentage of the anthracite product that was mined by independent companies, say two years and a half ago, before this road of which you speak was projected? Was it larger than 30 per cent?—A. I could not answer that question offhand.

Q. (By Mr. RIPLEY.) Were those sales which have been going on of independent operators to the railroads entirely voluntary, so far as your knowledge extends? That is to say, do the operators sell out willingly to the railroads, or is the selling a matter of compulsion?—A. Well, I gather that from the prices some of them received it was a voluntary disposition on their part.

Q. It was more profitable to sell out to the companies than to operate?—A. Oh, certainly. That is, I am simply now venturing that opinion on the information that we get.

Q. And that would still remain, perhaps, if an increase of the percentage to 65 were put in force. Would not that be an inducement to the individual operator to continue independent?—A. You can readily see that at some of the prices paid, if the properties represented a very large amount of money, the big prices were very influential with many of the operators, making them secure against the hazards of mining and against the hazards of business.

Q. In what part of the coal fields is the larger proportion of the independent operators at the present time?—A. There are rather more of the independent operators in the northern field than in the Schuylkill regions.

Q. Has the larger proportion of absorption of these independent operators taken place in the northern field during the last few years?—A. I should say yes.

Q. Are there very many independent operators still remaining in the Schuylkill field outside of railroad control?—A. I think not.

Q. And what is the situation in the middle field—in the Lehigh region? That map [referring to map of the various coal fields], if it is correct, would tend to indicate that there is a fairly large proportion of independent operators in that field?—A. I should say there have been many changes in the Lehigh field.

Q. Is that partly because, perhaps, the Delaware, Susquehanna and Schuylkill

road, which is largely a mining company, operates through that territory? In other words, can you explain the difference in the movement, the tendency toward absorption, in the different parts of the coal fields?—A. Well, so far as Schuylkill County is concerned, the work of absorption began in the early seventies by the Philadelphia and Reading Railroad, and that company was driven to it, strange as it may seem, by the action of its competitors.

Q. (By Mr. CONGER.) What action on the part of competitors do you refer to?—A. I mean at that time Mr. Gowan, who was president of the company, did not believe that a railroad company should be engaged in the mining of coal; but his competitors were coming down into his territory and were acquiring coal properties.

Q. (By Mr. RIPLEY.) Do you refer to the New Jersey Central?—A. No; I am speaking now of the Philadelphia and Reading.

Q. I mean the competitors who were coming in.—A. Yes; at that time the New Jersey Central, the D., L. and W., and also the Lehigh Valley and the Pennsylvania; they were coming down into that field. So, to save that tonnage against all possible competition Mr. Gowan and his friends bought 100,000 acres of coal lands, and that was transferred to the Philadelphia and Reading Coal and Iron Company, which was the ancillary company of the Philadelphia and Reading. That, then, was the basis of the absorption of the colliery operations down in the Schuylkill region at that time. And another factor that contributed very much to this consolidation of interests was the distressing labor situation at that time, growing out of the Molly McGuires.

Q. (By Mr. CONGER.) In just what way did the labor situation have its influence on this consolidation of coal lines?—A. The Molly McGuires were so thoroughly organized at that time, and they carried out their threats so effectively and so wickedly that it was a very unpleasant thing for a man to become identified or to continue to be identified with coal mining in Schuylkill County.

Q. And for that reason he was willing to sell out?—A. He was quite willing to sell out. It was this unfortunate influence, very unfortunate, that came into the situation at that time.

Q. (By Mr. RIPLEY.) Were practically all the purchases of coal lands, then, made at this time, along in the seventies?—A. No, that represented the great purchase, really in the early seventies, by the Philadelphia and Reading Railroad.

Q. And have no other great purchases taken place by that company since then? Or was the territory practically all bought up?—A. That question I could not answer definitely. There have been acquisitions of coal properties by the companies, either by the purchase of the coal or by securing control of the product of the collieries. Sometimes the railroad companies would make advances in the way of money for the development of the properties, with the understanding, of course, that they would control the tonnage therefrom.

Q. (By Mr. KENNEDY.) I want to know something more about these two classes of independents, the independents who mine and sell to the railroads and the independents who mine and ship their own coal. I want to know something about the conditions now; why some continue in the business of selling to the railroads and others bring their own coal to the market. I do not know whether you made it quite clear that it was more profitable for them to bring it to the market and sell it or not.—A. I think I made it clear that because of peculiar conditions which enter into our business it would have been more profitable had we disposed of our coal to the company. But I very early took the position that when the railroad company was buying coal at 60 per cent of tide-water prices it was thereby getting a rate of 40 per cent of tide-water prices less selling expenses, and it took a long time to convince our railroad friends that that was a correct theory.

Q. (By Mr. RIPLEY.) What do you mean by "10 per cent less selling expenses?" Will you explain a little more fully?—A. What I mean by that is this: When a railroad company is buying at 60 per cent, then of course there is only 40 per cent left, and there should be an allowance made for selling expenses, or for waste and handling, if an individual operator, who is selling his coal at the mines, should be placed on a parity with the operator who prefers to send his coal to tide.

Q. (By Mr. KENNEDY.) Your operators believe it is more profitable to sell to the railroad companies than to ship it or sell it themselves?—A. Yes, under those conditions.

Q. I would like to know if all the independent producers can freely get cars along the different lines to ship coal to tide water if they so desire, and if it is more profitable to ship in that way. Do you get cars freely on the line you use?—A. I do now, and have for some years.

Q. (By Mr. RIPLEY.) You have had difficulty?—A. Yes.

Q. (By Mr. KENNEDY.) You might tell about the difficulty you have had in the past, and state the condition at the present time. I want to ascertain whether

the independent producers can get cars freely, and also whether it is more profitable for them to sell to the railroad companies or not, and whether if they could get cars freely they would do so and bring the coal to tide water themselves?—A. Of course, it is much more profitable for them to sell to the railroad company and obtain 60 per cent for the production rather than send it to market if they are obliged to pay a 50 per cent rate of transportation. I use those figures illustratively.

Q. Will you explain the difficulties you have had in the past, and how it comes about that you have no difficulties at the present time?—A. Some years ago we were very much disturbed in this matter of getting an adequate supply of cars. It was of great concern to us, not only from the standpoint of our own investment, but also from the standpoint of our men. If I remember right, it was the winter of 1884 and 1885 we were allowed to mine 27 days in 3 months. That was about 9 days a month, and the situation became unbearable. I tried very hard, indeed, to get a better supply of cars, and finally after worrying over the matter for about a year or year and a half, I had to serve notice on the railroad company that if it failed to supply us with an adequate supply of cars, it would be necessary to hold them for all loss and damage. Now you can readily understand that an independent operator dislikes very much to take that position with the railway company; but we had to take it; we were driven to it, and the result was that after that time we had little or no trouble in getting our cars.

Q. (By Mr. CONGER.) You said you were "allowed" to mine about 27 days in 3 months. Do you mean by that that the inadequate supply of cars forced you to restrict your production to these 27 days, or were you a party to some agreement?—A. I was a party to no agreement.

Q. Who "allowed" you, then, to operate your mines only 27 days?—A. The short working time simply grew out of inability to get a car supply.

Q. It was lack of cars that brought about this restriction of production?—A. Yes; that was true at that time; but that, you will notice, was some time in the past, and we have had no reason to complain since then.

Q. How long ago was that?—A. That was in the winter of 1884-85.

Q. No serious difficulty since then?—A. We have had no serious difficulty since then.

Q. (By Mr. KENNEDY.) Do you know of others having such difficulty?—A. I have heard some complaints, but just how true they are I can not say. You understand that the operator who is mining and shipping his own coal has an advantage over the operator who is selling his coal to the company. He occupies a position of absolute independence, and can insist upon an adequate supply of cars. Where he is bound down to the railroad company to furnish coal, and it is stipulated that the railroad company shall determine the amount, that is a different proposition.

Q. Is it true that your class of independents is such a small factor that they are not worth considering by the railroads, and they come to the conclusion it makes no difference whether you have cars or not? Is that the situation with respect to your class of independents getting cars freely at the present time?—A. Well, if we have got to that point that we are so insignificant that we are going to be well treated, it seems to me it is a very desirable position.

Q. (By Mr. C. J. HARRIS.) Suppose a man—an independent operator—makes a contract with the railroad for 60 per cent of the tide-water price, is he limited in his output in that contract?—A. Oh, yes.

Q. They give him a certain proportion—what they think is about right—do they?—A. Presumably, yes.

Q. Do they cut down independent operators by any indirect means in the amount they shall ship at the present time?—A. I could not testify as to that.

Q. Are you independent operators allowed, in your schedule, a certain pro rata of the total shipments, or of the anthracite output?—A. Now, are you speaking of the operators who are selling the coal to the companies?

Q. I am speaking now of the independent operators who mine and sell in the open market in competition or in conjunction with the railroads.—A. Just what might be the treatment of other independent operators by other railroads I can not tell. I can only give you the experience that I have had with the company over whose road I am shipping.

Q. Now, as an independent operator, what do you say in regard to the curtailment of the output; is it a good thing, or is it not?—A. Before I answer that question I would like to make an explanation here in regard to the anthracite situation. The use of anthracite coal in prepared sizes is now almost exclusively confined to what we call the domestic market. Take the sizes known, for instance, as broken egg, stove, and chestnut: their sales are dependent largely on household use. Now, I doubt very much if during the summer months over 15 or 20 per cent of these

prepared sizes are used. So you can readily see that it is very necessary that, if you can not find a market or storage facilities for the coal mined during the summer time, that there should be a restriction somewhere. As to whether the restriction is a wise one; as to whether the restriction is always a just one; whether it is bearing with due proportion—equitable proportion—upon the operators or companies, is quite another question. It is a peculiar condition that is now surrounding the anthracite industry that is to be considered when we approach any discussion of the question. Some of us, in all these matters of restriction and market requirements, prefer to have a voice in them.

Q. (By Mr. KENNEDY.) Do you have a voice in them?—A. Well, thus far we have had, but it has been at quite a cost.

Q. (By Mr. RIPLEY.) What has been the cost? Do you refer to mere friction?—A. I think you have opened up a question there you'd better not press me too hard upon.

Q. (By Mr. KENNEDY.) If it would be injurious to you in your business to speak about it, of course we would not want you to do so.—A. I would not want to incriminate anybody else, either.

Q. (By Mr. RIPLEY.) We should be very glad for a general statement, without specification of names in any case.—A. From what I have said already, you can readily understand that in cases where the operator has insisted upon exercising his right to mine and to ship coal to market, where he has demanded a reasonable rate and equitable rates for transportation, that his way has been beset with some difficulties.

Q. (By Mr. KENNEDY.) I would like to ask, if the fact that you might be able to incriminate somebody else has any influence in making matters easy for you in the shipments of your production?—A. I would not wish to have that word "incriminate" unduly emphasized.

Q. You used it yourself.—A. I know I did; on this matter, take the case of Coxo Bros. & Co., a case in point. They had complained of unreasonable rates charged by the Lehigh Valley Railroad Company; they made a complaint against that company before the Interstate Commerce Commission. If I remember rightly, that was in 1889. There was a case that was tried with remarkable ability on both sides, Mr. Gowan representing at that time Coxo Bros. & Co., and Mr. John G. Johnson, the Lehigh Valley. The trial lasted one or two weeks; and if I remember rightly, after waiting about a year or a year and a half the commission gave an opinion in favor of Coxo Bros. & Co. The decree was opposed by the Lehigh Valley. In the meantime Coxo Brothers were not getting the relief they expected, and they built about 40 miles of railway, connecting their properties.

Q. (By Mr. RIPLEY.) What is the name of that railroad?—A. The Delaware and Schuylkill; as soon as they had become the owners of a railway, or shortly afterwards, they received benefits from that fact that they could not have received otherwise, and did not receive as colliery operators. Now I speak of that circumstance to show what was necessary to be done by a firm of the influence and importance of Coxo Bros. & Co., in order to obtain a reasonable rate for transportation.

Q. (By Mr. KENNEDY.) You said you liked to have a voice in these matters; do you have a voice in fixing the price of coal to the consumer?—A. You must understand, so far as I am concerned, that we do not ask for any voice in the management of anybody else's business; I simply insist and have insisted that I shall have a voice in the management of my own business. My point has been that we are capable of mining our own coal, and that we are capable of marketing our own coal, and I simply wish to have reasonable rates of transportation, and will relieve the railroad company of the burden of finding a market for it.

Q. Do you have any voice in fixing the price of coal to the consumer?—A. Oh, yes.

Q. To what extent?—A. I mean to say, as far as we are concerned, we make a price on our own coal.

Q. You make a price on your own coal?—A. Certainly.

Q. Does it differ materially from the price fixed by the railroad companies?—A. Of course, the tonnage now controlled by the railroad companies is a very important factor, and the price they make will influence our prices—some times may be higher, some times may be lower; but it is a factor in the market.

Q. Do you follow their prices?—A. Sometimes I think we might lead them. What I mean by that is that we might be more responsive, more quickly responsive to certain changes in the market.

Q. (By Mr. RIPLEY.) You speak of leading the market. Do you mean by that perhaps setting a lower price when conditions would seem to warrant it?—A. O, yes. So far as we are concerned on the limited tonnage that we mine there might be some reason why we might wish to move a few thousand tons of coal, and we might possibly make a concession.

Q. Would not such a course have the effect of increasing very largely, permanently, the capacity of your mine? The point I wish to bring out is this: What makes the price of coal? Is it the man that fixes the lowest price? That is, do all ultimately come down to the level of the man who sets the low price or are the large producers able to set a price that is fairly high, arbitrarily, if you please, and do the others come up to that level?—A. There are so many things that would enter into that question that it would be almost impossible to answer it just as you put it. For instance, dependent, as we are largely, upon tide-water market for our coal, we might feel that under certain conditions it might be wise for us to make a concession on the price of, say, 5,000 tons of coal. The railroad company, with its Western connections and other facilities, would not feel it necessary to meet that price. They would say it might be better for this accumulation of 5,000 tons or 10,000 tons to be out of the way than for them to undertake to meet the price on our large production.

Q. Suppose, however, that one of the railroads should thus attempt to set a price a little below the figure, affecting a considerable amount of tonnage, what would happen?—A. What has happened in the past when that has been done? There have been agreements among gentlemen, you know, to prevent anything of that kind.

Q. There have been?—A. Oh, yes.

Q. But they are of the past?—A. They are of the past; yes.

Q. How about the present?—A. Now it is "community of interest," you know.

Q. Will you explain what you mean by the phrase "community of interest?"—A. I only repeat as we read it in the public press. It covers the condition represented in the different railroads in which stockholders having an interest in one company and similar interests in other companies have harmonized by an interchange of stock.

Q. Does that definition apply, to your knowledge, to most of the railroads entering the anthracite territory?—A. I would not say that it applies to all of them, from the knowledge that I have. I would say that probably to 60 or 70 per cent of them.

Q. And will you specify any roads which, to your knowledge or in your belief, are not subject to such an agreement? Witnesses before the commission have testified that they were not entirely subject to such agreement. I will not press the question.—A. I would willingly answer if I had any positive knowledge on that point, but it would seem to me that the ownership, this interownership, need not extend to all the railroads, the anthracite carriers, in order that dominating influences should have control.

Q. It must cover a fair proportion, however, must it not?—A. Yes, certainly; it does—it does.

Q. Have you any information as to the proportion, approximately, which is controlled by "the community of interest?"—A. I think about 60 per cent.

Q. On what grounds do you base this opinion?—A. It is so given out in the public press.

Q. That is the source of your information?—A. And it is not denied, I believe, by the parties—the bankers who have made the necessary arrangements.

Q. (By Mr. C. J. HARRIS.) I suppose the printed reports of these companies would show these facts?—A. Those are facts very easily ascertained now.

Q. (By Mr. CONGER.) You testified that you had been engaged in the coal-mining business about twenty-two years, if I remember correctly?—A. Yes.

Q. Have you all of that time marketed your own coal, or have you at the same time during that period sold to the railroads?—A. We have sold occasionally some of our coal to the railroad companies.

Q. Have you ever sold your production under contract?—A. No; we have not.

Q. Have you ever had negotiation with a road to take your coal under the 60 per cent basis?—A. Yes. What I mean by that is that the railroad company were quite willing to take our coal on that basis.

Q. First, I will ask if at the present time you are marketing your own coal at tidewater, or wherever you market?—A. Yes.

Q. In other words, you are selling it yourself? Now, are you in any way restricted in the production at the mine?—A. No.

Q. You produce as much as you see fit?—A. We fought that battle out.

Q. When you at one time had a contract under consideration, was it proposed in that contract to restrict your production?—A. It never got as far as that; I mean when the suggestion was made in regard to the contract.

Q. Well, do you know whether, if you had made that contract to sell your production to the railroad, if that would have been the condition of it; or, in other words, is it a condition?—A. That is what I would have expected, and one of the reasons why I would not enter into such a contract.

Q. It is your understanding that all of these contracts between the railroads and the mine operators contain a provision that practically restricts the production and agrees upon the amount?—A. I assume that to be true.

Q. Do you know how that production is fixed? Is it judged by the production of past years, or in some such way?—A. It has been determined somewhat by the ascertained capacity of the collieries, and that has been determined somewhat by the production of previous years. Of course when you come to a new operation where you are developing, then it is a matter that has got to be considered, and it is in order to find what the capacity of the new colliery might be.

Q. But these different operators produce about the same percentage of the total output of the year, each one produces about the same percentage of the total production each year, do they not? There is not very much change? In other words, if the Philadelphia and Reading produced last year 21 per cent, it probably was practically 21 per cent in 1899? Is that a fact?—A. I do not know how it has been for the last few years. Of course these are figures that can be easily verified. I presume you have a memorandum showing what the production is of these various operators, have you not?

Mr. RIPLEY. We should be very glad to have it left.

The WITNESS. These simply represent the figures of the production, but there have been some changes. Take the Philadelphia and Reading, which is now standing for about 20.70 per cent. There was a time when the Reading a good many years ago, mined almost one-third of the entire anthracite production; but, growing out of the aggressiveness of the competitors and her embarrassed condition, and changes coming over the whole anthracite situation, she is now down to 20.70 per cent.

Q. Has there not been an intimation in the trade that the Reading would be glad to have a larger proportion than they have at the present time?—A. It would be very human, you know, to want to occupy that position.

Q. Has not a contention to that effect been noticeable at times?—A. At one time the trade was upset very much indeed; I think almost a year; at least six months, by a contention as to whether that line should receive an extra 1 per cent or not.

Q. (By Mr. C. J. HARRIS.) Are not all companies trying to get a higher proportion, not only the Reading, but others?—A. Well, that of course has been one of the causes of friction between the companies in bygone years—the matter of adjusting the percentage as to how much they should receive, and that was one of the most serious problems that came before them. Then of course after that, after they had decided upon their percentage, then adjustments had to be made with individual operators. Some of the roads had more of the individual operators than others. Take, for instance, the Lehigh Valley as a case in point—the large percentage of the shipments of that road came from the individual operators.

Q. (By Mr. RIPLEY.) Is that true at the present time of the Lehigh, that a large proportion still comes from the independent operators?—A. I think it is.

Q. (By Mr. CONGER.) Have the roads in the past undertaken to distribute the percentage of the total output among the collieries each on its own line?—A. That is a matter that sometimes has been determined arbitrarily by the proper officer in charge.

Q. Officer of the railroad?—A. Officer of the railroad company.

Q. Are they undertaking to do it by withholding cars, and was that method in use formerly?—A. Yes.

Q. Is that process quite effective?—A. Yes.

Q. In regard to the price of coal, how is that fixed at the present time? By agreement or by market conditions?—A. I think there is very little agreement at the present time as to the prices. I think that the market is taking care of itself, and the cause of that is the strike or was the strike.

Q. Explain how the strike is regulating the market at the present time.—A. That strike, you know, was a restriction, but it was not an effectual restriction.

Q. (By Mr. RIPLEY.) Of the output?—A. Of the production. The railroad companies prior to that time had undertaken to restrict, in order to maintain prices and high rates of transportation, and the miners thought that what would be good policy for the railroad companies might be a good policy for them, and they did restrict. There was a restriction there that lasted for about six weeks, and the result was that the coal on hand passed into the hands of the consumer, and ever since then the business has been a very active one and the prices have been maintained.

Q. (By Mr. CONGER.) The results of that strike then were beneficial to the railroads?—A. It is a radical view, and I will not be supported by others, but as I look over it I think it was.

Q. Was it beneficial to the operators?—A. I think that they have been receiving some benefit.

Q. Did the miners receive any benefit—the workmen?—A. Yes; they received a benefit; they received a higher rate of wages. It was unfortunate that there should have been a strike.

Q. (By Mr. C. J. HARRIS.) Did the retailers reap a very large benefit, more than their proportion of that strike, or don't you know?—A. I do not see how they could have received any more than their proportion.

Q. I understand that where they raised the price \$1, the retailers raised it \$3 or \$4?—A. There was another side to that phase of it. There were a good many retailers here in New York City who were obligated to furnish coal at lower prices, and they had to stand by that obligation. They had to stand by their contracts.

Q. (By Mr. RIPLEY.) And made the other man pay the difference?—A. Some of it; but in many cases I think they did not receive any advance at all.

Q. Were not those obligations made subject to strikes?—A. Some of them were and others were not.

Q. (By Mr. KENNEDY.) You said the miners received the benefit, the railroads received the benefit, and the operators received the benefit, and then you said the strike was an unfortunate occurrence. Why was it unfortunate?—A. I think it was unfortunate to have to resort to a strike to get proper results.

Q. (By Mr. C. J. HARRIS.) You mean all these people received a benefit, of course. What was the result to the consumers of coal? Was it a benefit to them?—A. They have been obliged to pay a higher price.

Q. (By Mr. KENNEDY.) Is it probable that this strike having proved a benefit to these three parties outside of the public, strikes will be likely to be recognized as liable to produce benefits in the same way year by year in different pursuits in the future?—A. Of course I can't tell what the future is going to be in regard to the anthracite situation. When I speak of the immediate benefits that came from the strike and benefits being reaped by various classes at the present time there is also another side to it.

Q. Let us have that.—A. Strikes may work injury: That is, when the price of anthracite coal becomes too high then it meets competition, for, after all, anthracite is just simply fuel, and it must meet all other kinds of fuel in the market, and when the price gets too high then its use becomes restricted.

Q. (By Mr. RIPLEY.) Have you any means of judging when it gets too high?—A. The fact is shown in the demand. Those forces work slowly, but they are working very effectively. We have felt the influence of them. Take development of the gas range. Here in New York City the demand for coal in the summer time formerly was for anthracite. Now the use of gas is such that it interferes very much indeed with the marketing of certain kinds of anthracite coal.

Q. (By Mr. KENNEDY.) We were informed yesterday that there is no such thing as competition between bituminous and anthracite coal. What do you say about that?—A. Was that opinion given by an expert?

Q. I should think the gentleman was an expert who gave it.—A. Let me say just here on that point that probably 30 per cent of our production at the present time is represented in what we call the small sizes. They might be called by-products; in fact, I speak now of pea coal or buckwheat, No. 1 or No. 2 buckwheat. Now those sizes are strictly competitive with bituminous coal. All those sizes represent from 25 to 30 per cent of the entire anthracite output.

Q. (By Mr. RIPLEY.) Are some of these being obtained from old culm heaps at the present time?—A. Yes.

Q. And were not those culm piles deducted as waste from the wages of laborers 20 years ago?—A. Oh, certainly; there was not then a thought of any market for what was going into the culm pile.

Q. In other words, the companies are selling at a profit to-day the product which they deducted from the wages of the employees 20 years ago by reason of the change of market conditions?—A. By reason of the change of market conditions.

Q. But they are making a substantial profit?—A. But there is no question there was a waste to the operator, too. The waste did not entirely fall upon the miner, because that coal went on the culm bank. That was a waste he had to stand, and the waste at that time was very great.

Q. Were the operatives not paid by the amount that they turned out?—A. They were paid according to various methods and rules. I think they have been paid by the car.

Q. Was not this waste deducted from the carload before they were paid? Was not that the system of deducting the waste, before a carload was made up?—A. Now you are asking me questions antedating my birth, and you know it is very hard for a man to answer such questions.

Q. (By Mr. C. J. HARRIS.) I suppose these culm piles require a certain amount of work now to prepare them for market?—A. Yes.

Q. Which would be a considerable expense per ton?—A. More or less expense is involved in it. My own experience in regard to the culm pile is this: We believe and for a long time past have felt it was a good deal better to take a large part of the pile and send it down into the mines, using that waste product, which was waste product at that time, in sustaining pillars where we can do that to advantage.

Q. Would you be able to estimate what the probable anthracite supply of the Pennsylvania district is; that is, how many years it would last at the present rate of consumption?—A. That has all been done.

Q. We have had various estimates.—A. I think the most reliable estimate that has been made was by an engineer, Mr. Griffiths, who five or six years ago made a statement regarding the remaining tonnage in the anthracite fields.

Q. I am trying to get at an estimate of the probable supply of anthracite coal in the Pennsylvania district, whether it will last for sixty years or one hundred years, or for what time; have you any idea?—A. That would be a very difficult question for me to answer. I could not answer, because we can't tell very well just what the rate of production is going to be.

Q. (By Mr. CONGER.) Summer prices are lower than winter prices, are they not? Is not there usually a rise for the winter trade?—A. Prices are usually lower in the summer time.

Q. Then in the fall, about October, they are increased?—A. As soon as the fall and winter demand sets in.

Q. That increase usually takes place on a fixed day, does it not? Does it not take place simultaneously?—A. In bygone years there was an attempt made to have a simultaneous advance, but the rule was very seldom if ever effective.

Q. Did that rise take place simultaneously last fall?—A. Last fall we had an abnormal condition.

Q. How was it a year ago last fall, do you remember?—A. A year ago last fall, as I remember. I think there was very little change in the market. I am simply speaking now from memory, but I could give figures from our books.

Q. Is it not a fact that when a rise in the price of coal takes place the increase in the price is usually made by all the dealers at the same time?—A. I think that has been the record in the past. I think there has been an understanding among the companies. I am not taken into their confidence, but I think there has been an understanding in regard to prices.

Q. You have not been a party to any such arrangement?—A. No.

Q. What would be your attitude or action in case of a rise in the market? Would you follow with your price?—A. Yes; for the reason that we have to follow sometimes the result of these very combinations, resulting from agreements. The friction engendered becomes sometimes a very potent influence in the market, affecting the price of coal. It is very necessary for us then to meet that condition.

Q. It is your opinion, then, as I gather it, that the price of coal is changed at times by agreement among producers, to which you are not a party?—A. What is the agreement for if it is not for that?

Q. Well, I am trying to get at the facts of the agreement.—A. I think that is a fair inference; at least, we are governed by that in the management of our business.

Q. You are governed by your inference that there is such an agreement among others?—A. Certainly.

Q. And you practically have to make your price to meet the market price?—A. We are not obliged to do so, but we look upon that simply as the chief factor in the whole situation.

Q. Well, I did not mean you are obliged to change because of any agreement, but because of market conditions; in order to do business, you have to meet market prices.

Q. (By Mr. C. J. HARRIS.) What is the limit to which the price of coal could be put provided the production was all in the hands of parties who were working in cooperation with one another?—A. That is a very difficult question to answer. I can readily see how it might be possible to put a price on anthracite that might be extravagantly high, but the moment that is done then we encourage the greater use of bituminous coal, and while it would take some time to bring down the exorbitant price, nevertheless the reduction would be bound to follow. You take to-day the development of the bituminous interests; you take to-day a further installation of such plants as those which have been established in Boston, by-product plants, known as the Whitney, the New England Gas Company; taking the coal from Nova Scotia, making coke from the prepared sizes; furnishing light, heat, and power; let there be an installation of many of those plants along the sea coast or elsewhere, and just as soon as you get anthracite coal much higher, or even at the present prices, you are inviting that competition.

Q. (By Mr. CONGER.) In your opinion, are the present prices of coal pretty high?—A. Yes.

Q. (By Mr. C. J. HARRIS.) About the top?—A. I think so. I think it would be very unwise indeed to have them any higher, and if I have a proper estimate of the ability of the men who are to-day in charge of this whole anthracite combination, or whatever it may be, they certainly would not jeopardize the future of the trade by insisting upon extravagant prices, because that very condition that I have pointed out, that possible competition, is inevitable.

Q. Is it your opinion that the interests of the producers of anthracite coal would be promoted by a lowering of the present prices of coal to the consumer?—A. I apprehend from what I gather that it is the intention to reduce prices later on. If that is the fact, then it seems to me that the judgment that I have passed upon the situation is a correct one.

Q. Do you refer to this as a permanent and general reduction or to a reduction for the summer season only?—A. A reduction for the summer season; and the reason of reduction in the summer season is that dealers, especially dealers in New England who have storage facilities, might be justified in taking on their coal at that time rather than wait until the fall and winter months come, when there is a very active market.

Q. I rather gather from what you say that if a general reduction should be made, so that prices for next winter would not be quite so high as they have been this winter, that such action would not be a detriment to the interests of the anthracite producers.—A. No; certainly not; certainly not. The price of anthracite, as of any commodity, has very little bearing upon the consumption. And then, again, it seems to me that a very important factor will come from what the general condition of the country may be. If everybody is prosperous, if everybody is making money, the matter of paying a little more for anthracite, or a little less, does not enter very much into the calculation.

Q. Bituminous coal is hauled to tide water at a less price per ton than anthracite, is it not?—A. Oh, yes.

Q. Do you know any reason why the railroads could not haul the anthracite coal just as cheaply as the other if they had a mind to do so?—A. It would be necessary for the railroad men to furnish the reason.

Q. Suppose they should adopt that policy and reduce rates on anthracite coal one-half, and the benefit of that reduction in the freight rates should go to the consumer, would such action, in your opinion, increase the consumption, and would it in that way not be in the interest of the producers of anthracite coal?—A. That is hypothetical entirely. The situation changes so very much that were there to be a reduction in rates of transportation it would inure only in very few instances to the benefit of the independent mining company. If you were to ask the question, probably in another form, that if a reduction in the price of coal of 50 cents a ton or \$1 a ton would increase the consumption, I might answer it by saying that it would. Asking the other question whether it would be wise to make that reduction under present conditions, it seems to me that you raise a debatable issue.

Q. Debatable from the standpoint of the producer or of the consumer?—A. Well, either from the standpoint of the producer or the consumer. Now, it is not wise, I presume, for the consumer to insist upon these enterprises being run at a loss or that a railroad company should be run at a loss, or that mining companies should be run at a loss, but growing out of very peculiar conditions that have developed in the anthracite region, growing out of the facts that these companies in bygone years received certain rights and certain privileges, you may say it is all wrong; but there is a condition that can not be changed, and if you were to insist now upon what you might think would be the proper and correct thing and theory, it might work great damage and great loss.

Q. The idea of all combinations ought to be ultimately a lower price to the consumer; is this, in your opinion, the tendency of combinations in the anthracite coal trade?—A. That has not been the record in the past, but, growing out of the fact that there had been combinations, the breaking of them, breaking of agreements, resulted in great advantage to the consumer. The benefit was in the breaking in prices as a result of what has been developed.

Q. (By Mr. KENNEDY.) You spoke about the Whitney plant in Boston having the effect of keeping down the prices of anthracite coal, and also of keeping them from going any higher?—A. I spoke of that as a possible competitor.

Q. As a possible competitor? I suppose you thought also of the possibility and probability of the community of interest people reaching out and getting control of such plants, and also of the Nova Scotia supply, if necessary, to aid them in their work?—A. Yes; I have thought of all that, and then, going still further, I have thought probably there might be some bill passed compelling people to buy

coal at extravagant prices, and all this in order that these enterprises should be supported. That would be the logical outcome.

Q. (By Mr. RIPLEY.) Have you any knowledge as to the way in which soft-coal prices are made? Are they on purely competitive basis, or is there a substantial agreement between, we will say, the so called soft-coal roads?—A. Well, the soft-coal roads have had their troubles lasting, I think, for about three years.

Q. Those troubles are over, in a measure?—A. And last year there came in an application of the community of interest idea, which seems to be so necessary now for salvation—redemption here; for salvation hereafter—and there was an agreement, as I understand it, in regard to prices on that coal.

Q. Can you specify any of the roads concerned? Do you refer to the Norfolk and Western?—A. I am not familiar enough with that situation to testify in regard to it, but all those agreements rely upon the very prosperous condition of the country. Let the demand cease or let there be an interruption of business, and those agreements will disappear as all agreements have done in the past.

Q. (By Mr. KENNEDY.) Mr. Harris asked you if the ultimate object of the combination should be the reduction of the price to consumers. You replied that they had received benefits from those combinations in the past because their agreements were broken and they went to pieces, and so forth. Now, is it your opinion, if the combinations are perfected so that they will not break, but will continue in existence, that the public will not receive benefits as a result of the combination?—A. That depends on how the power is used, because, as I understand it, the essence of this whole question of business cooperation is that it is a matter of power, and depends entirely on how that power is used. It seems to me if power is used wisely by the men who are in charge of the anthracite situation, and there ought to be an attempt on their part to so handle it, that there might be an increase of tonnage rather than a decrease. It will not encounter the hostility and the enmity of the public. That was one of the prime factors in the disaster that overtook the McLeod combination.

Q. Do you believe that if the community of interest plan goes on to the extent of controlling the railroads, the anthracite and soft coal fields, and the iron and steel manufactures that these gentlemen who control them will be wise and not so burden the people that panics and financial crises will result?—A. I can not give any assurance or guaranty as to their behavior. I am only pointing out what would be the wise thing to do.

Q. (By Mr. C. J. HARRIS.) What is going to become of the independent operators, the small operators, in these gigantic operations?—A. What has become of them?

Q. (By Mr. KENNEDY.) Suppose they would come to you and offer you a fair price for your property and there was an understanding that you'd better accept it or you would lose money?—A. We have passed through that temptation.

Q. (By Mr. CONGER.) And still exist?—A. Yes; we still exist, and I presume it is a wonder among our friends that we do.

Q. (By Mr. C. J. HARRIS.) Do I understand you to say that the independent coal operators are rather on the decrease in numbers than otherwise?—A. Yes; the tendency is that way. I think that the feeling on the part of the owners and managers of these great combinations is that so long as the independent operator exists, the freight rate is open to attack.

Q. (By Mr. RIPLEY.) You have said that there is an indication that the percentage rate will be raised to 65; is there not an understanding that in that event the contract will be for a number of years?—A. So far as these contracts are concerned that are now offered, they are to cover the entire amount of coal to be produced from a property.

Q. And to run how many years?—A. For the life of the property.

Q. That means then that the independent operator in signing a contract at 65 per cent, practically, ceases to exist, does it not?—A. Yes; he simply is an operator, he mines his coal and sells it to the railroad company.

Q. But he no longer has any power to fix the price of coal or regulate it in any way?—A. That has been his condition for some years past, you know.

Q. But this will assure it if these contracts are signed?—A. Certainly.

Q. And a number of operators have already assented to such agreements?—A. That I do not know; there is some question; the railroad companies, as I understand it, wish to have a large majority of the operators sign before this arrangement shall be effective.

Q. For the life of the property?—A. For the life of the property. Now let me say just here that while as I said the railroad companies are quite willing to pay 65 per cent, they have not yet manifested a willingness to make a freight rate of 35 per cent.

Q. That is, they wish to have an additional commission for the sale, etc.?—A.

Going on our theory and the principle we have been insisting on for a great many years, it is our contention that the railroad companies buy the coal for 65 per cent, leaving as the resulting rate for transportation 35 per cent to tidewater, less whatever the expense of the commission, which would probably bring it down to about 30 per cent. Now I say that while the railroad companies are apparently willing to buy the coal for 65 per cent, they have not got to that point where they are willing to say to an absolutely independent operator, We will transport your coal for 35 per cent.

Q. (By Mr. C. J. HARRIS.) It ought to be about 30 per cent?—A. It ought to be about 30 per cent to be on a parity.

Q. (By Mr. RIPLEY.) Suppose we set aside from the total output that which is directly mined from the ancillary companies; then we take all independent operators who sell to the railroads at 65 per cent, agreeing to sell on that basis until all the coal in the ground is out; how many firms will be left free to do as they please? What proportion of the output do those thus left produce?—A. Very small percentage.

Q. Less than 5 per cent?—A. I presume it might probably stand between 5 and 10 per cent.

Q. In other words, if these contracts now under consideration are signed, less than 5 per cent of the total output will be free of railroad control?—A. Well, it might be 5; I would possibly be a little safer to say between 5 and 10.

Q. Then, if the roads agree among themselves, that insures a perfect control of the prices so long as that agreement among the railroads exists?—A. And that is a very important qualification, so long as they can agree among themselves.

Q. Will you state hypothetically what might lead to disagreement?—A. Many things. Railroad officials are very human; troubles in one place beget troubles in another.

Q. When you make statements including the roads, do you include the Pennsylvania Railroad? What has been its attitude in the past?—A. Years ago it carried all the anthracite coal that was offered. In fact, all the collieries working along that line of road worked practically full time. But that is going back, I should say, ten or fifteen years ago.

Q. In other words, at that time there was no restriction imposed as to the output?—A. Not so far as the Pennsylvania Railroad is concerned.

Q. So far as the Pennsylvania Railroad is concerned?—A. That was a very disturbing factor.

Q. Has that policy changed to your knowledge at the present time?—A. I think it has.

Q. Is the Pennsylvania Railroad substantially in the agreement?—A. Now you are asking me questions that it would be impossible for me to answer. You can verify all this by getting the reports of the mine inspectors of the Pennsylvania district, and you can see there how much time has been worked by the collieries along these various roads.

Q. (By Mr. KENNEDY.) I want to ask you whether, if 10 per cent of the coal if sold at less than the price fixed by those who control 90 per cent, would fix the market price? We were so informed yesterday. We were told that even 5 per cent being free and independent would fix the market price of coal.—A. What! Do I understand that 5 per cent taken out of a total of 45,000,000 tons, that 5 per cent, namely, 2,250,000 tons, would fix the price?

Q. Yes; I want to ask whether in your opinion that is true or not? Suppose you controlled 5 per cent of that 50,000,000 tons, and you chose to fix a price lower than the 65 per cent controlled by the railroad coal roads, would you fix the market price and bring them down to your figure?—A. Carrying that thought out, to make the matter very plain, let us suppose that the anthracite consumed in New York City is, say, 3,000,000 tons a year, and, if I could supply 300,000 tons of it, I could make the price on the remaining.

Mr. CONGER: That is the theory expounded to us yesterday, and we want your opinion on it.—A. How did it commend itself to you?

Q. (By Mr. C. J. HARRIS.) We understand from you that it would be an absurd proposition, from your experience?—A. I should say so; yes.

Q. (By Mr. KENNEDY.) I was informed yesterday evening that a gentleman named Luther, in the coal trade—I presume you know him.—A. The general manager of the Philadelphia and Reading Company?

Q. I do not know what position he holds.—A. There is a gentleman with them by that name—the general manager.

Q. That he recently disposed of an option to a gentleman in New York on large tracts of anthracite coal in Virginia, and this gentleman said there was 100,000 acres there of anthracite coal. I would like to know whether the people in the coal

trade know anything of the existence of such deposits in Virginia or not?—A. They would like to know of them. No; I do not know of any anthracite coal anywhere else except in the State of Pennsylvania. They have down in Virginia a very remarkable formation of natural coke, but it is not anthracite coal. We made an investigation there some years ago. We were sure there was some anthracite coal, and we had an investigation made.

Q. How many miners do you employ?—A. When running at full capacity, we employ from 1,000 to 1,100 men.

Q. Do you work your miners about the same number of days in a year that the miners in the collieries of the railroad companies are worked?—A. The railroads complain that we have been working more days.

Q. We have heard the complaint that the independent miners are working a less number of days by far?—A. That has not been our experience, so far as we are concerned, simply because I insisted upon our right to mine.

Q. Your miners were engaged in the strike?—A. Yes.

Q. Do you think their demands of last fall were unjust?—A. No, sir.

Q. Do you believe in arbitration?—A. Absolutely.

Q. Do you believe that if one side or the other in a strike of that kind, where the public is largely concerned, becomes stiff-necked and holds out, and great injury is liable to result to the public, there should be some force to settle the differences?—A. Under those conditions arbitration should be compulsory, where the interests are so great and the damage that can be done is so great—I mean the damage to the public.

Q. You believe then that the public is a very large party to a controversy of this kind and that its interests should be considered?—A. I do not know how we could get along without the public.

Q. (By Mr. J. C. HARRIS.) How are you going to compel miners to work if they don't want to work?—A. I admit there is the difficulty.

Q. Would you imprison them?—A. Or, put the question the other way, put the operators in prison?

Q. Then how are you going to have compulsory arbitration without imprisonment?—A. Would it not be possible for these trades unions to be incorporated? Wouldn't it be possible to make contracts with them in regard to men, the same, as I understand, is being done in other countries? Would not that be one effective way, the only reasonable way, of reaching the situation?

Q. Is compulsory arbitration practicable according to our present laws and conditions, in your experience?—A. I have not had any experience in regard to it; but it seems to me, following out the suggestion there, that where we have a deadlock which involves so much in the matter of loss and damage and inconvenience to the community, some means should be devised whereby it could be settled.

Q. (By Mr. KENNEDY.) Has your experience been that the employees are the ones generally that come forward with a proposition to arbitrate, and that the other side hold out as a rule?—A. In the anthracite strike, as you well remember, the hesitation was very largely on the part of the employers; there was a willingness on the part of the employees to arbitrate.

Q. If you still see a difficulty in the way of what is called compulsory arbitration, do you believe that the interests of the public are so overwhelming and overshadowing all others that the Government should provide some way against losses to the public on account of great controversies of this kind?—A. Just how far the Government could go in a matter of that kind, of course it is not for me to say, and I would not hazard any opinion; but looking at the question from the standpoint of the employer on one side and the employee on the other, and the grave issues that might be involved, there should be some way devised by which differences can be adjusted. One reason why the companies hesitate, as I understand, about making contracts with the miners, is they say that the miners are utterly and absolutely irresponsible. If there was an incorporation—

Q. (By Mr. C. J. HARRIS.) Do the miners not object to incorporation as trades unions?—A. I don't know, I am sure, as to that.

Q. You never knew one to be incorporated, did you?—A. It is done on the other side, is it not?

Q. I mean in this country.—A. That I don't know.

Q. Have you anything to volunteer further?—A. No; I have not.

Q. (By Mr. RIPLEY.) Can you state anything respecting the proportion of the undeveloped or unworked coal lands in the anthracite territory at this time?—A. No; I am not competent to pass upon that question without making a more careful study of the situation.

Q. Is it not a common opinion that a large proportion of the southern field is as yet undeveloped?—A. You mean by that term the Schuylkill region?

Q. The southern regions.—A. Yes; and it was that lack of development that brought the troubles to the Reading.

Q. In what way?—A. That a hundred thousand acres of coal property involved a debt, carrying a very heavy interest account.

Q. Does that debt still remain?—A. That I do not know. I presume it does.

Q. The Philadelphia and Reading, in its reports, shows a very large debt, does it not?—A. Yes.

Q. Is not the cost of carrying that debt included in the expenses of the company?—A. I presume so.

Q. Does not, then, the cost of carrying this undeveloped land for the next 50 years come on the price to the present consumer in a degree?—A. There will be an effort, I presume, to get it out of the consumer. They have not been very successful up to the present time, I will admit.

Q. Has the reorganization cut down the debt?—A. I could not answer that question. You will have to depend upon the company's reports for that information.

Q. (By Mr. CONGER.) Would that item of interest on the investment covering undeveloped coal land be much of an item in the price of coal?—A. Very large. If I remember correctly the Reading company invested about \$50,000,000 in coal property, and if I also carry the fact correctly the interest at that time upon the debt that was created was 7 per cent which represented in interest an annual charge of \$3,500,000.

Q. (By Mr. J. C. HARRIS.) For carrying coal property?—A. For the carrying of coal property.

Q. (By Mr. RIPLEY.) Does not that debt remain substantially as it did at that time? That is to say, has the reorganization ever cut down that debt?—A. I presume not.

Q. (By Mr. CONGER.) Has it cut down the interest?—A. I presume it has. Undoubtedly. But, getting back to your question, you can see how that in that case that charge becomes a very important factor.

Q. How many million tons does the Reading produce in a year?—A. They produced last year 9,388,000 tons; but when that property was bought I presume that road at that time did not produce more than 6,000,000 or 7,000,000; so that you can readily see that the item of interest was a very important one. Take for instance, this recent acquisition of the Pennsylvania Coal Company; now, when you put the interest upon that it runs up to an item of about 50 cents a ton.

Q. (By Mr. J. C. HARRIS.) That is, on the investment?—A. As relating to the annual tonnage; it amounted to about 50 cents a ton.

Q. (By Mr. RIPLEY.) Is there any large proportion of that coal land of the Pennsylvania Coal Company not yet developed? Are they carrying a supply for future years?—A. They have a supply for future years, but it seems to me you have to be very careful when you use the expression "developed." There might be a very wasteful development. For instance, take a situation we have, mining in Luzerne County, Pa. Now, there are 3 or 4 or 5 operations there. It would be better for everybody, better for the public, if that work had been done by one operation.

Q. (By Mr. KENNEDY.) That would be an argument in favor of combination?—A. There are arguments in favor of combination. There are arguments in favor of power, but it is the abuse of power that is objected to.

Q. (By Mr. CONGER.) I have one point I think we would better bring out before we close, and that is in regard to the possible regulation of freight rates. You testified a few moments ago that the railroads, while they had expressed willingness to contract with the operators to give them 65 per cent of the tide-water price for their coal, had not offered to give a freight rate to independent operators of 35 per cent.—A. That is bound to come, because we will simply enforce it.

Q. You think you will be able to get it?—A. That has been our record in the past.

Q. I was going to ask you whether you had any suggestions to offer as to Governmental regulation of freight rates?—A. So far as our experience is concerned it has been a matter of profound regret to us that that the interstate commerce law did not give speedy and proper relief. That was the original intent, you will remember, of the law. The way it stands to-day, as I remember, under the law a decree of the commission is simply prima facie evidence, and then you may begin all over again. You may take that decree into the courts and it becomes simply a part of the evidence.

Q. It has been advocated by some that Congress should pass an act which would make the decisions of the Interstate Commerce Commission operative while pending appeal by either party. Would you favor such an amendment?—A. I would; yes.

Q. Are you familiar with the provisions of the so-called Cullom bill before Congress?—A. Yes.

Q. Do you favor those provisions, as a general thing?—A. I do.

Q. And you think, in the the interest of the public, Congress should enact the provisions of that bill into law?—A. I do; yes. If we could have had the relief which was expected under the Interstate Commerce Commission the time that Coxé Brothers & Co. brought the suit in 1889 there would have been a great change in this entire anthracite situation.

Q. (By Mr. RIPLEY.) Would it perhaps have stopped this tendency toward the absorption of the independent operators?—A. Yes; certainly. Coxé Brothers made their appeal. There was a concern of great influence and wealth; they went before the commission; they made a strong case, and yet it did not amount to anything.

Q. (By Mr. CONGER.) Why did it not amount to anything?—A. The commission had no power.

Q. Simply because the decision of the commission was not operative: is that it?—A. That is all. They waited a long time for it, and when they got it it was not operative.

NEW YORK CITY, February 19, 1901.

TESTIMONY OF MR. HENRY S. FLEMING.

Secretary-treasurer Anthracite Coal Operators' Association.

The special sub-commission met at 10.30 a. m., Mr. C. J. Harris presiding. At 3.40 p. m. Mr. Henry S. Fleming was introduced as a witness, and being duly sworn, testified as follows:

Q. (By Mr. C. J. HARRIS.) Will you give us your name, your address, and your official title?—A. Henry S. Fleming, 26 Cortlandt street, New York City. I am secretary-treasurer of the Anthracite Coal Operators' Association.

Q. Will you tell us something about the independent operators' association, who compose it, and what proportion of coal they produce—any items of that kind that would be of interest to the commission?—A. The association is made up of various individual operators—that is, smaller companies, the individuals owning the mines sometimes in their own right, and sometimes leasing from the landowners. We produced, up to this year, about 31 per cent of the entire anthracite output. This year I think it will be in the neighborhood of 29 or 29½ per cent.

Q. About how many members are there in your association?—A. That I really could not say. I do not remember.

Q. What are the duties of your association?—A. That question is very difficult to answer. The association was organized for the general benefit of its various members—to do anything that it could to further their interests. The idea at the time it was organized was that a small operator was not in position to argue his case against a large corporation, where a combination of a great many operators would be.

Q. Is it part of your duties to obtain reasonable rates for the transportation of coal?—A. There has been an effort made in that direction—a constant effort.

Q. What is the railroad rate at the present time to tide water?—A. That I really could not tell you.

Q. Do most of your members ship and sell their own coal, or do they sell it to the railroads for a proportion of the tide-water price?—A. None of the coal is sold to the railroads, but many of the members sell their coal to large companies, the stock of which, I understand, is practically controlled by the railroad companies. It is entirely separate—it is an entirely separate organization.

Q. That is what I meant. Do you sell to the coal companies that are supposed to be connected with the railroads?—A. The majority of the tonnage is taken by them.

Q. That is, the largest coal companies are really owned by the railroad companies themselves; or there is a community of interest, is there not, between them and the railroads?—A. I can only say, I suppose so. That is a question of the stock books. The stock transfers are the only things that will show that.

Q. You said that the independent operators had dropped from 34 per cent to 29 per cent this year. Will you tell us the cause of that falling off?—A. Quite a number have sold.

Q. (By Mr. CONGER.) Sold to whom?—A. To the various companies. Some of the largest companies have been increasing their holdings.

Q. The railroads?—A. Not directly, in any case.

Q. (By Mr. C. J. HARRIS.) We do not mean, when we say the railroad com-

panies; I think we would better say the companies which have been testified to as being controlled by the railroads. That is what we mean.—A. Yes; with that understood I should say, yes. I could not, of course, testify as to the control of these companies. That is something I do not know anything about.

Q. To what points is the coal shipped—the anthracite coal produced by these companies?—A. It really goes all over the country. The market extends south to New Orleans and west to Duluth, and to all points east of those cities.

Q. In what directions, if any, do you have most of the trouble with freight rates?—A. That would be a very difficult question to answer. Under the contracts there is no question of freight rates. The people who have sold their coal under contract have nothing whatever to do with the rate. On the relatively small proportion sold on their own account, naturally, there is complaint of the rate in every direction.

Q. Do your people have any complaints in regard to furnishing cars for other facilities?—A. That, I think is exactly as in any large industry. There are times when cars are scarce; and while we appreciate that it is impossible to furnish all that are needed, we find it a very wise plan to insist on getting them, though I am not sure it amounts to very much.

Q. Would you say they treat the companies in which they had an indirect interest better than they treat your independent companies?—A. Oh, no; not at all. I think the distribution of cars has been exceedingly fair all through. I would be very apt to hear any complaint in that direction.

Q. Are there any complaints in regard to terminal charges?—A. No; I do not remember of hearing of any complaint on that ground at all.

Q. What did I understand you to say in regard to the proportion of coal contracted to the larger companies as compared with what your independent operators ship and sell directly?—A. That I really could not answer. The larger proportion, I should say, is contracted.

Q. I understood you to say the larger proportion is sold to the larger companies?—A. Yes. In many cases, if I may explain, a company will contract to sell the greater part of its output. Anything it produces over and above the quantity contracted it may send to market on its own account. That is done sometimes.

Q. (By Mr. KENNEDY.) Did you not just now say that cars are furnished freely, that there is no trouble on account of cars?—A. When they can, the railroads furnish them. I think we all recognize that there are times when they can not give the cars.

Q. You heard the testimony of Mr. Brooks at Washington, did you not?—A. Yes.

Q. His complaint was that there was a great deal of trouble.—A. During the time grain is moving it is very difficult to get cars back. In many instances they have sent coal in box cars. I think that is a local matter. It is hardly a matter of any importance. The local agents may send in box cars to collieries whose chutes were not suited for them.

Q. Is the situation better now than it was at the time Mr. Brooks made the statement?—A. I should say, yes; decidedly. The railroads have all added to their rolling stock and to their motive power.

Q. He seemed to think it was because they were being discriminated against by the railroads.—A. I do not think so, because that is a contingency that happens in almost everything. I had the same trouble when I was in the iron business. Those are local matters; they are not broad.

Q. (By Mr. C. J. HARRIS.) What is the contract price generally made with the larger coal companies by the independent operators?

The WITNESS. The yearly contracts made a great many years ago gave the operators 40 and 45 per cent of the price at which coal sold at tide; and at the same time, I believe there were some contracts that were based on the amount paid to labor. The varying price of labor made a difference in the price that the operators received for their coal. Just how that was arranged I do not know. That was a matter of some 25 years ago. It was a regular scale contract. After that the rate was advanced to, I think, 55 per cent.

Q. We understand to-day it is 60.—A. Then it was made 60 per cent and was 60 from 1892 up to 1898—6 years.

Q. What is the contract that is to be made now?—A. The contracts are based on 65 per cent of the tide-water price.

Q. For how long a time is that contract to be made?—A. That, I think, depends on each individual company. It is a contract that is not made between the railroads, but between each coal company and each individual operator who chooses to sell.

Q. Is it not made for the whole product of the mine?—A. I think it is in some cases, and not in others. An operator whose lease terminates can not make such

an agreement. If the lease of any part of the ground terminates before the time by which all of the coal can be removed he can not contract for all the coal in the ground, so that each individual contract has to be drawn with that allowance.

Q. (By Mr. KENNEDY.) Have you seen these contracts?—A. I have simply seen the first form. It has been modified and worked over, and the last form I have not seen at all.

Q. You are familiar with all the terms of the contract, are you?—A. I really could not say I am. It has been in the hands of a special committee and has not come under my scrutiny at all.

Q. Could you send us a copy of it?—A. I really could not promise to do that. I could ask for it.

Q. You would only have to ask members of your association?—A. I should have to ask the executive committee.

Q. What percentage of the members of your organization have entered into that new contract with the companies?—A. That question I could not answer.

Q. Are they accepting it very generally?—A. They are; the majority of them are contracting on that basis. I might say they find it very much more to their advantage to do that, and avoid the necessity of having an office of their own to dispose of the coal. If they have an office of their own it is a very simple commercial proposition—they must have an office here and a representative in a dozen other places, involving large expense, while they may not be sending coal to those places.

Q. (By Mr. CONGER.) Do those contracts usually restrict the production of the mine?—A. Oh, no; never.

Q. Is the mine operator at liberty to produce as much coal as he has a mind to under that contract, and can he get cars to take as much as he will mine, regardless of the quantity?—A. The coal company agrees to take as much as it requires.

Q. Ah! As much as it requires?—A. I do not remember the clause that covers that ground, but the coal company certainly could not agree to take an amount of coal that it could not dispose of.

Q. What I was getting at was the fact as to how the production—the amount of production—is fixed.—A. Well, the coal company will take all the coal it can handle, and there comes in the point I made a little while ago—that the operators, when they ship over and above the amount contracted for, can sell the surplus on their own account.

Q. The operators can?—A. That has been the case always.

Q. If they dispose of their selling agencies they are not in position to market to great advantage, are they?—A. There are the various commission houses. There are in New York probably 18 or 20 large commission houses handling coal, both soft and hard.

Q. You testified a little while ago that the distribution of cars is, in your opinion, satisfactory to the operators at the present time. Naturally it would devolve upon the railroads to supply plenty of cars. Would they not, under this contract, have the first interest in that direction?—A. Most decidedly.

Q. Has that been the remedy for the evil?—A. I think the tendency, so far as I can see, is for the railroad companies to give the operators preference in the number of cars over their own collieries—that is, over the collieries operated by the companies supposed to be under railroad control. I notice that in taking the figures of the mine inspectors showing the number of days worked by various collieries, as a general thing, what we call the railroad collieries operate a less number of days than the individual collieries.

Q. (By Mr. KENNEDY.) Again that is directly a contradiction of Mr. Brooks's testimony.—A. That is what I say. It is purely a local matter. It is a matter that affects one colliery and may not affect another. That sort of thing may last at one colliery for a few days or a week. Shortage of cars is a local matter—a temporary matter.

Q. (By Mr. CONGER.) Are you an operator yourself?—A. No; I have not any interest in mines—that is, in hard coal.

Q. Have you any soft coal?—A. Yes; I am interested in several soft-coal mines.

Q. Do you consider that hard and soft coal are competitors?—A. Most emphatically. Thirty-five per cent of our output is in direct competition with bituminous coal. It is a competition that is steadily increasing.

Q. Have the independent operators any grievances at the present time? Are they satisfied with present conditions?—A. While they have taken in these contracts, I have not heard any complaints. The contracts are apparently satisfactory. Of course I think everybody would like more, but it has been doubtful whether it can be obtained.

Q. They are getting what they consider their fair share?—A. If fairly carried out, it really is; I think everybody considers it a very fair share. The arrangement puts the division on a very fair basis. Out of the difference between what the company

pays and what it receives, it has got to pay the freight rate, which is an arbitrary rate. These companies also have to pay their selling expenses and for the support of the various agencies.

Q. The present consumption of anthracite coal is about how much per annum?—A. Last year it was 47,000,000 tons, I think.

Q. Would the total capacity of these collieries be much greater than that consumption if they were run full time?—A. Not unless we had another class of men; the men won't work more time.

Q. Will not work more time?—A. No. They worked all the time in 1899; I think we were then just about as near our productive power as we can get.

Q. It has been testified to here in the last day or two that at present coal is being produced at the rate of 5,000,000 tons a month.—A. Yes; it is. But you could not do so much all the year round. To produce 5,000,000 tons a month you have to increase your dead work very rapidly, and that is slower work. You could not do it; you would not have space for it.

Q. Do you think every producer is putting out as much coal as he can at the present time?—A. No; I think there are some collieries that could put out more if they would press hard, but it would not be an advisable thing to do. Hasty mining is dangerous.

Q. Do you think the mines are being run at practically their full capacity—say two-thirds of the capacity at the present time?—A. I would say that to-day the mines are at full capacity, decidedly. The record of production is only 5,125,000 tons, I think, in a month.

Q. What I was getting at is whether there is any agreement or arrangement by which production is restricted among the operators?—A. No; there is nothing of the kind at all. There are times when the market simply does not take coal, and you have no place to store it. It is like any other large commodity. If you keep on running a factory you produce a certain amount of goods that you can not find a sale for; and the coal trade is in the same condition. During the summer months the market requires very little coal, and the mines operate until they have everything filled just as full as they can. They cover the current demand, and fill every available storage for the consumption in winter.

Q. (By Mr. C. J. HARRIS.) Is dead work done in the summer to some extent?—A. To some extent, yes; it is absolutely necessary to do that, so as to provide for extended mining in the winter; otherwise you could not operate.

Q. (By Mr. CONGER.) How is the price of coal fixed?—A. It is not fixed. Each company has its own price. The price varies according to the reputation the coal has, and according to the grade and quality.

Q. Does not coal of the same quality sell for about the same price in the same market now?—A. No; I should say the variation in the market would be between 70 and 80 cents a ton.

Q. In coal of the same grade?—A. Different kinds of coal.

Q. Same quality and grade?—A. Yes, I would be willing to say that is true practically of the same quality and grade. There is a difference in the reputation that a coal has. Some people prefer a free burning coal, and some prefer a slow burning coal.

Q. Can you mention any two names or kinds of coal between the prices of which there is such a wide divergence as 70 cents a ton at the present time?—A. Oh, yes. I should say that in any of the free-burning coals of the Upper Lackawanna region, as compared with the coals of the Lykens Valley district, you get a variation of more than that sum. Those are two extreme coals. They are both specialties.

Q. Do you refer to the New York price?—A. New York, yes; I am quoting f. o. b. New York.

Q. As I understand you, these two coals you have named are practically of the same quality?—A. No; they are different in quality. You can not get any two coals of the same quality. There are coals that have a reputation. The actual heating power of the one is practically the same as that of the other. I would say they are practically of the same quality. As to market value, they are entirely different in character, and consequently they have a different market value. Lykens Valley coal is a very choice coal to some people; other people would not use it under any consideration.

Q. (By Mr. RIPLEY.) Was there not formerly some sort of agreement or definite price put on each kind of coal?—A. I think there has been nothing of that kind since Mr. McLeod's time.

Q. That was customary, however, for a great many years, was it not?—A. No; that lasted only about 3 months, and that was not with all kinds of coal. That was only with the production of four or five companies.

Q. You mean to say, then, that in the market of New York to-day there is not a certain price for each grade of grate, stove, or nut coal? You mean to say there

is not a regular quotation for each one of those kinds of coal?—A. For an average all through?

Q. In general?—A. No; decidedly not.

Q. There is not?—A. No; there is not. One company will issue a circular for its coal, and you will find in that circular a series of variations all the year through. The circulars issued by the other companies are each for their own variety of coal.

Q. These collieries must overlap, do they not, so that two collieries or two companies will be producing practically the same quality of coal? That is, there is more than one company in the Lykens Valley district?—A. No; the Lykens coal is practically all brought up by the Lykens Valley Coal Company. The vein is touched by other companies.

Q. But the prices of that coal differ as between the different companies?—A. If all got out Lykens Valley coal they would all get the highest market price on that coal.

Q. In other words, there would be a practical agreement on that quality of coal?—A. No; I should not call it an agreement. I would rather put it this way. The people who were getting this class of coal would get just as much money for it as they get in the market.

Q. Did not the sales agents meet up to 2 years ago?—A. That I do not know.

Q. Were there not meetings of the sales agents representing all these companies?—A. That I do not know.

Q. There were meetings up to a comparatively recent date, were there not?—A. That I could not tell you.

Q. They were testified to very fully in 1892.—A. That was before my time.

Q. You have no knowledge, then, of meetings of sales agents within 5 years?—A. Absolutely none since I have been in the trade.

Q. You have never seen published reports?—A. I have seen numerous reports and statements.

Q. You have never seen anything to confirm them?—A. Absolutely nothing.

Q. (By Mr. KENNEDY.) Are soft-coal dealers members of your association?—A. No.

Q. Is there an association in New York of soft-coal men?—A. None that I know of.

Q. How is that coal handled here; does it come in as the property of individuals or the railroads?—A. It comes in as the property of individuals. Some of the very large soft-coal companies follow the same plan as the big anthracite companies do; that is, they buy up the product of the various small companies around them and ship it to New York as their product.

Q. Do you know anything about the difference of cost of shipping soft coal and hard coal—the charge per ton per mile by railroads?—A. No; I really could not say anything definite on that point. That is a matter of figures from the books of the company.

Q. You are interested in soft coal, are you not?—A. Yes.

Q. Shipping it?—A. Yes; I am interested in Tennessee and West Virginia mines.

Q. To what points do you ship that coal?—A. The West Virginia coal goes to Newport News and some of it West; the Tennessee to Chattanooga.

Q. Have you ever figured out the cost per ton per mile of shipping your soft coal?—A. Some years ago, in West Virginia, but that was an exceptional year. I think the cost was something in the neighborhood of three-tenths of a mill per ton per mile.

Q. You consider that very reasonable?—A. Yes; that was particularly reasonable.

Q. Was it more so than they are charging for shipping the hard coal in this region now?—A. Very much less; but the price there has advanced very materially since that time. That was really a losing price. The roads could not afford to operate on that basis.

Q. You know nothing about the charges of shipping soft coal to this market?—A. No; I do not; I am not in that business at all.

Q. Have heard of no complaints about the great disparity between the two?—A. Oh, naturally I have heard complaints. I think all anthracite people have complained that the soft coal gets into the market for less money than the anthracite does.

Q. Do you know of any reason why it should be brought in cheaper?—A. Yes; there is really a very good reason. Soft coal comes in train loads, and it is all the same. You can carry it out to the end of the dock and dump it into the boat and ship it. Anthracite comes in different sizes and is of different qualities; all have to be kept apart. Probably 5 cars will be of one kind. Those will have to be loaded into a barge. The others will have to be held, and you have got to hold the barges there under demurrage till you get enough of that grade to fill them up.

So it does make a very great difference in the cost. The coal must be put on storage piles, awaiting sufficient amount to fill a particular order or must be held in cars at the cost of demurrage on the cars. Of course, that does not pay. It means also interest on the value of the coal, as well as the breakage on the coal, which amounts to a big item. Soft coal is shipped direct. It goes right from the mine down into the barge. It is an infinitely easier article to handle.

Q. What is the rate per ton per mile of shipping hard coal to tide water?—A. The present rate? I could not answer. I would simply be giving a guess, and that would be, I think, very unsatisfactory. It varies on the different roads and according to different mileages.

Q. What has it been in a recent period?—A. Well, in the period which I compared with the rate then prevailing on the Chesapeake and Ohio, it was about nine-tenths of a mill; but that is not a fair comparison, you remember, because that nine-tenths includes all the selling charges, and this demurrage at tide, and the delays. It is very expensive.

Q. (By Mr. C. J. HARRIS.) Have you any estimate of the amount of anthracite coal in sight at present; how long it would last at the present rate of production?—A. None except that made by Griffith some years ago, and published in the Bond Record.

Q. Do you remember about what that was; how many years' supply he estimated there is ahead?—A. No, I really do not.

Q. Sixty or an hundred?—A. I really could not say offhand. My recollection is that the estimate of one hundred years was for all regions. That supply was estimated for some two hundred and fifty or three hundred years for the Reading Company alone; something of that kind. That is simply a guess. Really I do not remember.

Q. The Reading Company is the largest holder of coal lands of any of the railroads, is it not?—A. Oh, yes, by a great deal. I am speaking simply of the Reading Company as being the largest of all.

Q. (By Mr. KENNEDY.) What profit has the seller of coal now, on the ton?—A. What is his commission, you mean?

Q. Yes; or what is the profit? Can you give us the cost of bringing a ton of coal to New York—mining cost, and the transportation cost, and any other items of cost, if there be any, and the selling price of it?—A. No; I really could not do that. The figures vary so much in each case. They vary with every mine; with every part of the mine.

Q. Can you give an instance?—A. I could not give even a single case. That is a matter that does not come under my department at all.

Q. Do you know anybody that could do that?—A. That would have to be done by the individual operators, by each company. The figures vary in each case. They vary with the distance the mines are from tide, and they vary with business, the amount of track the operators own. Some of them have a few miles of track running from their breaker out to the railroad, and on that they get a certain mileage. And they vary with the vein they are mining in, and the length of time they have mined in the vein, and the local conditions for the vein. I do not think it would be possible to ever arrive at even a moderately accurate estimate. I took that thing under consideration a long time ago, and found it impossible to arrive at satisfactory conclusions.

Q. Can you give us any information about the export trade in anthracite coal, and also in bituminous coal?—A. In anthracite coal there has been practically no export to Europe. Some small quantities have gone over, I think more as samples than anything else. I do not suppose the total amount of anthracite export to Europe would be more than 10 or 15 tons. The Bureau of Statistics gives the figures of anthracite export, including the coal going to Canada. The Canadian market is a very large one for anthracite.

Q. Do you know anything about the exportation of the soft coal?—A. Yes; there is quite a great deal of it going abroad.

Q. You are in that trade yourself?—A. Yes, but we are not exporting any. I went over to Europe a couple of times just on that matter to find out what market there is, both for soft coal and hard coal.

Q. What do you think of it?—A. I think the market there is a very big one, especially in the southern part. I do not think we can touch the northern part for a great many years.

Q. Are you going exclusively into southern Europe?—A. Yes; I think the shipments this year will amount to close on to a million tons.

Q. Is that a great improvement?—A. There was practically nothing before. I really do not remember the exact figures. I did see them, too.

Q. (By Mr. C. J. HARRIS.) Where does the coal go from mostly?—A. Phila-

delphia and Newport News. I think a little has gone from New York—very little. New York is not so good a shipping point as those.

Q. West Virginia coal mostly?—A. West Virginia and Pennsylvania. The coal has been received very favorably on the other side, but our method of mining is so different from theirs and also the shipping, that it is going to take a little more effort to establish the market, and get firmly fixed in it than it would here.

Q. Whence have these southern countries of Europe formerly obtained their coal supply?—A. From England principally, and small quantities from Belgium and Germany. Spain produces practically no coal, Italy none; they have to import all they use.

Q. What did you say of the price of anthracite coal at present? What is it here in New York? What is it, delivered on the other side, on the Jersey side?—A. That would be a very difficult question to answer.

Q. What is the New York price of anthracite coal at present?—A. That would be beyond me to answer; it would depend altogether on the kind of coal you are going to buy.

Q. We have had an average price given us here?—A. Yes, but an average price would not apply to every coal. You probably could not buy a ton of coal on that basis.

Q. I think we have had an average price of \$1.25 or \$1.75.—A. I should not like to answer that question, because it would be simply a guess, and I do not think you would get a first-class coal on that basis.

Q. How much higher is anthracite coal at present than it was at the same time last year, if any?—A. I should say about 30 or 35 cents a ton. I do not know about that. [After looking at paper.] Yes, I think that is a very fair estimate. I have here a statement showing the averages are made up from the selling contracts prepared by me for the association. Each company turns over to the company from which it buys coal an exhibit of the average price at the end of each month. Those statements were sent to me, and I put all of them together.

Q. To what do you attribute the higher price at the present time when compared with the corresponding twelve months ago?—A. I think it is very largely due to the strike. It made coal extremely scarce.

Q. Do you have an idea that the prices will drop back to their old position?—A. Oh, I think so, beyond any doubt. You see anthracite coal in this market, in fact in all the markets, is meeting with a very strong competition from bituminous coal, and a very injurious result from the use of gas as fuel. Gas and steam are replacing it in the large office buildings and in houses for domestic use. The consumption of anthracite is unquestionably falling off.

Q. Suppose the price of anthracite coal should be unnaturally advanced; would there be any check for such advance?—A. There would be almost an immediate check from the increased consumption of gas—gas and bituminous coal for steam-making purposes.

Q. (By Mr. CONGER.) Is it not a fact that the price of anthracite coal has already been so advanced as to greatly encourage the use of gas and other fuels?—A. I would not put it in that way; no. If you will look over those figures you will see the price of anthracite has been comparatively regular from 1897 to 1900. Taking the average of any size—except, possibly, the steam sizes—I do not think you will find an average advance of more than 15 cents.

Q. (By Mr. C. J. HARRIS.) Can you give us the maximum price of the domestic coals for 1897, 1898, and 1899?—A. Those prices are not fixed that way. There is a general average of chestnut and larger.

Q. (By Mr. CONGER.) Are those prices from 1897 higher than they were previous to that?—A. No; they run just about the same. I have no general figures of this kind for previous years. I have the figures of some of the companies and some individuals who sold here. They run very close all the way through. They are much lower, I might say, than they were back in the latter part of the seventies and in the eighties.

Q. Everything else was lower?—A. Everything else was lower; yes.

Q. The independent coal operators have no grievances now of which they may complain?—A. I do not know of anything that I feel at liberty to complain about.

Q. (By Mr. C. J. HARRIS.) With the present new contracts that are offered to the independent operators will there be any large percentage of independent operators in the anthracite coal business in a short time?—A. In what way? I do not quite understand.

Q. If the independent operators tie up their properties on this 65 per cent contract, then that property, that product, is handled by the larger coal companies, and I understand you to say that the tendency is for the independent operators to go into this arrangement—to sign these contracts. In view of this outlook is it

not probable that there will be very little independent production in a short time?—A. What we call an independent operator is a man who owns and mines, irrespective of the way that he sells.

Q. The degree of independence—that is what I was trying to get at.—A. You mean independent shippers. If you put it that way, I think there will be comparatively few. I believe most of them will find the contract rather more to their advantage than the other method of selling.

Q. Has there been any corresponding reduction in freight rates offered the independent producer?—A. Oh, yes; that same proportion carries all through. You mean to the independent shipper?

Q. Yes, the independent shipper.—A. Yes.

Q. (By Mr. CONGER.) You are quite certain of that?—A. That is what I am told. I am simply giving my general information on that point. I think that is the general understanding among the shippers.

Q. Mr. Haddock testified this morning that he did not so understand it.—A. Mr. Haddock never had a contract.

Q. That is probably true, because it would harmonize with his testimony, which was to the effect that he had not as an independent shipper as yet been given a freight rate equivalent to 35 per cent of the selling price.—A. I should be very much amazed if he has, because those contracts have not gone into effect.

Q. Ought he not have it now if the present rate is 40 per cent?—A. The rate is not 40. That is not the way it should be calculated.

Q. (By Mr. KENNEDY.) You say you know of no cause of complaint on the part of the independent operators that you are at liberty to state. Do you mean by that you know of no complaint whatever?—A. No; I mean I am not authorized to make any complaint.

Q. Do you mean by that you know of no cause for complaint?—A. I think I would rather not answer that question.

Q. Are you familiar with labor conditions in the anthracite region?—A. Yes; fairly so.

Q. Do you think the miners were just in their demands last fall?—A. No, I do not.

Q. You do not?—A. I think part of the demands were possibly just, but the general demand, I think, was unfair.

Q. Are you in favor of arbitration of labor disputes?—A. Very strongly, when both sides can be equally responsible.

Q. Do you recognize that there were more than two parties interested in that strike last fall? Do you recognize the public as a party at interest in a trouble of that kind?—A. I think necessarily.

Q. Well, have you any opinion as to whether there should be any means of compulsory settlement of troubles of that magnitude when they affect all the people?—A. I think it would be very desirable if that same compulsion could apply equally to both operator and laborer; but while you could very easily apply compulsion to the operator, whose money is in his property, it would be very difficult to apply it to the laborer. The laborer has no interest; he has only to pack his trunk and household goods and leave.

Q. In that case the laborers were asking for arbitration from the very beginning, were they not?—A. There was nothing said about arbitration in the beginning; not in the beginning of the labor dispute.

Q. Are you sure that Mr. Mitchell did not submit a proposition for arbitration?—A. At the first meeting; but that was after the thing had gotten fairly under way, and the matter had been taken up locally first by the various unions and various lodges.

Q. (By Mr. RIPLEY.) You say, Mr. Fleming, that the individual operators have no complaint to make?—A. I say I am not authorized to make any complaint.

Q. You have said that there is a tendency toward decrease in the proportionate output of the independent operators during the last few years, have you not?—A. No; I referred to the difference between last year and this. Prior to this year there had been no material decrease.

Q. Has not a very considerable purchase of coal land been made by the coal companies within the last 2 years, beginning with the purchase by the New York, Ontario and Western, and other companies?—A. I think that was covered in a previous question; yes.

Q. (By Mr. KENNEDY.) Have you anything to volunteer?—A. No; I think you have covered the ground very thoroughly.

(Testimony closed.)

NEW YORK CITY, February 21, 1901.

TESTIMONY OF MR. ALFRED WALTER,

President Lehigh Valley Railroad Company.

The Special Subcommittee met at 1030 a. m., Mr. C. J. Harris presiding. At 1.42 p. m. Mr. Alfred Walter was introduced as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. C. J. HARRIS.) Will you give us your name and your occupation and address?—A. Alfred Walter, president of the Lehigh Valley Railroad; my residence is in South Bethlehem, Pa.

Q. We would like to question you to some extent in regard to the anthracite coal situation. Will you tell us what proportion of the anthracite coal output your railroad carries, or the companies connected with your line?—A. We transport something over 15½ per cent of the product.

Q. Has your proportion been increasing, or has there been any variation in that percentage for the last 10 or 15 years?—A. The percentage that we are hauling now is, according to my recollection, about that of the last 3 or 4 years.

Q. Is the coal output on your line produced by companies auxiliary to the railroad company or by independent operators?—A. It is produced by both.

Q. Do your auxiliary companies buy the output of the independent producers for the most part?—A. In part we do, and in part we do not.

Q. What is the percentage basis on which you buy and handle what you do buy?—A. At the present time we pay our operators from whom we buy coal 60 per cent of the selling price at tide water.

Q. That has been the evidence of most of the witnesses, but there has been mentioned a different proposition at the present time which would be more favorable to the independent operators—that is, a larger percentage to them. Have you made any of those contracts yet?—A. We have not concluded the arrangement. The matter is now under discussion.

Q. Is there probability that the operators will receive a still higher percentage than they now get?—A. It looks that way; yes.

Q. What do you say of the production and sale of anthracite coal; is it increasing from year to year, or does it stand about the same in tonnage?—A. In tonnage I think the statistics would show that it varies from year to year, but probably over a period of years it increases somewhat.

Q. Is there an economic limit to the price at which you can sell your anthracite coal? Could the price be advanced indefinitely, or, the minute the price of coal became what the people called exorbitant or considerably increased over what it now is, would there be a resort to the use of other articles for fuel?—A. Oh, unquestionably; it has done so already.

Q. What would you say of the price of coal to-day; is it a high, or a low, or a fair price?—A. I should say it is an equitable price. We hear of no complaints from anybody.

Q. Is the price of coal higher than it was at the same time a year ago, and if so, how much?—A. You are speaking now of the price to the consumer? You know there is a very great difference between the fluctuations of the wholesale price and the price to the consumer. The price of coal to the consumer does not vary very much. I could not give you exactly the difference. It is not much over 25 cents, if that.

Q. Is the margin between the wholesaler and the consumer—that is, the margin of profit—a fair and proper and equitable one, would you say, or could it be handled more economically by large companies?—A. I am not thoroughly advised on that subject, except in a very general way. It of course depends on the facilities that the people have for handling it. Many years ago, perhaps twenty years ago, coal was handled at all points in a very primitive way. I think, within my memory, when a boat load of coal came to the dealer's yard it was unloaded by a bucket and a mule. At that time the business was done on a small scale through a great many dealers, and the amount of money invested by any particular dealer in plant, etc., was very small. The tendency of the last few years has been to concentrate the handling of coal in fewer hands, and those people have invested much more money in labor-saving devices, have carried larger stocks of coal, and the presumption is that they save by so doing. It works out on the same line as all other business of a similar character.

Q. Is the cost of mining coal the same now that it was ten or fifteen years ago?—A. Oh, no. When I first became familiar with anthracite mining some twenty odd years ago, the great bulk or very large proportion of the mining was done at

what was called above water level; that is, the lands were developed by putting in drift or a tunnel, and the coal that was worked out was above that level. The result was that as water accumulated the mine drained itself, and at that time mining was a much more profitable undertaking than it is at the present time. Not only that, but it was like all occupations of that kind in that it was gone into by a number of individuals. The plant required was comparatively small. The amount of money spent at that time for a coal breaker probably did not run very much over \$40,000 or \$35,000, and a large part of the coal that was mined went to waste. Now those workings above water level have not existed for some years, and in order to obtain the tonnage it is necessary to go below the surface in a vertical way. That means that you run up against innumerable difficulties, increasing the cost in every direction. Not only that, but in order to get any return at all on the investment it is necessary to have much larger investments. For instance, the Lehigh Valley Coal Company is just completing one colliery operation that is going to cost us over \$500,000. The same tonnage was taken out twenty years ago by a number of operations that perhaps cost us \$25,000 or \$30,000 apiece.

Q. Why is it there have not been inventions of machinery in anthracite coal mining to cheapen the cost, or have there been any?—A. Oh, a great many. There has been a vast improvement in that respect.

Q. Do you use the electrical coal machines?—A. Yes; there are a number of devices of that kind.

Q. They work in anthracite the same as in soft coal, do they not?—A. The devices are different. Of course, the method of conducting anthracite mining is quite different from that of conducting the mining of bituminous coal; but the general idea that labor-saving machines have been invented and are used is true.

Q. But still that fact has not, I understand you to say, lowered the price of mining coal per ton?—A. Oh, no; because the other items of expense have increased in very much greater proportion.

Q. What do you say of the general community of interest which has been developed on the part of the various coal railroads in the last few months or the last year? Is coal mining and handling coming more and more into fewer hands?—A. I do not think it is coming, necessarily, into fewer hands; I do not see any evidence of that.

Q. Well, what would be the end and aim of such combination in an economic way—and the results?—A. I take it that the competitive conditions under which we have done a great deal of our work in years gone by, have developed so many conditions that they render difficult the reasonable and businesslike discussion of the intricate questions involved. It is desirable that when they are discussed they should be discussed under conditions that will enable this to be done without any particular interest feeling that it is jeopardizing its business interests.

Q. Would there be any savings arising from such a combination that would be likely to benefit the consumer as well as the people interested in the combinations?—A. Generally speaking, I think that any arrangement that can be brought about to benefit the producer is bound to benefit the consumer.

Q. You see the map of the coal fields [referring to map]. Do you mean that in such a combination the markets nearest to the coal field would be supplied from that coal field, saving, perhaps, in transportation of freight?—A. Not necessarily.

Q. That would not cut very much figure in the matter?—A. Not very much; not necessarily. You must remember that the anthracite coal from one region is entirely different from the anthracite coal from another region. In other words, anthracite coals are not all alike; they are not one substance, nor can they be used for one purpose. People who have been in the habit of burning anthracite coal from one region do not like to burn it from another. Take a very cold country; the people there like to burn a very hard coal. Take a warm section of the country; they like to burn a softer coal. There are some sections of the country, particularly down East, down in New England, where they pay a very high price for a certain class of coal, and do so because it is cheap for them to do it. I know it was the case some years ago in the manufacturing districts of Massachusetts, where the operators came home for their dinners in the middle of the day, that they would buy a small quantity of red ash coal, which will kindle with a match almost; and when burned up will burn itself up entirely, there being very little ash left; they got the full benefit of it. And I suppose they buy it still. They did formerly. They could afford to pay for that coal, whereas harder coal coming from a different vein could not be used for their purposes at all.

Q. (By Mr. KENNEDY.) What proportion of the coal product that goes over your road is that of independent operators and shippers?—A. Generally speaking about 60 per cent.

Q. Is that higher than the percentage carried over other roads?—A. Higher than most of them, yes. I think it is the highest of any.

Q. You mean 60 per cent of the coal that goes over your road is shipped by independent—by individual operators?—A. Yes.

Q. Do they get cars as freely, and are they supplied as cheerfully as they are given to your own people?—A. Oh, quite so; generally more freely.

Q. There is no complaint on that score, is there?—A. I think not.

Q. Is it not the policy of your road gradually to get absolute control of the product of your region?—A. No.

Q. Would there be any advantage to your company in having the mining and shipping and selling of the product?—A. None, excepting to conserve the general interest. Of course the operator, like everybody else, only asks what he thinks is his fair share of the business; and as the ability of the whole region to produce is very largely in excess of the ability of the market to take, the individual operator very often thinks that he should have the opportunity of shipping when, in order to conserve the general situation and make a reasonable and equitable division, it would be unwise for him to do so; that is, unwise for other people situated the same as himself, to have him do so.

Q. Is there any restraint in any way upon his shipping to the full capacity of his collieries?—A. No; if he does it, he does it of his own free will and accord.

Q. You ship about 15 per cent of the anthracite product?—A. Yes; something over 15 per cent.

Q. Is there any allotment to you of what your line shall carry of the anthracite?—A. No; we endeavor to conform to our proportion of the tonnage which can be shipped in any one month.

Q. Can you say what the maximum production of your field might be, as compared with what you are shipping now?—A. We are shipping now our maximum.

Q. You are shipping your maximum?—A. Yes; I think all fields are.

Q. (By Mr. RIPLEY.) Would that be true of the Philadelphia and Reading fields?—A. I think so. I can not speak for them, but that is my impression.

Q. You mean the maximum of collieries that are in existence, not the maximum amount of coal that is in the ground?—A. No; I mean the maximum of the ability to produce.

Q. (By Mr. KENNEDY.) Have the independents any large tracts in reserve that are not operated?—A. I think not.

Q. (By Mr. C. J. HARRIS.) Do the independents own or lease for the most part?—A. Both; I should say, perhaps, they lease more than they own.

Q. (By Mr. KENNEDY.) You said something about a 65 per cent contract. I would like to ask you if it is provided in that contract that those who sign it shall forever after be debarred from shipping during the life of the other collieries?—A. I do not understand your question.

Q. Is it provided in that contract that those who sign it, the independent operators, shall give the entire product of their collieries to the company, sell it to the company? Is the 65 per cent contract for the whole of their production?—A. Yes. I want to be a little careful in answering that question. I think there are a great many limitations and stipulations in connection with that.

Q. (By Mr. RIPLEY.) Practically it is for the life of the property.—A. Practically, yes; still, as I say, with certain limitations.

Q. (By Mr. KENNEDY.) I should like to have you tell us more about your understanding of this phrase which has become so common now, "community of interest," and how far the principle behind it has progressed among the coaler roads.—A. Of course, I can only speak of my own experience. I have no definite information in regard to others, and I do not know that I can state it any differently from the way in which I have stated it.

Q. Can you say whether gentlemen who are in the directorates of other railroads are also in yours?—A. Yes.

Q. And would they have a voice in bringing about a uniform policy in all the coaler railroads or most of them?—A. I do not think that; no. The idea of some people being interested in different properties is not at all an agreement. The presumption is that if a gentleman is interested in more than one property he will, when he considers a question in connection with any one property, take it up with a view to that property.

Q. Is there any tendency toward a consolidation of all these coaler properties?—A. Not that I know of.

Q. Is it possible, the way events are going, for an absolute control of them to be had by a few men?—A. I should think not. In the first place, you must take a practical view of that question. The affairs of these different companies are very complicated and very extended, and the difficulty now that we have in getting the results that economically are required involves the most careful consideration of all the questions that come up, and I think that gentlemen would hesitate to go beyond the point of transacting the affairs that are brought before them. We have all we can do to look after the interests of our individual property,

Q. (By Mr. RIPLEY.) For instance, what proportion of your total traffic in tonnage is coal and what general tonnage?—A. About one-half is coal.

Q. The percentage varies as between the different coal roads, I suppose?—A. Oh, yes; it is different on the different roads.

Q. Can you give us any statement of the approximate percentages—how it is on other roads? Is your percentage of coal tonnage higher than—A. (Interrupting.) As compared with other merchandise?

Q. Yes.—A. I would not care to answer. I have a very vague idea on that point.

Q. The large percentage of your tonnage is coal, and an equal proportion of other freight would make it very difficult to administer the property solely in the interest of the coal without jeopardizing the other interests, would it not? The fact that your business is of this dual nature would make it difficult to carry out a definite line of policy for coal without affecting the other branch of the business, that is to say, it is not exclusively a coal road?—A. No; you are quite right about that.

Q. So that, for instance, a director in that company, while wishing, perhaps because of being a director in another coal road, to influence the Lehigh Valley's course in the interest of the other road, would be obliged to consider the effect on the general traffic of that same road?—A. Yes.

Q. (By Mr. C. J. HARRIS.) Were these so-called coal roads built originally for the coal traffic exclusively? Do you know about that?—A. You mean at their inception?

Q. Yes.—A. Some of them were and some were not.

Q. What I wanted to get at is this: Has their business outside of hauling coal become very much more important than it was when they first started?—A. Oh, yes.

Q. Is it growing?—A. Yes.

Q. Cities and towns and districts settle up, and the tonnage other than coal becomes a more important item every year; is that it?—A. Yes.

Q. (By Mr. KENNEDY.) I would like to ask you something about the labor condition in the anthracite region. Do you believe that the demands of the miners made last September were just?—A. I hesitate in answering, because in a business transaction I hardly know what you mean by the word "just." They made their demands and they were acceded to.

Q. (By Mr. RIPLEY.) The strike has not seriously embarrassed the companies, to your general knowledge?—A. Not up to the present time; no.

Q. (By Mr. KENNEDY.) I would like to ask you if the public is paying any more for coal as a result of that labor trouble of last year?—A. Oh, yes.

Q. One gentleman testified the other day that the labor men had done what the railroad presidents had not been able to do in the past; that is, they had reduced the amount of coal produced, restricted it, adding that it was a good thing for the railroads, a good thing for the independent operators, and a good thing for the miners. He did not say about the public. I would like to ask you if you think it was a good thing for the railroads, a good thing for the miners, and a good thing for the consumers?—A. In so far as it resulted in concessions to miners and in exhausting stocks which had accumulated.

Q. (By Mr. C. J. HARRIS.) It allowed a higher price to be made, did it?—A. It resulted in a higher price being made.

Q. (By Mr. KENNEDY.) In a way that statement was correct then, that it was beneficial to the railroads and to the producers?—A. For the time being.

Q. Is it beneficial to the public?—A. That depends entirely. I do not know what the public view of it is.

Q. Could you not put yourself in the place of the public?—A. No.

Q. Are you in favor of arbitration of these disputes between capital and labor?—A. That is rather a large question to answer in a few words. I believe that we should endeavor to get along with a minimum amount of friction with the people we employ and do all we can to prevent any trouble.

Q. Do you recognize that labor, in a great industry like that, should have a voice in fixing the wages, the hours of labor, and the conditions under which the laborers work?—A. I believe that labor should be in a position where it can discuss and endeavor to reach conclusions with the employer as to what it shall do for what it gets.

Q. Do you think labor can do that better in an organized capacity of, say 140,000 men, than—A. (Interrupting.) I think so—yes.

Q. You think organization is a good thing?—A. As a general proposition, yes.

Q. Do you recognize the public as a third party in interest to a controversy like that of last fall—the coal interests being one party, the mine workers another, and the public a third party?—A. I think that the employer, so far as he has obligations to the public, should recognize them.

Q. Would you recognize the public, the public being consumers of this coal? They are cut off from the article which they want, delayed in their business, and inconvenienced in their homes, and if the controversy continues, the price goes up. Under those circumstances would you recognize the public as a third party—a very large third party—to a controversy of that kind, and that each should have some voice, the influence of which should prevail in a controversy like that?—A. That is a very broad question to answer. I do not know that I am prepared to express myself very fully on it. It is very much of the nature of a one-sided proposition. If the price of coal goes down we have to stand the loss. The public does not take us into consideration very much. If an arrangement could be brought about whereby, when we are at a disadvantage we would be taken care of, it might be advisable under such conditions that in the other stage of the case we would have to be regardful of the public, too.

Q. You would not be in favor, in the public interest, of a legal force to bring troubles of that kind to an end before they go so far as to disastrously affect the public?—A. That depends very much upon conditions. I am not prepared to express myself on that decidedly.

Q. (By Mr. RIPLEY.) I want to ask you if you are aware of a proposition to build an independent line to tide water along the line of the old Delaware and Hudson Canal within the last year?—A. All I know about that is what I have read in the newspapers.

Q. What would have been the effect of putting in another independent line? Would it have been to make more friction between the roads?—A. I think that is reasonably to be supposed. We have had considerable experience in matters of that kind.

Q. Did you formerly ship any of the Pennsylvania Coal Company's coal?—A. No. Q. So that the acquisition of that property by the Erie would not affect you in any degree?—A. No.

Q. Can you say anything about the relative proportion of your output of anthracite from the northern and the southern territory? Is the coal of the southern fields more expensive to mine, or are those fields worked as cheaply as others?—A. When you speak of "southern," what do you mean?

Q. I mean the middle, western, and Schuylkill.—A. Of course the geological formation and characteristics of the different regions vary very much. The Schuylkill and what is known as the Mahanoy are more expensive to operate than others, and as time goes on the expense will increase.

Q. Is that not also true of other coal beds in the whole southern territory, that they are more expensive to mine than the northern?—A. Very much indeed.

Q. Is a larger proportion according to the area of output at the present time in the northern field? That is to say, is the Wyoming field more likely to be exhausted under present conditions than is the southern and middle western field as a whole? Is the northern field being more extensively worked?—A. I should say it is.

Q. I am simply trying to get at the description of the general situation. You have spoken of your percentage of the annual output as being about 15. There is no form of agreement as to that?—A. No, no.

Q. Are there any roads which have in the past held out against such a general allotment?—A. I think not.

Q. Has the Pennsylvania Railroad always been in entire harmony with other companies?—A. In a sense.

Q. But in a sense also not?—A. No; I think not. Of course, I do not know. I would prefer not to discuss the Pennsylvania's policy. I do not know what that is, but we have not found—I do not think they are peculiar in any way.

Q. The statement has been made by witnesses here, that in the past the Pennsylvania Railroad has been rather a "free lance," implying that it held itself aloof from any obligation to conform to any other operations or to conform to any agreement as to the output, and I want to ask you whether that is true in your judgment?—A. The reason I smile is this, that my experience in the last 10 or 15 years has been such—difficulties have been so great, controversies have been so great, and as far as the use of the lance is concerned, it has been so universal—that I do not think the term "free lance" applies to any particular person or company.

Q. Suppose you next year should turn out 20 per cent of the annual output—we will say of an output of 50,000,000 tons. Suppose you were to increase your output to 10,000,000 tons, would there be any complaint on the part of the other companies? Judging by experience of the past, are you quite free to extend your output?—A. If we are prepared to take the consequences.

Q. Those consequences would be what?—A. Disastrous to me.

Q. In the line of—A. General competition; general disturbance.

Q. I see. But so far as the direction that the company goes, that action might

be taken if your directors chose to do so?—A. Oh, yes; there is nothing to prevent them; in fact, it has been done repeatedly.

Q. Within recent years?—A. Yes; within the last 12 or 18 months.

Q. So recent as that?—A. Yes; oh, yes. We are producing freely, and the market is taking all we can produce, and we are not under strain.

Q. Have you ever heard a complaint on the part of the Philadelphia and Reading road that it should be entitled to a larger allotment?—A. Yes; I have; from every other road, too. I have not heard it from the Reading particularly.

Q. The Reading, however, controls more coal lands than other roads, and the map would seem to indicate that its proportion of coal fields is greater as compared with the others than its proportion of the total output. Has that proportion been larger in past years?—A. Yes; I think so.

Q. Considerably so?—A. I think so; yes.

Q. (By Mr. KENNEDY.) If all are perfectly free to mine to their full capacity why should there be any complaint from any of them in regard to allotment? Why should there be any complaint; why not go ahead and increase their output?—A. That would mean self-destruction.

Q. I should like to ask you if there is any competition; and how you follow it; on what basis?—A. In communities where bituminous coal is used, and under conditions where bituminous coal can be used and also the finest sizes of anthracite coal, the prices which obtain are affected by the prices at which bituminous coal is sold.

Q. What proportion of the anthracite output would that be, 35 per cent?—A. Yes; quite that or more. The proportion is constantly increasing, too. Of the total tonnage produced, the percentage of the fine coal is increasing with great rapidity.

(Testimony closed 2.28 p. m.)

NEW YORK CITY, February 21, 1901.

TESTIMONY OF MR. E. B. THOMAS,

President of the Erie Railroad Company.

The special subcommission met at the Chamber of Commerce building at 1.42 p. m., Mr. C. J. Harris presiding. At 2.29 p. m. Mr. E. B. Thomas, president of the Erie Railroad Company, was introduced as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. C. J. HARRIS.) Mr. Thomas, will you give us your name and address, also stating your official position?—A. E. B. Thomas; 21 Cortlandt street; I am president of the Erie Railroad.

Q. How long have you been president of or connected with the Erie Railroad?—A. I have been connected with the Erie for thirteen years in different capacities; but have been engaged in the transportation business for over thirty years.

Q. Could you tell us what proportion of the Erie Railroad's traffic is in anthracite coal?—A. Yes; I will tell you from our last report, which I brought along because that will give it a little more accurately than I could from memory. Our total coal transport, coal and coke, was about 12,000,000 tons out of a total of 27,000,000 tons.

Q. Not quite one-half?—A. A little less than one-half—that is, hard coal, bituminous coal, and coke.

Q. Yes. Your bituminous coal comes from the Pennsylvania field?—A. From the Pennsylvania and Ohio fields.

Q. (By Mr. KENNEDY.) From the Hocking Valley?—A. We transport a certain amount of Hocking Valley coal in competing for transportation from Marion to Chicago, and possibly some little locally at junction points on our line. We are large carriers of Pittsburg coal, completing the transport of the Pittsburg and Lake Erie from Youngstown to Cleveland. We also distribute that coal locally on our lines, and we produce from our own mines of the bituminous coal for supply for market purposes about 1,600,000 tons. I speak in round numbers.

Q. (By Mr. C. J. HARRIS.) About how large an anthracite-coal tonnage do you carry?—A. About 6,000,000 tons. For the year ending June 30, 1900, our anthracite coal transported was 6,000,000 tons. For the calendar year of 1900 it was 5,200,000 tons.

Q. How much of this anthracite coal is mined by your own company; in a general way, what proportion?—A. We purchased 900,000 tons and we mined about 700,000 tons from our own mines. I will give you the distribution of the 5,200,000 tons of the last calendar year: For the Delaware and Hudson, 1,100,000 tons; for the Pennsylvania Coal Company, 1,900,000 tons; and for the Erie, 1,750,000. Now,

for all other producers and other railroads we transported 450,000 tons. That includes individual operators and coal coming to us at junction points.

Q. Do you handle this anthracite coal mostly by purchase?—A. Yes.

Q. And do the selling yourselves?—A. Do the selling ourselves.

Q. What is the percentage allowed the operator?—A. The operator has 60 per cent of the tide-water price. He has that net without any expense of selling or handling, and takes no commercial risks.

Q. We have had a great deal of testimony about a new contract that is being made, giving 65 per cent to the mine owners. Are your roads doing the same thing?—A. We are doing the same thing with our operators, and it is expected that arrangement will be consummated.

Q. (By Mr. KENNEDY.) Have any such contracts been signed?—A. On the part of the operators, yes. I have some on my desk that I have not as yet signed. I have no reason to doubt the arrangement will be completed.

Q. Would you furnish the commission a copy of that contract omitting the names?—A. I would not like to answer that question at the moment. If you leave that open I will answer before I leave the city. If the contracts go into effect, I have no hesitation whatever in saying I will do so.¹

Q. If any contract goes into effect?—A. Yes.

Q. Well, most all of them will have to go into that contract before any—?—A. (Interrupting.) No; we do not make that a condition. We do think, however, we would be entitled to the acceptance of it by the bulk of them.

Q. Does that contract provide that those who sign it shall dispose of the entire product of the mines during the life of the mine to the Erie Company?—A. No; the Erie Company does not make any of the contracts. Some coal companies in the interest of the Erie will make a contract to purchase of the miner the amount of coal he may have in the ground.

Q. (By Mr. RIPLEY.) That is, for the life of the property?—A. Yes; for the life of the property.

Q. (By Mr. KENNEDY.) So after he signs that contract he can not be an independent shipper of the coal from the mines covered by the contract?—A. No; from that particular mine he could not.

Q. (By Professor RIPLEY.) You have said that the contracts at the present time provide for 60 per cent of tide-water prices?—A. Yes; prepared sizes.

Q. Do you in conformity with that arrangement transport the coal of the independent operators who ship, for 40 per cent?—A. We never have declined to do so. The rates on anthracite coal vary from \$1.15 to \$1.40 a ton.

Q. The rates of freight would presumably be somewhat in advance of 40 per cent, would they not, to the person who ships individually?—A. An advance over 40 per cent? I do not think so. Certainly the rates to the individual operator would not be any higher than now.

Q. In other words, the individual operators would get the same rate to tide water that the person who signs a permanent contract would get?—A. I would not like to answer that question, because that is a question that has not been decided—what the rate will be on a 35 per cent rate. Under the 40 per cent rate, as they now stand, the rates are from \$1.15 to \$1.40 a ton.

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Q. The complaint has been made before the commission that the individual operator who attempts to ship or sell for himself is charged somewhat in excess of that price. I want to ask you if that information conforms to any practice that you know of?—A. So far as I am aware—and I get in very close contact and touch—I do not know a single dissatisfied operator or shipper in all the anthracite region on the line of our road, nor do I know of any controversies between them. The most amicable and pleasant relations have existed during the entire time I have been connected with the road. It is the fashion in this country, if a man fails in business, either from want of capital, his own inability, or the unfortunate enterprise in which he is engaged, to charge his failure to the railroads rather than by any possibility to his want of industry or application or ability.

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Q. You have implied that the railroads would be justified in charging somewhat more for the transportation of individual operators' coal in getting that coal to tide water than they would charge if they had purchased the entire output of that mine; will you state what reason you have for that position?—A. Because the coal which they purchase is purchased under an arrangement which gives them a stability of business; the other is irregular. An operator may want cars to-day, he may not want them to-morrow; we may be prepared to furnish them to-day, and for one day they may be idle. There is no uniformity of transportation, which is a very essential element in the cost, and I believe that would justify a higher rate under those conditions. If we directed absolutely the output of the mine, we would know to-day whether that mine is going to work to-morrow and to what extent, and we could supply that transportation with regularity.

Q. (By Mr. C. J. HARRIS.) Your road would be able to rely on that amount of traffic always, whatever competition might come in?—A. Yes.

Q. What is the economic purpose of this combination or community of interest in the coal-operating roads that has gone to the front in the last six months? What is there to be said in favor of it?—A. I do not know of any combination, and perhaps this is as good a time and opportunity as will be presented to get clearly before you the fact that there is none. I know of no coal combination whatever. The nearest we ever came to one was in 1896, when the several anthracite-carrying roads entered into an agreement limiting the amount of transportation of anthracite coal, and agreeing upon a specific percentage which each of them would carry. That agreement was to continue, and did continue, for one year. It expired by limitation and has never been renewed. There is to-day no moral obligation on any railroad not to transport or mine all the coal it can dispose of. I am at perfect liberty on the part of the Erie road to mine all the coal I can, furnish transportation or bring it down here, and if I can sell it at a profit, to do so; or, if I prefer, throw it in the North River, which, if I could not dispose of it, I would have to do.

Q. (By Mr. KENNEDY.) If there were any combination or coal trust, as it is sometimes called in the public press, you would know of its existence?—A. Considering the amount we transport, I think I would have to be invited to be such a party to make it a real good strong success. I want to be perfectly frank and distinct in my disclaimer in that respect. Now, as to community of interest, we do consult together. It is impossible to conduct the commercial affairs of this country without consultation. There are no agreements, express or implied. We are at liberty to, and we do, mine and market as much anthracite coal as we can profitably find an outlet for.

Q. (By Mr. RIPLEY.) You feel that if you increased your proportion that would be an invitation to all other roads to do the same thing, and there would be an excess of production?—A. These markets are fairly well divided up as a result of long years of experience between the several coal producers and transporters. I could go, for instance, into the territory of some other road that has hitherto supplied the coal, and I could reduce the price of coal there and thereby add to my own transportation and market for a while. In a little while, however, the same thing would occur in our territory, the result of which would be that I would have succeeded in permanently lowering the price without any benefit to myself. Now, that is all there is of community of interest. The greatest danger that the public have to apprehend is from unrestricted and unrestrained competition. The great danger to the public in railroad rates is not that railroad rates may be too high; not that by combination among railroads we may so put up rates as to cripple commerce. The danger is from too low rates and favoritism, the former being the most important factor in breeding the latter. What this country commercially wants, and what I think the people want, if they thoroughly understand the question, is stability of rates—uniformity of rates; that A shall pay as much as B, and B shall pay as much as C; that favoritism shall be stopped. I know of no more pernicious factor in bringing about favoritism than unrestrained and unrestricted competition.

Q. Is there a tendency toward equitable freight rates at the present time? No favoritism; no rebates?—A. Rates as they exist to-day are not perfect, by any means, but they are more stable and more uniform than I have ever known them to be in my experience.

Q. What is the cause of that—the good times or the better understanding among the railroad managers?—A. Both.

Q. Which is the larger factor?—A. That would be very difficult to say. There have been a great many changes in the personnel among railroad men in the last few years, and, naturally, the transportation business, like every other, is one in which the element of personal equation can not be entirely overlooked. I think there is a feeling of more confidence on the part of each of us, and at the same time among us a disposition to bring about a better state of affairs. The railroads

of this country have shown their ability to transport a ton of freight 100 miles, or 1 mile, more cheaply than in any other country in the world.

Q. (By Mr. KENNEDY.) Why are they able to do that?—A. For a great many reasons. This is a new country, with opportunities for creating business and increasing our tonnage. We have stimulated development in every possible manner and in every possible way. No doubt the element of competition has done a great deal toward that. We have built a cheaper class of roads than other countries, and while our capitalization seems large it is very small compared with that of foreign roads. The capitalization of English roads runs as high as \$350,000 a mile, and it has been not unpopular to cry at the Erie road because it had a bonded debt of \$70,000 a mile—a property which could not be reproduced to-day for the bonded debt and a very large sum in addition.

Q. (By Mr. RIPLEY.) If you included the value of the terminals?—A. We have included the value of the terminals.

Q. But excluding the value of terminals it might be— A. I am not so sure about that, because I doubt very much the estimates of what can be done, compared with what is actually accomplished. For instance, the Lehigh Valley road several years ago used our tracks from Elmira to Buffalo for their own terminal at Buffalo. They were dissatisfied with the arrangements, and upon the expiration of the contract they gave us notice that they desired to build their own line. We made every effort to keep them, but they presented statements as to how cheaply they could build the road and how satisfactory the result would be to them, and they went off and built the road. I think to-day they would be glad to be back.

Q. The country is paying interest on two parallel roads instead of one?—A. Exactly. The best example of that is the Nickel Plate and the West Shore. They were parallel and competing lines, built against two railroads that can transport freight probably more cheaply than any other in the world. How much better would the country have been conserved had the money invested in those two roads been applied to the improvements upon existing lines, the cheapening of transportation, and the giving of better service to the public.

Q. Would not that same reasoning apply to the paralleling of the Lehigh Valley and the Central of New Jersey as they appear on that map [referring to map]?—A. Precisely. Either one of them were competent to do all the business through that territory.

Q. (By Mr. KENNEDY.) What benefit would the public have if there were but one of those roads, as you see it now?—A. I never have known of an instance where we succeeded in reducing the cost of transportation that in the end the public did not receive the benefit of it.

Q. (By Mr. C. J. HARRIS.) If one road could secure the whole tonnage and traffic of the two roads they would be able to make some reduction in charges perhaps on account of that increased business?—A. They certainly could.

Q. Some 20 or 25 per cent, perhaps?—A. I would not like to state the amount.

Q. Well, it would be some percentage of reduction?—A. They certainly could do that, and had legislation been directed to preventing the building of the competing lines which were unnecessary and to the restriction of the capital issues upon which profits should have been paid to the existing lines, then the legislation would have been in the line of affording a better solution to this problem than it has thus far done.

Q. Do you think that without this competition the then existing railroad would have reduced traffic charges?—A. As I say, I have never known an instance where we succeeded in reducing the cost of transportation that ultimately the benefit of that did not go to the public. It is a very narrow question and very difficult to answer as to whether, without any competition whatever, a reduction would have been made. That is going into the field of theory to too great an extent, but you must bear in mind that America is competing with the world. The price at which we ship a car of grain from Chicago to New York is not fixed by the railroad. It is fixed on the Bourse of France, by the markets of England and the Continent, and it is in competition with the Argentine Republic, with India, Russia, and all other producing countries. It costs so much, or at least the producer is willing to sell it at the point of production for so much; it is worth so much at foreign markets: shall America step in and take that or leave it?

Q. (By Mr. KENNEDY.) It is largely the railroads that must decide whether the American farmer gets the foreign market for his grain?—A. To some extent. Now, being forced to carry that export trade in competition with the world, it would have been an impossibility for them to so advance rates as to cripple seriously or produce any injustice toward shippers. That is my answer to your question as to whether if it had not been for this competition we would have reduced the rates.

Q. Does not the shipment of grain by the Mississippi River and the Gulf have an

influence?—A. It has a very great influence; likewise shipment on the lakes to Buffalo and on the canal from there to the St. Lawrence River and the Canadian line.

Q. (By Mr. RIPLEY.) The statement has been made in the past that the Erie Railroad has been rather prominent in providing low rates of freight as in competition with some of the trunk lines. That condition prevailed through some years in the past, did it not?—A. Well, I would not like to say that I was any more virtuous than my competitors.

Q. I did not put it on the ground of virtue. You got a larger volume of tonnage, did you not? Supposing you did offer lower rates, you got a larger proportion of tonnage thereby?—A. Yes. I never heard of the Erie Railroad offering a rate that it was not forced to by a competitor, or promptly met by it.

Q. And that rate even for a road like yours, which lies well inside of our territory, is undoubtedly affected by competition of roads that lie in Canada?—A. The competition of the Canadian roads is a very important factor in the rates of the American roads.

Q. Even as far south as the territory through which you operate?—A. Even as far south as New Orleans.

Q. Can you explain, by example, what you mean by the latter statement?—A. Because it goes right back to a statement I have made in regard to this foreign export business. If a man can export his shipment via Montreal at a lower rate, if that rate is not met by the roads via Galveston and New Orleans, then they must forego the business. Likewise, if it is not met by the roads through the interior they must forego it. It makes no difference, materially, to the exporter whether that property passes through Montreal, Portland, Boston, New York, Philadelphia, Galveston, or New Orleans.

Q. Would it not be an advantage to the roads in American territory if that competition with the Canadian roads ceased to exist?—A. If they were brought under the same laws and regulations as we are I do not know whether there would be any more propriety in eliminating them from the field than in eliminating us, but as long as they are free from restriction we are compelled to observe their competition.

Q. I want to ask about the growth of the Erie system. What is the present relation of the New York, Susquehanna and Western and the Erie Railroad?—A. The capital stock of the New York, Susquehanna and Western is owned by the Erie Railroad.

Q. The entire stock?—A. Substantially. It was taken through an exchange of stocks.

Q. Is that the same relation that exists at the present time between the Erie Railroad and the short road of the Erie and Wyoming Valley, which has recently been acquired?—A. The Erie and Wyoming Valley road is the road that belonged to the Pennsylvania Coal Company, and extended from Hawley to Scranton, in the anthracite region. They also own the road from Hawley to Lackawaxen, the latter being under lease to us—the Erie Railroad.

Q. The purchase, then, of the Pennsylvania Coal Company carried with it the purchase of that road?—A. Of the Erie and Wyoming Valley; yes.

Q. The purchase of the Pennsylvania Coal Company will very considerably affect your proportion of the total tonnage, will it not?—A. It simply preserves to us the tonnage we have enjoyed since the existence of the two properties, 38 years.

Q. They have always shipped over your line?—A. They have.

Q. It, however, gives you a permanent guaranty of stability of traffic in this way?—A. It does, and that was one of the greatest—one of the controlling features in the purchase. If the relations that have existed in the past between the Pennsylvania Coal Company and the Erie road could have been guaranteed there would have been no object whatever to us in the purchase of the Pennsylvania Coal Company, because we were carrying all their traffic. At times we thought we did not get a fair division of the rate, but that was a matter of bargain and sale.

Q. Was not that the same division of the rate that was accepted by the other dealers?—A. No; it was the division of the transportation of the two railroads that I have referred to.

Q. But there was perhaps friction in that respect owing to the fact that that company owned that railroad?—A. That was a factor in it.

Q. Is the price of these properties—the price paid by the railroad—a matter of public record?—A. It is.

Q. Will you then state that price to us?—A. The price was \$32,000,000, in 4 per cent collateral trust bonds, and \$5,000,000 in preferred stock.

Q. That represents a purchase of the company at what market figure, as compared with its value during recent years?—A. I do not know of any public value that has been placed on the Erie and Wyoming Valley. It was a company of very small capitalization.

Q. I refer to the Pennsylvania Coal Company.—A. The Pennsylvania Coal Company only had a capitalization of \$5,000,000. It was one of the oldest companies in the field, and, as I say, business relations have existed between the two companies since its formation, over 38 years ago. Unfortunately, the Erie Railroad in its coal business just reached the edge of the promised land. In other words, we went to Carbondale with our Jefferson branch, connecting with the Susquehanna on the west, and we went to Lackawaxen, and afterwards to Hawley. We did not reach the absolute point at which this property was produced, with the resulting effect that we were subjected to large laterals from the roads which did reach and control them.

Q. In other words, they took an undue proportion of the through rate?—A. We always thought they did; probably they thought otherwise. At all events they got it. Now, the incentive for the purchase by the Erie Railroad of the Pennsylvania Coal Company was the continuance to its lines of a transportation which it has enjoyed for a great many years and the insuring its own fuel supply by absolutely controlling the source and putting its own cars by its own power under its own breakers. We consume on our road 2,200,000 tons of coal every year in the conduct of our business, of which 350,000 tons is anthracite.

Q. What proportion of that anthracite production from your field and tributary fields goes to New England and the West, respectively, and to tide water?—A. I can not state that proportion exactly. The Pennsylvania Coal Company and the Delaware and Hudson ship each about a million tons. I think we pull about three million tons to tide water ourselves. As to what becomes of that, after it goes to tide water, how much is consumed here, and how much goes to Sound points and around Cape Cod and to New England points. I have not figures at my command to show.

Q. But practically, so far as you are concerned, all New England tonnage goes by water?—A. No; we dispose of some New England tonnage by Fishkill and Newburg.

Q. Will you explain as to whether there are compound rates in force between the coal field and New England?—A. I do not know what a compound rate is.

Q. The statement has been made before this commission that one rate was charged to the Hudson River, and that then another rate was charged from thereon. In other words, that the through rate to Boston.—A. (Interrupting.) Was the sum of those two rates?

Q. Was the same as those two rates; yes. Is that practice in force via the Harlem River?—A. I do not know; we do not handle any coal that way.

Q. By the Hudson River?—A. Yes; I think that is the way the rates are made.

Q. Will you state what practical reason exists in business for making double rates?—A. The ability of the New Haven road to exact a rate.

Q. But at Fishkill you connect with other New England roads?—A. No; we connect with the old New York and New England, which is now a part of the New York and New Haven system.

Q. The coal does not come through on a through bill of lading?—A. No; I think not. I think the rates are through rates; I think the coal is billed through, but the division is agreed upon. I think it gives the New Haven road a very much larger proportion per ton per mile than the road west of the river gets.

Q. In other words, the road in New England territory gets a larger proportion than the mileage seems to imply?—A. Yes; that is, it is not pro rated per ton mile over the two roads.

Q. Why is the New Haven road able to exact this—because it monopolizes a certain territory?—A. Largely.

Q. Would that not be an indication of the possible danger in granting a monopoly of territory to a road or a set or combination of roads? Would it not indicate that they could, in a measure, set an arbitrary rate?—A. No; because, on the other hand, they are exposed to the competition of the water. They are also exposed to the competition of the Fitchburg, Delaware and Hudson and the Boston and Maine from the northern ports, and also from the competition of bituminous coal from Virginia fields.

Q. Still does not that leave, within a definite territory, each of the roads a certain traffic which it can absolutely control?—A. Possibly.

Q. That is, all points in New England are certainly in competition?—A. No.

Q. There are many points on the Boston and Maine and New York, New Haven and Hartford territory which are entirely controlled by the road in whose territory they lie?—A. Yes.

Q. The point I am getting at is simply this: To ask you whether, if a monopoly of traffic in a given region has to be given to the roads, insuring them stability of traffic and with the desired result of stability in rates, there ought not to be some regulative power to determine when these rates are just and reasonable; that is, whether monopoly does not, with all its advantages, from one point of view, imply

some regulative power on the other?—A. Possibly; yes; but a manager who undertakes to work on that line of policy would soon ruin his business by absolutely drying up his source of supply, and would put his territory at such a disadvantage with the remaining portion of the country that neither the manufacturer nor the transporter could exist, and he would be forced to recognize that competition, even though he disregarded all moral and other obligations.

Q. That would be true certainly if you were speaking of a long term of years. Might it not be possible, however, for a certain board of directors and administration to come in and milk that territory for speculative purposes while they maintained control of that road?—A. Yes; but my experience is that speculators can milk more quickly through Wall street than through any such method as that. What they want is the dollar, and they want it quick. They may ultimately get out through some such channel as that. The latter is too tortuous, too lengthy, and too dangerous a channel to pilot the speculation through safely.

Q. And yet have there not been samples of squeezing of territory in a way to be not certainly in the permanent interest of the property, but which has occurred by reason of temporary control?—A. I do not recall any instances of that kind, and in my experience I never knew an appeal made by a majority of manufacturers or by communities in which the attention of managers was called to their condition, the impossibility of their meeting other competition fairly, of sustaining themselves, that was not promptly and fairly and liberally met. It is to the interest of every railroad manager to develop and sustain to the greatest extent the business along his line. We run trains on which we carry people that do not at times pay us the cost of their transportation. Why? Because we want to develop that country; we want to induce people to go there and manufacturers to settle there; and the difference between having a thickly settled community along your line and having a wilderness is success or failure.

Q. Does the purchase of the New Jersey Central by the Philadelphia and Reading road in any way affect the proportion of your tonnage, the volume or the character of it, as far as you are concerned?—A. Not a particle.

Q. In other words, the allotment of tonnage—of coal tonnage—is so firmly established that the consolidation of two or three roads will not affect it?—A. Excuse the interruption; there is no allotage of tonnage. But the tonnage that honestly belongs to each road and is marketed by it is so thoroughly established and well fixed, being the result of years of working, whether that is controlled by one or two companies cuts no figure whatever.

Q. (By Mr. KENNEDY.) Did not some of those roads complain at times that they did not have their proper allotment, that their allotment should be increased, etc.?—A. There is no allotment, and there has not been since 1897. I am very particular in making that point, because of charges made in respect to combinations. I never knew anybody to think that he got enough, and, naturally, the railroad managers are made up of the same clay as the balance of the world.

Q. They complained, some of them, that they did not ship their proper proportion of the entire production?—A. I think the Erie road doesn't get enough, either in tonnage or money.

Q. If you think not, you may increase your production, if you have facilities to do so?—A. Yes; and I can't make any money by doing so, but by increasing production and extending my markets I am pulling down the price on all my business. I would think about it a little while before being very aggressive on that line.

Q. The railroad men are thinking more wisely and intelligently?—A. By experience.

Q. The effect would be to pull down prices?—A. Certainly; yes. Suppose I am transporting, and I legitimately place 100 tons which I am marketing. Now, I can go over in some other man's field and I could make my transportation 110 tons, but by doing that I pull down my 100 tons, for which I am getting a fair price, to the level at which I am carrying that 110 tons. It is not good commercial policy.

Q. But the public gets cheaper coal?—A. For the moment, yes; in the end, no.

Q. Do you dispose of your product at tide water at practically the same level as the other coal roads dispose of theirs?—A. The prices vary slightly. I think we get about the same prices as the others. There are shades of difference in the coal, and there are tastes in the buyers. Some people give more for one particular coal from some particular mine than they will give for coal from another mine. For instance, the Lehigh has a more extended reputation than the Lackawanna coal, and can demand a little higher price in the markets.

Q. Is there any sort of connection in determining what the price shall be in New York or tide water?—A. No; I can not say there is any. There are consultations in regard to it. The Reading is the largest producer. That company sometimes fixes the price, and we generally follow.

Q. (By Mr. C. J. HARRIS.) Is there a market price for coal every day about the same as for wheat?—A. The price does not vary to that extent.

Q. (By Mr. KENNEDY.) The Reading fixes the price, you say?—A. Not invariably. Some of the larger companies lead off in their prices, and the rest follow.

Q. (By Mr. RIPLEY.) Does not the Reading Railroad control a larger proportion of the undeveloped coal lands than any of the other coal companies?—A. I so understand.

Q. Is not the cost of carrying their interest charges on these undeveloped coal lands put upon the earning power of the corporation?—A. That may have been the case originally, but the Reading has been through bankruptcy so many times since it acquired that land that I think it would be difficult for it to obtain that increase. At all events, the Reading can secure no more for transportation than the rest of us.

Q. You would say, then, these successive reorganizations practically cut out any excess of capitalization due to the purchase and retention of those coal lands?—A. If I were the security holder, I should think so. Of course, all that is speculative—guesswork—as to whether that has or has not been done.

Q. (By Mr. C. J. HARRIS.) What is there to prevent an abnormal price being charged for coal, provided that this community of interest, if there is any such—provided the whole anthracite supply should be controlled by a few hands? It has been stated here by certain witnesses that the anthracite deposits are a natural monopoly, being limited in extent and no others being discovered. What are the circumstances or the reasons that would prevent a very high and, we might say, unreasonable price for anthracite coal being charged?—A. There are a great many reasons. First, anthracite coal is not a necessity, absolutely; to a very great extent it is a luxury. Because of its cleanliness and the more economic and better manner in which it can be handled it is better adapted for furnace and house use and such purposes as those. But the competition of anthracite with bituminous coal is one that is continually growing. If you will trace the history of the anthracite industry you will find that the increase has been in latter years not in the prepared sizes, but what was formerly known as the refuse. The great increase has been from the small sizes—from washeries—the washings of the old culm banks. There is where the increase in the production, if any, has been. There has been very little increase in the prepared sizes. In this city, take the building of apartment houses. One of these large apartment houses will probably accommodate as many people as a dozen houses used to accommodate, all of which did use broken sizes. Now these apartment houses use anthracite mixed with bituminous or bituminous altogether. The best that can be said of the anthracite industry is that for several years it has been stationary. It is not a growing industry. It only grows with the increase of houses. While that is quite an increase, it is more than offset by the competition it has met with in the increase in the use of coke, gas, oil, and in other ways.

Q. (By Mr. KENNEDY.) The consumption of bituminous coal goes on in a greater increasing ratio than the consumption of anthracite?—A. Oh, enormously so. The anthracite industry has a capacity of production in this country of about 60,000,000 tons a year. That can be increased undoubtedly by additional development, but the country can only take and dispose of about 45,000,000 tons a year. Now, there are 15,000,000 tons of ability to produce in excess of our market. What are you going to do with it? Throw it in the North River or restrict it to what the country demands and what you can market at a fairly reasonable price?

Q. (By Mr. C. J. HARRIS.) What is the probable length in years' duration of the anthracite coal supply of the United States? Have you any estimate?—A. Oh, I should think that 10 or 50 years will see the substantial extinction of many of the anthracite fields. The Reading, I understand, say that they have enough to last about 100 years. I do not know how that is, but 50 to 60 years in the Lackawanna Valley will see pretty large inroads, and the mining is constantly increasing in cost. The expense of producing it is increasing with the depth of the mines and the difficulties of water and gas. Now, the largest production we have had of anthracite coal in this country was in 1899, when we produced 47,000,000 tons. Last year, 1900, we only produced 45,000,000 tons. That falling off was due to a two-months' strike.

Q. Forty-seven million?—A. Forty-seven million.

Q. Some one stated it was 60,000,000.—A. Whoever stated it was 60,000,000 was in error. There is an ability to produce 60,000,000, and there has been an abnormal production of anthracite coal since last November. That is due to the fact that in September and October the mines were absolutely idle and no coal was produced on account of the strike. That exhausted stocks around the country, and it naturally followed that January and December, usually quite dull months, have had an abnormal demand made on them to replenish exhausted stocks.

Q. I may be wrong; but I think a witness said at that time the production was going on at the rate of 60,000,000 tons.—A. Yes; the January production was a little over 5,000,000 tons, which would be at the rate of a little over 60,000,000 tons, but the anthracite mines have never been able to work much over 235 days in the year.

Q. (By Mr. RIPLEY.) What difficulty is there in producing uniformly throughout the year and storing all the excessive production during the spring and summer for the 4 months?—A. To some extent that is being attempted; that is also to quite an extent a little bit of a problem.

Q. Will you specify further in respect to that?—A. The demand in the summer months is for coal to be transported to the West, Chicago, and up-lake ports, which must go forward during the season of navigation. Now, to stock at tide water is a very expensive proceeding—to get right at tide water, where you can transfer from your stock piles to your boats, is a matter of considerable expense; the re-handling of that coal, the wastage and breakage of it, all add to its cost. Another thing: Very large stocks of coal are always a menace to the market.

Q. It is rather dangerous, then, for a company to be loaded up?—A. It is dangerous; it is expensive. You take a stock of 500,000 tons of coal. The expense of producing that, of piling it up; expense of rehandling, wastage, form a very considerable item of the cost of that product, which could be more cheaply produced and disposed of from day to day.

Q. (By Mr. C. J. HARRIS.) I suppose anthracite coal would not deteriorate in 6 months, would it?—A. Not in 6 months; but there is a certain amount of deterioration, and no customer will pay as much for coal that has been exposed for a long while as for freshly mined coal.

Q. (By Mr. RIPLEY.) It gets dull?—A. Gets dull in appearance; and the appearance of the coal is a factor in the sale of it. The anthracite industry in early years was a very profitable industry. Naturally it proceeded on very wasteful lines. There was nothing to call for any economical study of the problem or its development upon these lines, and many of the breakers there to day are antiquated. And the transportation of anthracite coal, as it has been in the past and is to-day, is the most extravagant transportation that I have ever known of. For instance, we have mines on one side of the Lackawanna Valley up on the hill and we haul coal down into the valley and up the hill on the other side going to tide water. We have mines on the opposite in which we drop that coal into the valley and haul it up on the other side to go West. But these things, through our recent acquisition of control of the Erie and Wyoming Valley, the Pennsylvania Coal Company, we shall to quite an extent eliminate; and there is a great deal more of such work that could be done to advantage. As the markets develop the necessity for these economies, the more intelligently will we be forced to study them and apply them; but when anthracite coal sold for \$6 at tide water there was so much money in it that there was no inducement for a man to apply economical measures.

Q. (By Mr. C. J. HARRIS.) Would you say that the profits accruing to the coal roads from the handling of the anthracite trade were unreasonably large?—A. I do not think so. I do not think they have been large compared with the profits that the individual operators have made. I can recollect individual operators who were carrying their dinners in their pails when I came on the Erie Railroad thirteen years ago who are living at the Waldorf-Astoria now. I really do not believe they are subjects of charity.

Q. (By Mr. RIPLEY.) They have sold out to the railroads?—A. Not all of them—very few of them. Some of them that have not sold out are living there and running their automobiles.

Q. (By Mr. C. J. HARRIS.) What is the price of coal, wholesale, here in New York?—A. I did not charge my mind with that. It is a matter of detail I should not like to answer, because I should want to speak accurately on that. I do not think there would have been any advance—in fact, I know there would have been no advance in the price of anthracite coal in New York this winter if it had not been for the advanced price that was paid to labor last fall.

Q. (By Mr. KENNEDY.) Are you in favor of applying the principle of arbitration to disputes between capital and labor of the magnitude of that in the anthracite region last summer?—A. No; I hardly think the time has arrived in this country when that can be done with justice to either party. I do not think we are yet educated up to the point where we can safely commit ourselves to that course of procedure. I am in favor of negotiation, always.

Q. You recognize that there were three parties at interest in the controversy last fall?—A. Yes.

Q. The employers of labor, the laborers—the miners—and the public?—A. There were.

Q. Are not the public quite as much a party at interest as any of the others?—

A. Yes; but no more so; are they? Now, let me answer that by reciting a little condition there. The anthracite country had not had a strike in twenty years. Labor was well paid—fairly well paid; the great difficulty was not with the rate that was paid, but with the fact that laborers could not secure sufficiently steady work; that there was not enough days work in the year to afford to them as large a compensation as the miners in the bituminous region. Professional agitators took advantage of that circumstance and came down into a country where all was peace and quietness, where there had been no strike in twenty years, and where there was really no cause for their benevolent services, and stirred up all this agitation and organization with the resulting effects. They had a perfect right to do what they did; I am not questioning that at all, I am only reciting facts. The conditions existing between many of the miners and the employers there—individual operators—partook largely of the nature of personal relations. A great deal had been done for them in the way of contributions, donations, hospitals, charitable work.

Q. Do you understand that practically the great majority of the miners in that region are now in the United Mine Workers' organization?—A. I understand they are.

Q. Do you believe that a professional agitator who had not really the interest of the men at heart could come to a region like that and find only 10,000 organized and bring in 140,000 practically?—A. I think he could.

Q. I want to ask you if you do not believe, the public being such a large party at interest, suffering as everybody did and as it was threatened that all would suffer a great deal more, that there should be some compelling legal force to bring about a settlement of troubles of that magnitude?—A. It certainly would be very desirable if there was some method by which that could be done with justice to all parties.

Q. Do you believe in compulsory arbitration, so called?—A. Based on the experience of New Zealand, I am not prepared to say that I do.

Q. Why do railroads give lower rates for exports, for carrying grain or other articles for export than they do for domestic purposes?—A. Because of the competition of the world we are meeting.

Q. I want to ask you if you consider it an injustice to the American miller and the American manufacturer of grain products that the grain is carried at so much lower rate for export than their products are carried to the seaport?—A. I am not willing to admit that that is done to so large an extent as to admit of any discrimination against them; but I believe that by increasing the volume of our business by reason of that slightly lower rate for export, we are enabled to give a lower rate to the miller than if we did not carry it.

Q. The millers claim that it is in the interest of the foreign miller and foreign manufacturer that the grain, instead of the grain products, is able to get so much cheaper rates.—A. Yes; I have heard that claim made, but I have never seen it substantiated yet. It is certainly to our interest to have the grain ground in this country. We would rather have the mills on our own line than in Edinboro.

Q. You think the millers have no just ground of complaint on that score?—A. I do not think they have a legitimate ground of complaint. Grain is much more cheaply handled than grain products. It loads itself and is handled by machinery. Grain products have to be handled—have to have storehouses provided for them, and do not load as much per car, are more subject to damage. There is every reason why grain products should pay a higher rate than the grain itself.

Q. Let us consider this condition: Suppose a shipper of grain products will load a car to its marked capacity and will take care of it at the terminals himself, will he receive as low a rate for transporting those products as the man who ships the grain?—A. No; I think the grain products bring a higher rate. Grain products have a different classification from the grain itself. They have been put into a class by themselves.

Q. (By Mr. C. J. HARRIS.) Are you familiar with the workings of the interstate-commerce law? Have you any changes to suggest in it?—A. I have failed to observe where the interstate-commerce law has been of any benefit to the country at large or to the railroads. The Congress in its wisdom saw fit to create an interstate-commerce commission as the result of the labors of a commission extending over quite a long period, taking an enormous quantity of testimony. The commission got into power, and like all such commissions, wants more power. They have been industriously seeking for many years the power to make rates.

Q. (By Mr. KENNEDY.) Or revise rates, which?—A. One is the same as the other, because if you revise a rate you say what it shall be, and saying what it shall be is absolutely the making of it.

Q. (By Mr. RIPLEY.) That is to say, changing one item.—A. (Interrupting.) It changes the relationship and compels the other to observe it. Now, if I wanted to make money, I would rather have a position on the Interstate Commerce Com-

mission, with the power to make rates for this country, than to have free license to loot the United States Treasury.

Q. Why so?—A. Because it would be infinitely more profitable, and safer.

Q. Supposing you wish to abuse that power?—A. Yes, certainly. I say, if I wanted to make money.

Q. Nevertheless a justice of the United States Supreme Court might make a very great deal of money?—A. He might.

Q. You grant that character is a great protection?—A. Exactly; but I say, putting the power of making rates in the hands of any 5 men in a country whose industries are so diversified as the industries are here, is too great a power to lodge in any body, unless its members are appointed for life; but, as you say, the element of character enters into it. It is not a safe thing to put into the hands of political parties; and the present law demands that the present body, the Interstate Commerce Commission, shall be composed of only a certain number of each political party. In other words, it is a political question.

Q. (By Mr. KENNEDY.) Has the commission any power or authority that the railroads are bound to respect?—A. Yes; the recommendations of the commission, in almost all respects, in many respects, have been followed.

Q. Has accomplished great good, has it, for the transportation interests of the country?—A. I do not think it has.

Q. Has it accomplished anything?—A. I would not want to go to the extent of saying it has accomplished nothing. I do not think the interstate-commerce law has been a success.

Q. The powers the commission was supposed to have have been emasculated by court decisions, have they not?—A. On the contrary, I think it has all the power the original law intended it to have.

Q. You make that statement after having read the debates in Congress?—A. Yes; I do not think Congress ever intended that the commission should have power to make rates.

Q. Does the Interstate Commerce Commission serve any good purpose at the present time?—A. Yes; I think it does to a certain extent. It affords an opportunity for people who feel that they are aggrieved to have their grievances investigated; and if they have a real grievance I believe that as a rule it is remedied.

Q. (By Mr. RIPLEY.) In other words, it secures publicity for grievances?—A. I think you have expressed it exactly. The intelligent force of public opinion is, after all, what makes law in this country, and what enforces law.

Q. In your judgment that is sufficient guarantee for its existence, without adding to its power?—A. I think so.

Q. If it has secured that, is it not well worth the existence of the body?—A. Yes; possibly.

Q. (By Mr. KENNEDY.) Have you any opinion to express on the subject of pooling, or is that now a thing of the past?—A. I think the railroads of this country ought to have the power, like all other commercial organizations, to make legal agreements among themselves.

Q. But the decision of the Supreme Court of the United States —A. (Interrupting.) It has declared we have none.

Q. Therefore, what results—combinations and community-of-interest arrangements, etc.?—A. There are no combinations. Naturally, that has had a great deal to do with what is generally called community of interest.

Q. There are no combinations, you say?—A. I do not know of any.

Q. Have there not been great combinations in the Southern system?—A. There have been. A great many roads have been consolidated and brought under one management and one ownership.

Q. Do you call it consolidation, then?—A. There have been more consolidations, I think, than there would have been but for the laws prohibiting pooling and prohibiting agreements.

Q. Have not these understandings or community of interest arrangements between the railroads done away with the question of pooling to a very large extent? Are the railroads reaching out for that power any more?—A. There is no effort being made by the railroads in favor of any legislation that I know of; at least we are not a party to any. I think that railroads would like, and I think they ought to have, power to make legal agreements between themselves. I think those agreements could be very properly made subject to the approval of some commission, and I do not believe the railroads should be allowed to make agreements that would be oppressive to the public or disastrous to commerce.

Q. (By Mr. C. J. HARRIS.) Would the self-interest of the railroads be a check to that course of procedure?—A. I think it would. I do not know of anything that is any more vulnerable to public opinion than a corporation.

Q. (By Mr. RIPLEY.) Has that been as true in the West as in the East?—A. I do not know so much about the West. They have not had as severe competitive conditions as we have had. The Western country is more sparsely settled; there are fewer people there.

Q. (By Mr. C. J. HARRIS.) Does the effect of consolidation, as it has gone on in this country so far, lessen or increase the traffic of the road?—A. So far, it has lessened it. Take the case of the Erie road, formerly made up of three separate and distinct corporations between New York and Chicago. They are now one corporation substantially so far as relates to the officers, organization, and everything—one corporation. The expense of maintaining two has been eliminated, and I have never known of an instance where we have reduced the cost that the public did not get the benefit.

Q. (By Mr. RIPLEY.) Speaking of consolidation, will you mention any other economies that might be incidental thereto?—A. Out of organization?

Q. Through the consolidation of a number of roads, other economies than those of administration—organization?—A. Yes; there are a great many economies.

Q. In other words, will it have the effect to reduce materially the ton-mileage rate?—A. I think ultimately it will. But the greatest danger we have is not through excessive rates, but from rates that are too low. Now we expend about 51 per cent for labor—a little more than that—for instance. I can tell you exactly what that is. Of our operating expenses last year \$15,000,000 of our operating expenses—54 per cent—was paid to the employees—distributed among about 30,000 people.

Q. What bearing does that fact have on this question, namely, the economy of operating through consolidation?—A. You take the case of the Lehigh and the Lackawanna paralleling themselves for 100 miles. If that passenger business can be done by an interchange of tickets good on both roads the public is better served. There would not be as many trains running as there are now, but there would be ample trains for the service. In other words, there would not be two running at the same hour when one would amply serve the purpose.

Q. Would there be the same competition in providing facilities? For instance, it is commonly stated in the West that the facilities for passenger travel over such roads as the Rock Island are materially better by reason of the strenuous competition between those roads for passenger traffic. They provide reclining chairs and everything of that sort. Is not the providing of facilities fully as important as the rate either for passengers or freight?—A. Yes; I think competition will always exist. Take it between New York and Chicago. There will always be competition between those points. If one road fails to provide somewhere approaching the facilities and accommodations of the other, it will begin to lose travel, and the minute it does that it will be forced to furnish the accommodations. You can not eliminate competition without you put all the railroads of this country under one management, and that is impossible.

Q. How does the value of the stock, preferred or common, compare with the value of the bonds of the Erie system?—A. There are forty-three millions of preferred stock, sixteen millions of second, and a hundred of common.

Q. That is materially less per mile than any of the foreign companies?—A. Yes.

Q. What is your practice in making improvements out of the operating expenses? Does it differ from the custom abroad?—A. The English have capitalized pretty much all the expenditures upon what was called improvements. In this country the practice has not obtained to anywhere approaching the extent it has abroad. For instance, the Lake Shore road has the same capitalization, stock and bonds, that it had 25 years ago, and yet the road has been improved to probably as great and probably greater extent than any other road in the country.

Q. Would that same statement be true of the Erie road?—A. No; not entirely.

Q. It has increased the volume of its securities?—A. In respect to some classes, yes, and in respect to others, no. The Erie road has been through several bankruptcies in which the securities have been reduced in volume and the rates of interest also.

Q. Have they been reduced in volume?—A. Yes; reduced in volume at times.

Q. The statement is made of many reorganizations in this country that while they reduce the fixed charges, they nevertheless increase the stock?—A. What difference does it make, if they do not pay any dividend?

Q. Does not that last series give control of the road in its operation?—A. Yes, it does; as a rule, yes.

Q. Then, does not the existence of a large amount of securities thrown upon the market in this way offer a premium for their acquisition for speculative purposes?—A. I suppose it might be so construed, but not actually perceptible. I have

never known that to cut much figure. The company with a small capitalization is much more exposed to being seized for speculative purposes, as you illustrated awhile ago, than a road with a large capitalization.

Q. Would that not be an argument in favor of restriction of capitalization?—A. I should think it would.

Q. Do you know any other examples of roads in this country whose capitalization is, perhaps, not excessive, from the point of view of earnings, but nevertheless is large compared with the cost of duplication?—A. I could not answer that question.

Q. The point I wish to come to is this: Whether any power, either in State or Federal hands, for prevention of excessive issue of securities, might not be advisable, both in the interest of the public and of the investor?—A. Much more desirable than legislation looking to what they shall charge for commercial work—much more desirable than to undertake to regulate the rates that shall be charged.

Q. In other words, you would favor the regulation of the financial details of the business, leaving the railroads free to perform the commercial side of it as they please?—A. Yes; if you are bound to control by legislation, control by capitalization; restrict the capitalization to actualities, as you express it, but do not hamper the roads in their commercial operations. In other words, if it is necessary for them to carry a part of their product at a very low price in order to make tonnage, which would serve to reduce the cost on the balance of their business, permit them to do it; do not hamper them, but simply undertake to control your corporations rather through their financial machinery.

Q. A proposition has been suggested to this commission for the prevention of, perhaps, at times, fraudulent overissue of capital stock through supervision of interstate roads by the Interstate Commerce Commission. Would you favor an extension of powers in that direction rather than an extension of their power to regulate rates?—A. I should, most decidedly.

Q. You believe it would conduce to the interests both of the railroads and the public?—A. Yes.

Q. Can you suggest anything further in this line?—A. No; I do not know that I can. This is a new country. We have a great many problems to work out here yet; among other things the problem of government. The surplus wealth of this country is largely invested in transportation enterprises. You can not touch that disastrously, unfairly, or unfavorably without affecting the whole country at large more seriously than by any other possible means. Probably 85 per cent of our surplus wealth is invested in railroads, and there are the owners of the securities and the army of the employees to be considered. On the Erie line we have 30,000 employees. That is a larger army than George Washington ever commanded. Whenever you touch that industry by legislation unfavorably, unfairly, it must ultimately be reflected on the country itself and on the success and prosperity of it. The country has shown its ability and its capacity to carry freight cheaper than any other country. Why not let those forces that have demonstrated that capacity work out their own solution instead of hampering them so much with investigation, legislation, and all that line of procedure?

Q. (By Mr. KENNEDY.) What you just said suggests the question to me: How do freight charges at the present compare with those of 20 years ago or with those of any other period you choose to speak about?—A. Why, they are not in sight at all.

Q. Let us have something on that line.—A. Our rate last year was 5.59 mills per ton mile, average rate. The rates of Erie road 20 years ago were probably over a cent a ton per mile—probably a cent and a quarter—and yet our volume of business was so large that a difference of 8 cents a ton would be a difference of \$1,000,000.

Q. (By Mr. RIPLEY.) Has a reduction corresponding to this one taken place in local freight rates? You have spoken of the reduction of average freight rates.—A. Oh, yes; the local rates have been reduced.

Q. Have they been reduced in proportion?—A. (Interrupting.) To the through rates? I do not think they have. Everything is competitive. If a rate is not competitive by reason of another railroad, it is competitive by reason of commercial conditions, and railroads can no more escape commercial conditions than can the grocer around the corner.

(Testimony closed.)

WASHINGTON, D. C., March 16, 1901.

TESTIMONY OF MR. ARCHIBALD A. McLEOD,*Former President of the Reading Railroad.*

The Commission met at 2.42 p. m., Mr. Clarke, presiding. At that time Mr. Archibald A. McLeod appeared as a witness, and, having duly affirmed, testified as follows:

Q. (By Mr. CLARKE.) Please give your name and address.—A. Archibald A. McLeod: New York, 149 Broadway.

Q. What is your official relation or what has it been to railroads?—A. I have been president of several railroads—the Reading, the Boston and Maine, and the New York and New England, and others, and I at one time leased the Jersey Central and the Lehigh Valley railroads.

Q. Are you now connected with any railroad company?—A. Not as president.

Q. The Commission will be pleased to have you proceed in your own way to give such information as you may have concerning the transportation problem and its relations, as you understand it, to other industries.—A. I presume you mean with reference to anthracite coal.

Q. If you choose to specialize it we shall be pleased to have you.—A. I have not given my attention so much to the transportation of bituminous coal. To a considerable degree my experience has been more in the mining and transportation of anthracite. I do not know just exactly what information you wish.

Q. We would like to be informed if you please as to the relation of the railroads to the coal production and coal transportation.

Mr. KENNEDY. And the distribution.

Mr. CLARKE. Yes, the distribution—the marketing.

The WITNESS. The mining and the distribution are conducted by the coal companies with the exception of cases in which individuals are engaged in the same business. Each one of these transporting companies has stocks in coal mining companies, and these companies are paying freights to the railroad companies for carrying the coal for those mining companies. That is the way the business is done, I believe, in every case. The accounts are kept separately. The coal companies are charged the same freight rates that they charge individuals where individuals mine and transport over these transportation companies' lines. The books are kept separately, and there is perfect accounting, just as though the coal company was owned by some interest other than the transportation company. That is the method.

Q. Is it a fact that the stock of the coal companies is in most cases owned, or at least the majority of it, by the railroad companies?—A. I believe that to be a fact. I know it is in some cases.

Q. Is that the case in regard to the Reading?—A. Yes.

Q. Practically, therefore, the railroad companies can and do control the coal companies?—A. In this case they do.

Q. (By Mr. KENNEDY.) Mr. Chairman, I would like to ask Mr. McLeod if he has seen this paper of topics suggested for statements on the anthracite coal industry, and to ask him if he could not take that paper and take up the topics and discuss them in his own way?—A. I will see. Take the railroad rates for instance. The railroad rates on anthracite coal are made exactly as the railroads make rates on other merchandise. The coal freight agents get together and make rates on coal just as the merchandise freight agents get together and make rates on merchandise. It is the same method exactly. There have been no changes in recent years that I know anything about. I think that has been the rule ever since these transportation and mining companies have been in existence. So far as I know, it is. The rates to New England are just like other rates. Sometimes they make water rates in connection with rail rates, and in different seasons of the year they are higher. It depends very many times upon the scarcity of vessels. Sometimes it is very difficult to get bottoms to transport coal to New England from the terminal points, Philadelphia or New York, and rates go up. At other seasons, when bottoms are plenty, they are lower. So that just what they are now, of course I do not know. They vary according to the season, supply and demand, and so on.

Q. (By Mr. RIPLEY.) What proportion goes by rail?—A. A very small proportion. I will give you the distribution of anthracite coal: The States of Pennsylvania, New York, and New Jersey consume about 70 per cent of the entire product; the New England States take 11 per cent, and that is very largely taken by water. A very small proportion of it goes by rail.

Q. (By Mr. CLARKE.) It has to go by rail some distance, I suppose?—A. It has to go down to tide water at Philadelphia or New York. The Reading takes most of its coal, if it is destined to New England points, to Philadelphia, because it has large shipping docks there, and it goes down through the Delaware River. It has shipping docks also at Port Reading, from which it delivers large quantities of coal to New England and to New York City. The other companies take their coal to New York because, with the exception of the Pennsylvania Railroad, their lines do not reach Philadelphia. Then the West takes about 12 per cent of the production, and the South about 4 per cent, and Canada takes about 3 per cent. Practically, 1,500,000 tons go to Canada.

Q. Is the consumption in the West increasing?—A. Very rapidly.

Q. Faster than in any other section?—A. Yes. The consumption in the West has been increasing very rapidly for a good many years.

Q. (By Mr. RIPLEY.) Is the demand from the West for a particular variety of coal?—A. Yes; although most of the sizes go there. The stove and chestnut sizes are very much sought after in the West, particularly the chestnut, for domestic purposes—cooking and heating.

Q. (By Mr. FARQUHAR.) Has the encouragement of consumption in the West come through lower freight rates on the lakes?—A. No; I do not think lower rates have had anything to do with it. The West is growing rapidly, and as the people accumulate more money they buy this luxury. Seventy-two per cent of the entire production of anthracite is a luxury now. There is very little of it used for steam, and not over 28 per cent of it is sold in competition with bituminous coal for making steam. The other 72 per cent is now almost wholly used for domestic purposes.

Q. (By Mr. KENNEDY.) The president of one of the coal roads told us in New York that 35 per cent of the anthracite is sold in competition with bituminous coal.—A. Well, I do not think so. I think I can prove what I say by statistics (examining papers). Here is the average of all sizes produced from all regions, and of this 71.72 per cent are above and the lower sizes. Those are the actual figures, so that there are 28.28 per cent that comes in competition with bituminous coal.

Q. (By Mr. FARQUHAR.) Do you care to have that paper of yours used as an exhibit in your testimony?—A. No. I simply give you the facts in round figures; the balance is a matter of detail.

Q. (By Mr. RIPLEY.) Has there not been a change in the proportion of prepared sizes to other sizes?—A. Yes.

Q. In recent years, and for what reason?—A. Well, the reason is that they have found ways by which they could use these smaller sizes. Years ago they were thrown away—thrown into the dumps. Recently the dumps have been worked over and all this coal has been taken out and marketed. In 1872 there was only 5.92 per cent of these small sizes; in 1873, 6.60 per cent; in 1874, there was 6.45 per cent. It then comes on down until we come to 1877 and we have 11 per cent, then in 1878 it was 10 per cent. Then when we come to 1888 we have 19 per cent, and in 1896 (that is my latest statistics) we have 28.28 per cent, showing how the use of the smaller sizes in proportion to the other sizes has grown.

Q. Might not that proportion have increased to 35 per cent, as stated in New York, by the present time?—A. That may be true. I am reminded by your question that my statistics are incomplete and cover only the years up to and including 1896. That is as late as I am familiar with the subject. I will make the correction. It may be 35 per cent now; I could not say that it is not; but my percentages of 71.72 and 28.28 are absolutely correct up to the date given. It will probably go on in about that ratio until the maximum is reached.

Q. (By Mr. CLARKE.) Has there been any increase in the exportation to Canada?—A. Yes; that is increasing all the time, but slowly. The greatest increase in comparison to the tonnage taken is in the West and that, as I say, results from the good times in the West. The people of that section of the country have had good crops for a good many years, and as the farmers become more able to provide themselves with luxuries, they take more anthracite coal. That is found to be the case all over the country.

Relation of independent operators to the railroad: I presume you have had all that from the gentlemen who have been before you. I myself changed their relations to the transportation companies in 1892, and the arrangement I made with them is practically in existence now. At that time I made contracts with almost all the individual operators in the anthracite region, which were designed to make a fair division between the miner and the transporter, and they were so fair that they are in existence now.

Q. (By Mr. RIPLEY.) What was the proportion?—A. Sixty per cent of the tide-water price.

Q. (By Mr. KENNEDY.) Did you make any provision as to marketing the entire output of their mines?—A. No; in fact that was not necessary. What they wanted from me, and what was agreed to, was a fair division between producer and transporter, and it is in existence to-day, except that now they are agitating the question whether they shall get 65 per cent. That is the only change.

Q. (By Mr. CLARKE.) The independent coal producers do not pay freight to the railroad company, but receive from the railroad company a percentage of the amount received for the product at tide water; is that it?—A. You may put it in that way and then you may put it in another way. For instance, the coal is taken under that agreement to divide according to those percentages. The coal is sold by the coal company, not by the transportation company, because they do not do that kind of business. The coal company takes their coal, disposes of it at tide water, and then they get 60 per cent of the average price at tide water for their share and the 40 per cent goes to the coal company for the purpose of paying the transportation to the railroad company transporting the coal to market.

Q. That is to say, the coal company, allied with the railroad company and owned by the railroad company, takes the coal of the independent operator and allows him a percentage?—A. Yes.

Q. (By Mr. RIPLEY.) Have you seen any of these recent contracts, or do you know anything further respecting them?—A. I know only what some of the individual operators have told me. They are all my friends. They have said to me that there is practically no difference except a proposed increase of 5 per cent. I do not believe that the proposed new contract has been closed; they are agitating the subject now as to whether they can secure the increase. Outside of that I think the contracts are to be practically of the same nature.

Q. Is there not a difference in this respect between these new contracts projected and those which were in effect, namely, that the new ones are for the entire life of the mine—to last until all the coal is taken out of the ground?—A. I believe that is true. I do not know of my own knowledge.

Q. But the contracts initiated under your management were not of that perpetual nature?—A. No. Mine were made for 7 or 8 years, and they were continued after that because they were considered to be satisfactory by both parties.

Q. What can you state as to the relative proportion of the independent operators along the different lines of railroad?—A. The total shipments in 1900 were 47,000,000 tons, of which individual operators mined, in round number, 16,000,000 tons, or about 33 per cent.

Q. But do not some of the railroads procure their tonnage to a greater degree from independent operators than others?—A. Yes; the tonnage of the Lehigh Valley is very largely from individual operators, more than any other. The Reading mines nearly all its own coal.

Q. There are very few independent operators on the line of the Reading?—A. Very few. The Lehigh Valley mines only—or it did last year—2,922,000 tons out of 7,675,000 tons.

Q. Approximately two-thirds is from independent operators?—A. Yes.

Q. What is the proportion of the Reading, or will you make a statement from the table you have respecting the proportion of the different railroads?—A. The Reading, out of 9,084,000 tons, mined 7,605,000 tons.

Q. What is the proportion of independent operators on some of the roads that have recently entered the territory, such as the New York, Ontario and Western? Is it small?—A. Yes. They mine 1,086,000 tons and the individual operators mined 906,000 tons.

Q. Will you give the proportions of the Central Railroad of New Jersey?—A. They mined 4,133,000 tons and the individual operators mined 1,670,000.

Q. (By Mr. KENNEDY.) I would like to ask you whether there is an allotment made to that railroad in any way, and whether this amount is under or exceeds the allotment?—A. No; the allotment question has been eliminated so far as my knowledge goes. You probably know what the percentages are to each of those interests.

Mr. RIPLEY. Yes; we have those data.

A. I do not know of any pressure that has been brought to bear on any of the individual operators. I think they are all pretty well satisfied. I do not know of any discontent that exists to-day on the part of individual operators anywhere.

Q. Can you say how this allotment is arranged?—A. That is ancient history. These percentages have been in existence from, I guess, about the time I was born. They have not been changed except as one interest would get a little more tonnage than another by some change in ownership of roads or something of that kind. I do not think they have been changed in a good many years. I know when I first entered the anthracite business about 17 years ago the percentages were in exist-

ence, and there has been no change since that time except that I increased the Reading's percentage by business methods.

Q. Was there not a time when the Reading's percentage was nearly one-third?—A. It was nearly one-third about 1870.

Q. What is the percentage at the present time?—A. Twenty-one per cent.

Q. To what degree has there been a decrease in the proportion?—A. Let me tell you how that occurred. It was under Mr. Gowan's management of the Reading, and because he did not keep pace with the increase in consumption in the market. His percentage went down because he failed to mine and market his percentage of the increase in the consumption; therefore, his competitors' percentages went up. In other words, when he acquired all these coal lands, he was mining and transporting about 6,000,000 tons of coal per annum, and that was about 33½ per cent of the entire output at that time. When I went into the Reading 15 years later, the tonnage of the Reading did not amount to over 6,500,000 tons, while in the meantime the entire tonnage had more than doubled. It was taken away from him because he simply did not hold on to his proportion. That is the reason the Reading's percentage was reduced.

Q. Well, could not the Reading very easily supply one-third of the consumption at the present time with the coal properties it owns?—A. No; it would take it some years to develop the collieries up to that capacity. You must bear in mind that there are certain months in the year that it is impossible to dispose of anthracite coal except to dealers who have storage places to deposit it. The consumer waits—the average consumer waits—until the cold months of the year to order his coal, and except for these dealers who provide storage places to take the coal from the mining companies during the months of April, May, June, July, and August, when the demand of September, October, November, and December comes on there would not be enough coal to go around, and people could not get it; consequently the companies, in order to have coal at certain distribution points in the country, have to mine it during the summer months and sell at concessions to get those dealers to take and store it and hold it until the consumers come into the market for it. The proportion of consumers who will buy their coal in the warm months when they do not need it, and put it away in advance, is very small. That has got to be done through dealers who have places to store coal and await the pleasure of the consumers.

Q. Did you have to fight the other coalers to increase the Reading percentage?—A. No.

Q. Did not you have to reduce the percentages of any of those roads?—A. Well, I would be taking a little more than my proportion of the increase.

Q. (By Mr. RIPLEY.) Has there not been a feeling for a great many years on the part of the Reading management that it was not getting its due proportion of coal output?—A. There may have been, but it was the management's own fault. They simply stood still, and the other companies, with their increased facilities, were ready to take the coal that was offering all the time, and supplied the increased demand. There are many interested in Reading throughout the country who do not know how the Reading's percentage was reduced. They say it was reduced, but it was not; its tonnage stood about stationary, and its percentage, therefore, fell off. When the entire tonnage was 18,000,000 tons per annum, about 1870, Reading had 33½ per cent of it; when it increased to 36,000,000 tons, and Reading failed to get its proportion of the increase, its percentage was reduced, although Reading had the same tonnage practically.

Q. (By Mr. KENNEDY.) Do you know of any claim that the Reading has not its proper percentage at the present time?—A. There is none that I know of.

Q. Or a claim of that kind on the part of any of the other coal roads?—A. I do not know of any. Of course, you understand, I am not in their counsel now.

Q. (By Mr. RIPLEY.) Is there not a disposition on the part of the railroad companies to provide greater storage facilities for dull seasons of the year? Are they not building large storage bins?—A. Yes; I built two for the Reading near the mines where, during the dull months of spring and summer, I could mine and store 300,000 tons of coal, and which could be shipped in October when the people wanted it.

Q. Prior to that time it was customary to store only on wheel?—A. No; they had storage places at different points throughout the country. For instance, at Perth Amboy the Lehigh Valley had large places where they could store two or three hundred thousand tons of coal. The Reading had another large depot at Port Richmond, where they could store a large amount of coal. Then they had pockets along the New England coast, where they could take the coal in vessels and store it in the pockets until the demand came from the people.

Q. Do those increased storage facilities tend to steady the price between seasons

of the year?—A. Well, no; it does not do that so much as it helps the companies to keep their collieries running and keep their men on hand to get coal to the point of distribution so it will be there in the fall of the year when the demand is made. Otherwise it would be impossible for the collieries to mine or the roads to transport enough coal to meet the demands of September, October, November, December, and so on. That is the object in doing that. Otherwise you see the collieries could not be kept running during those 8 months, and when the demand came, if it came all at once, the possible supply would not meet it.

Q. Is there any restriction upon the output, so far as you know, of any individual operators placed by the railroads?—A. Not that I know of. I think that is a great bugaboo. I do not think there is any restriction put upon the mining and transportation of coal when they can get rid of it. You could not give it away, sometimes. For instance, the market, we will say, will take 50,000,000 tons of coal. You could scarcely give away 3,000,000 more tons—the people would not want it. It is just like any other commodity.

Q. If anthracite coal were \$2 or \$1.50 cheaper a ton than at the present time, would not that decrease in price increase the demand for it?—A. You would not have the coal; you would bankrupt everybody in the business: there would be nobody mining it.

Q. But the increased supply could be utilized, could it not?—A. How are you going to use it when there is nobody going to mine coal unless he makes money out of it? If the coal was selling at that price nobody would be mining anthracite coal, because it costs \$1.90 a ton to put anthracite coal in the cars, without adding anything for transportation.

Q. Have you any statement respecting the cost and the elements of cost at the mine month?—A. I have.

Q. (By Mr. KENNEDY.) Before you go further with that: You say it costs \$1.90 to put anthracite in the car at the mouth of the mine. What is the transportation cost to tide water for a ton of this same coal that costs a dollar and ninety?—A. That is varied. I do not know just what they are charging now.

Q. Give an instance.—A. I suppose the average freight rate to-day is about \$1.50 a ton. I know positively that on the coal coming from one colliery the average freight rate on it was only \$1.36.

Q. (By Mr. RIPLEY.) To tide water?—A. Yes; that is about 7 mills per ton per mile.

Q. What would be the rate through to Boston on that basis, approximately?—A. That can be ascertained by a mathematical calculation. I would have to figure that out. You can do that by taking the number of miles.

Q. Is it on a mileage basis?—A. No; but you take the mileage as a basis and you can tell just what it would cost. Now, what do you want: the cost of coal?

Mr. FARQUHAR. The idea was this: You made the statement that the cost of putting a ton of coal on the car at the mouth of the mine was \$1.90, and \$1.36 in a special case on freight, making \$3.26. What is the selling price at tide water of that coal?

The WITNESS. The average price at tide water for coal for the last 20 years has been \$3.48 per ton; the highest has been \$3.96 and the lowest \$3.48.

Q. That would make a working margin of 22 cents up to 50 cents; 22 cents up to 50 cents for handling?—A. Yes; but there is nothing included there for the cost of coal in the ground.

Q. (By Mr. RIPLEY.) Do you include in that calculation, also, the interest charge upon the investment—that is, the investment in reserve coal lands?—A. I include in the \$1.90 a ton the interest on the investment in coal lands, that is all; nothing for the coal but the interest on the value of those lands.

Q. Is that interest charge heavy on some railroads?—A. Somebody has got to own the land.

Q. I do not object, you understand; I am simply trying to bring out the point that there is a large investment on many acres.—A. I am talking now of the average. I do not take any one company in figuring on the average, so that does not make any difference. We all know that the Reading has a large quantity of land that she has no use for now, but that does not make any difference in this statement, because I take the average of the whole region.

Q. Can you give your opinion as to how much reserve coal land the Reading has?—A. The Reading has 150 years of coal supply.

Q. How does that compare with the reserve of the other companies?—A. None of them, of course, compares with the Reading. There are some of the smaller ones that are almost exhausted. I would not like to make that statement here, because it might interfere with the values of some of those properties if taken seriously, but we all know that there are a good many of those properties that are

nearly exhausted. That is, in 10 years 10 per cent, and in 40 years 75 per cent of the collieries in the Wyoming region will be exhausted.

Q. At the present rate of output?—A. Yes.

Q. Don't lose sight of this question as to the cost of a ton of coal matter.—A. The average cost per ton on cars, including all charges for improvements, depreciation, land exhaustion, taxes, and insurance, I figure at \$1.59. Then the average cost for a ton of coal on cars, including the interest on the value of coal lands, brings it up to \$1.90. That is the average on coals; some cost a great deal more, some cost less.

Q. (By Mr. KENNEDY.) Is that a printed report?—A. No; this is a private report.

Q. No public document?—A. No.

Q. Of any railroad?—A. No. That [pointing to a book beside him] is a public document, with State information; it contains all the mining laws; that you could get if you wish it.

Q. (By Mr. RIPLEY.) The cost of carrying these reserved lands is at present borne by the price of coal and the consumer, is it not?—A. No.

Q. What pays the interest on the debt of the Philadelphia and Reading road?—A. The Philadelphia and Reading Company has a general business as well as a coal business. The coal business would not maintain the Reading road, nor would its other business maintain it. It must have all the business it can handle, and yet it has one hundred and twelve millions of capital that is not earning anything now. There are, altogether three hundred and eighty-two millions of capital of the so-called anthracite roads that is not earning a cent of interest or dividends.

Q. Does that all represent actual investment?—A. It represents actual investment or interest on actual investment. Some of these stocks have been increased from time to time by adding the interest that was unpaid, the unpaid coupons, and so on, and in the case of the Reading there are one hundred and twelve millions that don't receive any interest, and twenty-eight millions more that has just begun to receive interest. The Lehigh Valley has \$40,441,000 on which no dividends are paid. The Erie has \$172,000,000 on which no dividends are paid. The New York, Ontario and Western has \$58,113,000, making a total of \$382,554,000 that don't earn a cent.

Q. Are not many of those securities represented by bonds issued 30 or 30 years ago for the purchase of these coal lands?—A. I can't speak so much for others. In the case of the Reading—referring to the period of 1870 to 1876—the Reading invested in actual cash about seventy-five millions in coal lands.

Q. What has paid the interest on that seventy-five millions since that time?—A. Their net earnings went as far as they could, and when they did not have any earnings the interest went unpaid.

Q. Has not the fact that it has been struggling along under this heavy debt been one reason for the financial difficulty of that railroad during the period—we will say—from 1875 to 1890?—A. That is true.

Q. Could it not have put coal profitably upon the market at a cheaper price if it had not been burdened with the interest charge for this heavy debt?—A. It has been putting coal on the market as cheap as it did before it had any debt, and for less money.

Q. (By Mr. CLARKE.) Could it not put coal on the market cheaper still, but for that debt?—A. No; because it has one hundred and twelve millions that don't pay any interest.

Q. (By Mr. KENNEDY.) Put it this way. Suppose the Reading had not secured a monopoly of all those lands and held them undeveloped, is it not probable that other interests would have taken hold of them and developed them, and have brought about a competition that would very materially decrease the price of coal?—A. I do not think so, because they have not been making money in mining coal; nobody has made much money on coal except a few individuals who might happen to have a colliery located very favorably, having a good vein of the right size in which to mine, without any slate or other substances which would interfere with the cheap mining of the coal. A few of those could make money, but, in my opinion, the people on an average are getting cheaper coal to-day than though this coal had been mined by individuals, just for the reason that I stated a little while ago, that it requires a large amount of capital and a large, thorough organization to mine this coal from poor veins, as well as the best ones, and distribute it to the places where it is needed by the public at an average cost which places it within the reach of all the people. If it were not for the large aggregation of capital and thorough organization the people would not be able to get it at a reasonable price. It is not like bituminous coal. Bituminous coal is taken the

year round. Anthracite now is a luxury. We know that it is, because they have no anthracite coal on the Pacific coast, and they get along without it. If this coal should advance above a certain price it could not be sold at all; people would not take it, because, as I said before, about 72 per cent of it is a luxury.

Q. (By Mr. RIPLEY.) Could not a larger percentage of it be used for manufacturing purposes by reducing it to steam sizes?—A. No.

Q. In the cities, where, for instance, they have ordinances against smoke nuisances.—A. No; take the city of New York, for instance. There is a city that has in existence those ordinances. It can get all the pea, buckwheat, and rice coal it needs. Still the New York people will use bituminous coal. Bituminous will make more steam than anthracite coal.

Q. Even of the smallest sizes?—A. Yes. There is one thing about this anthracite business that a good many people do not understand. As we have shown here, it costs double to produce this coal that it does to produce bituminous coal, and when you sell 28 per cent of it at a loss of \$1 a ton you have to add such loss to the price of the other sizes in order to get cost for the whole product, and before you can make any money on the 72 per cent the loss on the 28 per cent must be added to it. They must sell the 28 per cent in competition with bituminous coal, as I say. On that 28 per cent they lose a large amount of money, and if a larger percentage of the small sizes were produced the cost of the domestic sizes would be greater to the consumer.

Q. What are the average wages of coal-mine operatives?—A. I figure them the year round. They do not work every day in the year, as you probably know, and I estimate they earn about \$10 a month to the man. The average number of boys employed is probably 12 per cent of the whole number of employees, and they get about half that wages. Just to show you the difference in the cost of producing anthracite and bituminous coal, I cite the fact that it requires 145,000 men to produce 47,000,000 tons of anthracite coal, and 91,000 men to produce 73,000,000 tons of bituminous coal in the State of Pennsylvania. That statement at once shows you the great difference in the cost of producing the two coals. These statistics are public property, gathered by the State, and there can not be any question about their accuracy.

Q. (By Mr. KENNEDY.) Is there any foreign trade in the anthracite business?—There is practically no foreign trade except with Canada. It is not possible. I had that subject thoroughly investigated to see whether it was possible to create an export trade to Europe for anthracite coal, and I found it absolutely impossible. The cost price of anthracite coal with freight added would be prohibitory. There is no back lading for coal-carrying vessels, and this is something that must be taken into account when considering the question of exporting coal. The only export coal that we have been able to dispose of has been to Canada, and, of course, the trade there is natural, because Canada has no anthracite coal. They can't get it anywhere else, and we can deliver it to them at reasonable prices.

Q. (By Mr. RIPLEY.) The Philadelphia and Reading Company could have produced more coal than it does with its facilities if operated to its full capacity the year around, could it not?—A. Certainly; if it could dispose of it.

Q. Did the existence of such a surplus have anything to do with the entrance of the Philadelphia and Reading into the New England territory in 1892?—A. No; my object in that move was to increase the Reading's tonnage without getting into such a row with my neighbors that the whole structure would go to pieces. There has been a well-recognized rule among those companies for years that where the transporting company owns the rails the tonnage distributed on those rails should be considered as belonging to that line; therefore, they would not precipitate a war that would be ruinous. My object in going into New England was to get, in that way, and under a well-recognized rule of the distribution of tonnage, an advantage that I could not get in any other way. The Boston and Maine and the New York and New England handle about 3,500,000 tons on their rails. That is the tonnage I intended to get for the Reading Railroad without a fight. If I could have carried out my plans I should have secured that large tonnage to the Reading, and the other lines would have had to give it up. It was a legitimate vantage I was securing for the Reading road.

Q. Which would have increased the tonnage very considerably?—A. Very largely; and would have enabled the Reading management to pay dividends on all its securities.

Q. Without increasing the price of coal in New England?—A. Yes; without increasing the price. And another thing I intended to do was to eliminate very largely the middlemen. The amount of money between what the companies get for this coal and what it costs to the consumer when it is put into his cellar is simply outrageous. It is there that the greatest reform could be made in this business, and that is what I intended to do, and I have no doubt it will be done

some day. I intended to erect large pocket depots in certain places in the city of New York and other cities where a man with a cart could go and get coal for the people; there would be nothing between the producer and the consumer but the man, the horse, and cart, because the coal would be shot right into a cart. Instead of putting it into yards and reloading it at unnecessary expense, I would have simply a cart and horse between the producer and consumer, and the amount of money that could be saved would be enormous. For instance, it costs me to put coal into my cellar in New York a dollar and a half a ton more than I know that the man who delivers it to me pays to the coal company for it. Now, that extra expense is simply absurd, and there is where the greatest reform could be made. It is so all over the country. You may go into any small town anywhere in the country and you will find twice as many dealers there as necessary to supply the residents with coal. In Philadelphia, along Ninth street, you will find coal dealers almost on every lot, where one good large supply station would do that business just as well as all those dealers and eliminate an expense of at least a dollar a ton. If a man has a yard, we all know very well there must be three, four, five, or ten thousand dollars' expense connected with that yard in some way or other, which could just as well be saved provided large stations, such as I have spoken of, were established the coal put in pockets, and screened as it went out in a cart. Then instead of \$1.50 a ton, it would cost about 30, 40, or 50 cents at the most for delivery to the consumer.

Q. (By Mr. CLARKE.) Why could not the railroad companies and coal companies bring about that reorganization of business?—A. That was my intention. I think it could be done.

Q. (By Mr. FARQUHAR.) Is there an opposition among these coal dealers maintained, so that they are kept in business—in finding customers and distributors; is there opposition?—A. Yes.

Q. Is there sufficient opposition to keep that business up among local coal dealers?—A. Oh, yes. Of course, in some places they have retailers' associations, but I find in buying my coal in New York there is considerable opposition and competition between them. I have taken particular pains, as you may naturally understand, to see whether one would sell at a lower price than the other, and when my coal was put in this last summer I telephoned to a coal man and got a certain price, and telephoned to another man to quote prices, and the latter sold it to me at 25 cents less per ton.

Q. Does that shading come out of the retail dealer and sales agent?—A. I think it came out of me. I do not think I got full weight. [Laughter.] In fact, I had that thing investigated myself in various places, and I caught I do not remember how many sending around short weights.

Q. (By Mr. KENNEDY.) If the citizens of Washington pay \$8.50 and \$6.75 a ton for coal, how much would there be saved if this arrangement of yours you speak about were put into effect—just the man and cart between the producer and consumer?—A. I think 75 cents a ton could be saved.

Q. That is the profit there is in it to the retailer?—A. Yes. There is no question that that saving could be accomplished. A couple of large pocket stations in this town would supply the whole city. One on each road would supply the city conveniently.

Q. Seventy-five cents a ton would be very little, considering the investment a man had in his business, would it not?—A. That depends. It depends on how much he could do. The trouble is so many go into the business that they must have a large percentage in order to live, and there is where I think the business is conducted on wrong principles. I think the people who control the coal ought to control the distribution of it in the cities.

Q. (By Mr. FARQUHAR.) The entire cost of present distribution, then, to consumers, you would say, is just an extra cost put on to consumers—what it costs to run every yard and pay the salaries of the men in the yard, and delivery teams, that is placed on the consumer's coal?—A. Yes; of course it is. You can see that these companies are selling their coal at low prices in New York by those figures I give you, which are absolutely correct. I vouch for the correctness of them. I will tell you why: Those figures are the result of certain contracts under which settlements were made where the money passed from one man to the other, and there is no better way of getting at a true result than that, because each man is bound to see that he gets what is due him. There can be no question about those figures.

Q. (By Mr. RIPLEY.) Would this plan of yours be more feasible if the railroads more fully harmonized their interests by consolidation than at the present time?—A. They can't carry it into effect in any other way than by harmonizing their interests. My idea was to benefit the consumer as well as the corporations I represented, by bringing every interest, so far as possible, into one harmonious

organization, thereby saving a large amount of money that is now thrown away in the manner I have just described to you.

Q. But an essential feature in that plan meant the consolidation of the railroads.—A. Not necessarily. What I was striving to do was to control the sales of coal; then to establish reasonable and uniform prices based upon cost of production, and transportation according to mileage to points of distribution: to do away with near-by high prices and far-away low prices, and the excessive and unwarranted commissions and profits to middlemen, which for many years have worked a great injustice to both the consumer and the producer.

Q. (By Mr. TOMPKINS.) In that connection, what would prevent the railroad company owning the transportation facilities and owning the coal mines, if they desired to utilize their facilities for the best profit, putting the price of coal to a point where it would cost the consumer a great deal more, and where the only beneficiary would be the railroad company and the coal-mining company? What would be the protection against that?—A. The people would not take the coal; they could not sell it.

Q. They would be compelled to take it?—A. No; the people are not compelled to have anthracite coal.

Q. You are speaking only of anthracite coal?—A. That is all. You can't sell anthracite coal above a reasonable price. The moment you get to such a price you have got to stop. The price will take care of itself, just as sure as you live.

Q. (By Mr. RIPLEY.) An independent coal operator in New York testified before our subcommittee that the price of coal at the present time is very near the upper limit for maximum sales. Have you any opinion respecting that statement?—A. I do not agree with him. You can get more for anthracite coal, and ought to get more for it to day.

Q. More than the present price at tide water?—A. Yes; anthracite coal ought to be sold so that everybody could make a reasonable profit out of it at an average of \$4 a ton.

Q. (By Mr. FARQUHAR.) Four dollars?—A. Yes.

Q. (By Mr. RIPLEY.) What is the price this year at tide water?—A. That I can not give you now, because it is too soon to get average figures. For the year 1899 it was \$3.92.

Q. That was the average price for a long term of years?—A. No; it was the average price for 1899. I took the average for 20 years just to show you how evenly the price has been running.

Q. (By Mr. KENNEDY.) Didn't you say the retail price is as high as could be maintained and permit the doing of business on a large scale?

Mr. RIPLEY. The highest price consistent with maximum demand?

The WITNESS. Yes; but if you eliminate the middlemen you do not increase the price of coal to the consumer, but you make a good deal more money.

Q. If by reason of these economies of which you have spoken the cost of putting the coal at tide water were reduced by 75 cents or \$1 a ton, would not the public be entitled to some proportion of that saving?—A. Certainly. My intention was to give the public half of it, and the other half would have made the companies which I represented pay dividends. That was my object.

Q. (By Mr. CLARKE.) Why should these anthracite coal companies sell coal in competition with bituminous at a loss?—A. Because there is no use for the small sizes except in competition with bituminous coal; they could not give it away. It must be taken by people who use it for making steam.

Q. Why is it not better to let it remain in the ground than to take it out and sell it at a loss?—A. Because you can not get the large sizes without the smaller ones, and if you did not sell them at whatever they are worth in the market in competition with bituminous coal, you would be so much worse off. The process of making anthracite coal is this: Here is a vein, we will say 8 feet in thickness. That coal is all mined out in the first place as you mine bituminous coal. You take the "run of the mine," and it is put in the breaker and crushed in order to get the different domestic sizes, and then it is run over screens, and as it passes through the troughs there are little boys sitting there and picking the slate out. The whole 50,000,000 tons that was produced last year passed under the eyes of those boys; they see it all and pick out the slate as it goes by. When it passes over the screen the very finest of it goes through first. Then it passes over another sized mesh, then another size, and so on, and when it gets down to the bottom you have the largest sizes of the coal; but all sizes are made through one process, and therefore it costs just the same to make one as to make many. So this coal you have to sell, whether it be culm, pea, buckwheat, or stove—the latter the highest price—costs just the same at the mine, and while some of the sizes will bring \$2.25, other sizes may bring only 50 cents. The culm is the very smallest. Then you come to the rice, then the buckwheat, then the pea, just according to the size of

the screen, and as all those sizes must be made in order to get what we call the domestic sizes or higher-priced sizes, it is obvious that a producer must sell his whole production of the small sizes at whatever price they will bring in the market in competition with bituminous coal or suffer a total loss on say 80 per cent of his mine production.

Q. These are the steam sizes that compete with bituminous?—A. Yes.

Q. (By Mr. FARQUHAR.) Does not the culm become competitive for domestic purposes by the use of fans?—A. It can't be used for domestic purposes because it is so fine that it will run through the grate; nor can they use it in a locomotive as the exhaust would drive out such a large proportion of it. They have not yet been able to devise any way of using the small sizes except for steam purposes.

Q. In recent years, how far has fuel gas and illuminating gas, used in the kitchens of the country, competed with anthracite coal?—A. That is a very difficult question to answer. It can only be answered in this way: If it had not been for these other fuels coming into the market in competition with anthracite coal, instead of mining and transporting 50,000,000 tons, as they now do, they would be mining and transporting 75,000,000 or 100,000,000 tons. It has prevented the growth in the use of anthracite coal that otherwise they would have had.

Q. (By Mr. RIPLEY.) Has this substitution not, however, resulted in the conservation of the reserve supply for future years?—A. Of course. Twenty-five million tons you could have mined and sold is not mined or sold; it is still in the ground.

Q. (By Mr. FARQUHAR.) That does not help the present generation?—A. No. But it is a fact, and, besides, you know, there is always more coal found when you come to dig it out than was ever estimated when it was in the ground. Experience has taught us that. I believe there is coal enough for 200 years instead of 150.

Q. In the Reading lands?—A. No; in the entire region.

Q. How will the reserves of other companies compare with those of the Reading?—A. The Reading owns about one-third of the whole.

Q. (By Mr. RIPLEY.) There will come a time, unless the ownership changes, when the Reading will own the entire anthracite coal in the ground of the country?—A. I do not know what warrants you in thinking that.

Q. I ask you the question—your judgment on it—that is all.—A. I do not see any indication of that result at present.

Q. (By Mr. KENNEDY.) Have the other companies reserves that will last as long as those of the Reading company?—A. Not all of them.

Q. Have any of them?—A. I could mention a company that has 25 years' reserve. That is the lowest. From that it will run up close to the Reading. I know there are other companies that have a very large reserve.

Q. (By Mr. RIPLEY.) Are you acquainted with the estimate made by William Griffiths in the Bond Record of years ago respecting the anthracite coal supply?—A. I have read that, but I have forgotten. I estimate we have 15,000,000,000 tons of anthracite coal in this region.

Q. (By Mr. KENNEDY.) You said a while ago that 75 per cent of the reserves in the Wyoming Valley would be exhausted in 10 years.—A. No; not quite that—10 per cent in 10 years and 75 per cent in 40 years.

Q. They have reserve lands?—A. Oh, yes. The life of a colliery is about 30 years. Then they must open up new collieries, and that, of course, is a great expense, for which a sinking fund should be established, and which is not now done except by a few companies. Remember, you have to have a new colliery, a new plant every 30 years, and there are a great many millions now invested in them.

Q. (By Mr. RIPLEY.) Are the most easily or the least easily worked portions of the territory now being developed?—A. The veins nearest the surface are being worked out first. You know there is a good deal of chance in sinking shafts. You may strike a vein in one locality, in perfect place where it has not been disturbed at all, and a few hundred feet away you may run into a break, and that holds good all over the region. It is only by experience, by putting down shafts that one can tell whether those veins are in place or whether they have been squeezed out, as they are in some places. For instance, I have opened collieries on some tracts of land and got one first-class colliery that would produce cheap coal, and the other one would be good for nothing and the expenditure wasted. That is another thing that must be taken into consideration in estimating the cost of coal. There is a good deal of hazard in sinking these shafts until developments have gone sufficiently far to demonstrate just where the vein is in place.

Q. The belts of the Schuylkill region, however, are really more difficult to work than in the Wyoming, are they not?—A. It costs 20 cents a ton more to produce in the Schuylkill than in the Wyoming region.

Q. And from Schuylkill a large part of the future supply of the country will have to come?—A. Yes.

Q. As a consequence, then, we have to expect in the future a greater expense of mining than at present?—A. Naturally; as you go deeper the expense will increase. You know something about the formation, don't you, of the coal veins? We have, for instance, 16 veins in some places, with a certain amount of rock between them, and the lowest one or those may be down 3,000 feet in some localities. Naturally, as the veins near the surface are worked out and you have to go deeper and work much deeper veins, it will cost more to produce coal, and in a great many places the deeper you go down the more water you encounter. For instance the last year I worked the Reading mines, we pumped two tons and a half of water for every ton of coal we raised.

Q. (By Mr. RIPLEY). Are you aware of any tendency toward consolidation of the different railroads which serve the anthracite coal territory?—A. No, no; I am not aware of any.

Q. I refer to the leasing or the purchase of one road by another?—A. No; I do not know of any. All I know is what I see in the public prints, that one company has purchased the stock of another, and so on. That you know as well as I. I have no inside information of anything in contemplation.

Q. (By Mr. KENNEDY.) Do you know anything about the community-of-interest plans?—A. No; not except in a general way. That is all on the surface. I think everybody knows about that, pretty well. One company may buy the stock of another, and I must say, I think it is a good thing. I think it will produce better results for the people.

Q. The community-of-interest arrangement?—A. I do believe in it. I believe when you get stable rates and reasonable rates the country will be more prosperous. I believe that there is nothing that will produce greater prosperity than equal, reasonable, stable railroad rates.

Q. (By Mr. TOMPKINS.) That suggestion applies to all railroad rates?—A. Yes.

Q. Then we come to the original question: What would prevent those in control of the situation from taxing the people for the benefit of the combined interests?—A. The people. You can't get any combination of capital that is big enough in this country to rob the people; it can't be done. The man doesn't live, and could not live, that would attempt it, in my judgment. That question will take care of itself.

Q. (By Mr. KENNEDY.) They are not attempting it, you think?—A. No; I do not believe there is any such intention on the part of any men, and I know them pretty well. I know what my own methods were in trying to accomplish the same thing, and I do not believe there is any man engaged in it to-day that is not engaged in the work of self-preservation. I do not believe otherwise. I have no interest in saying so. I am a free and independent citizen, but I believe that, and I think I understand the situation pretty well.

You ask for a division of this tonnage. The following table gives the figures:

	Per cent.
Pennsylvania and Reading.....	21
Lehigh Valley.....	15.65
Delaware, Lackawanna and Western.....	12.57
Central Railroad of New Jersey.....	11.48
Pennsylvania Railroad.....	11.32
Erie Railroad.....	11.51
Delaware and Hudson.....	9.55
Delaware, Susquehanna and Schuylkill.....	4.26
Ontario and Western.....	2.86

Q. (By Mr. CLARKE.) Has the New York Central recently acquired interest in the anthracite regions?—A. Not that I know of. I do not believe that the New York Central as a corporation has any interest in the anthracite region. I understand that some of the stockholders own stock in some of the anthracite roads. I do not know.

Q. It has been stated within a few months that the New York Central owns certain contracts, certain short pieces of road, and that it was about to build a connecting link between them and the coal fields?—A. Does not that report refer to the bituminous fields?

Q. (By Mr. RIPLEY.) Does it not refer to the Erie and Wyoming Valley, perhaps, which was an independent road of the Pennsylvania Coal Company?—A. Well, the Erie has got that.

¹ The Erie has recently taken in and added to its tonnage so as to give it 11.51 per cent.

Q. (By Mr. KENNEDY.) Do you refer to the report of control of the Delaware and Hudson?—A. If they have control of it, I don't know it.

Q. (By Mr. KENNEDY.) Is it true that the Reading fixes the price of coal and that other companies follow the lead of that company?—A. That I can not tell you, because I do not know what their policy is now.

Q. Can you say whether that was true in the past?—A. I believe that when I was president of the Reading I had considerable influence with other people; yes. That is what I was there for.

Q. (By Mr. RIPLEY.) Are you aware of the purchase of the Central Railroad of New Jersey by the Reading?—A. Not except from the public prints.

Q. I mean by the public press. Would not a combination that increased the tonnage of the Reading directly give that company a still more important voice in fixing the price?—A. No; it does not increase their tonnage at all.

Q. Not the direct tonnage, but the tonnage controlled by the two roads; it adds the proportion formerly carried by the Central Railroad of New Jersey to that formerly carried by the Reading, does it not?—A. No. How does it do that? They all go on; they each have their coal; they each have their coal companies; transporting it does not change their movement at all.

Q. Would it not be an advantage in the case of having two parallel lines that each carry coal under one management?—A. That is impossible; it never will be done; it can not be done; it is out of the question.

Q. Do you know of any legal bar to the actual consolidation of these roads?—A. Yes.

Q. Where is it found?—A. I think the laws of New Jersey now prevent the combining and consolidation of railroads.

Q. Will you state what was the cause of the receivership of the Reading Railroad? Was it the leases of 1892?—A. Actual lack of capital to carry out its own plans.

Q. Was not there also a constitutional provision prohibiting such a lease?—A. Yes; the State brought suit to cancel the lease.

Q. What was the outcome of that suit?—A. The suit was discontinued because the Reading went into the receiver's hands; the parties on both sides thought it was not to their advantage to continue the suit, and it was discontinued.

Q. Did not Chancellor McGill render a decision at that time?—A. If my recollection serves me right, I do not think he did; I think the suit was discontinued before he rendered any decision, if my memory serves me right. I do not think he did.

Q. A constitutional provision prohibiting the lease of the Lehigh Valley or of the Central of New Jersey to a Pennsylvania corporation would not operate against an actual purchase?—A. No.

Q. So that a purchaser at the present time would not be prevented from making his purchase by the legal obstacles which stood in the way of consolidation in 1892?—A. Oh, of course not. I know of no way that you can prevent a man from buying property if he has the money to pay for it.

Q. Are you aware of the terms, as printed in the public press, under which the Pennsylvania Coal Company was transferred to the Erie Railroad?—A. All I know about it is what I saw in the public press.

Q. Have you formed any judgment as to the financial expediency of such a purchase?—A. I think it is wise.

Q. For the Erie Railroad?—A. Yes.

Q. And for what reason?—A. Because it secures to that road a tonnage that might otherwise get away from it; I think it was a good move.

Q. Have you any judgment as to the price paid for the securities of the Pennsylvania Coal Company so far as that price was mentioned in the public press? Was it high compared with the financial position and possibilities of the company?—A. No; I think it is worth the price. You must remember that anthracite coal is getting more valuable with every ton that is taken out. You can never replace it again. The Pennsylvania company has a large tonnage left unmined, and that tonnage is now secured to the Erie road. There has been no money in mining; they want the transportation of the coal.

Q. The transportation of that coal, then, is profitable to the road?—A. Reasonably so only.

Q. It would seem that if they assume so great financial responsibility there must be considerable profit?—A. The Erie will pay off all that debt through the sinking fund of 10 cents per ton, as they have provided, and it will be wiped out, and without any burden to the Erie.

Q. That 10 cents will be put on the price which will be charged for the coal at tide water, will it not?—A. Not necessarily. It will be sold in competition with all the other coal and at the same price.

Q. It will simply reduce the profits on coal for somebody?—A. Yes; it will be that much less than for some other company which has not been conservative enough to provide a sinking fund, as all should do. And, as all must sell at the same price, the one that does not put that 10 cents in to liquidate debts of the same nature will meet with a day of reckoning which I do not wish to contemplate.

Q. The debt provided for by the sinking fund will be extinguished when the coal is exhausted?—A. Yes.

Q. Is that a common practice with the other roads to your knowledge?—A. It is receiving more consideration now, because people are seeing that they must do that to liquidate the debts for large sums of money which have been invested in coal lands.

Q. The foundation of such sinking funds is going to still further increase the cost of putting the coal upon the market as years go on, is it not?—A. I suppose that will be taken into consideration, just as you take into consideration the increased amount paid to the miners or the increased cost of taking coal out of deeper mines and so on; that is perfectly natural.

Q. (By Mr. KENNEDY.) Now, how many times has the Reading been in the hands of receivers, Mr. McLeod?—A. Four times, I think.

Q. Can you state what the causes were that forced the receiverships in each of those cases?—A. It increased its debt too largely in financing the coal lands with bonds; it could not earn the interest on the bonds and had to go to the wall.

Q. In any case, was it the result of ruinous competition, so called?—A. Yes; it sold coal below cost; away below cost. It sold coal before the Reading receiverships as low as \$2.48 a ton at tide water.

Q. (By Mr. LITCHMAN.) What was the effect upon the volume of stock and bonds of the reorganization of the Reading Railroad after the receivership of 1893?—A. The debt was increased somewhat.

Q. Was not the cause of that receivership the excessive capitalization and issue of bonds incurred in financing the coal operations?—A. No; the cause of that receivership was a lack of capital. For instance, when I leased the Lehigh Valley and the Jersey Central and took over their coal operations and the individual operators as well, I found that I had \$13,000,000 invested in coal and in carrying the customers of the companies. The Reading did not have that much capital, and I had to borrow \$8,000,000 of that \$13,000,000. Then the panic of 1893 came on. I had arranged to fund that \$8,000,000 of floating debt by selling securities, etc., giving me a working capital of \$17,500,000, but the parties who were to furnish the money had six months in which to do it, and on account of that panic coming on before I could get the money, there was nothing in the world for me to do except to put the Reading in the hands of the receivers to save its securities. That is the reason I did it.

Q. Was it not necessary at that time to purchase outright large amounts of coal produced by independent operators?—A. It was not necessary. I did it. I made all those contracts, and that coal was purchased under those contracts, which proved to be a good thing because it has stood ever since.

Q. Would these independent operators not have interrupted the Philadelphia and Reading Railroad at this time had you not purchased their coal?—A. No; I never had any trouble with the individual operators. The individual operators were all willing to follow me always. I made that arrangement with them, and they considered it fair. There were some on the line of the Lehigh Valley that had contracts outstanding then at 55 cents. I canceled them voluntarily, gave them all 60, and brought them all in under one general plan.

Q. Have you ever shipped any coal for the firm of Cox Brothers?—A. Yes; I made a contract with Cox Brothers and built a road in to get their coal.

Q. Was the Philadelphia and Reading Railroad involved in the well-known case of Cox Brothers v. The Lehigh Valley before the Interstate Commerce Commission?—A. No; not at all.

Q. There was complaint at that time, was there not, on the part of the independent operators, that they charged an undue amount for the carriage of their coal?—A. I only know by what I saw in the press that Cox Brothers had a suit pending with the Lehigh Valley.

Q. Was not the price charged for transportation by the Lehigh Valley practically the same that was charged by all the other roads?—A. I think so. I think the roads all charge the same rate.

Q. Was not that case of Cox Brothers v. The Lehigh Valley practically, then, a statement of the attitude of the independent operators toward all the anthracite coal movers?—A. No; I do not think it was. An individual might have a grievance that some other individual would not have.

Q. Assuming that its grievance, however, was purely a financial one, not personal, would that still not be true?—A. One individual might not be satisfied

with what another individual would be satisfied with. I do not know what the Coxe Brothers claimed; I never saw what their claim was; I never read it. Now, Coxe Brothers may have sought to get something that was not fair—I do not know about that—but I believe, so far as my knowledge goes, the individual operators were always fairly dealt with, because I dealt with them myself, and I know I dealt with them fairly.

Q. At the time of entrance into New England territory was the controlling interest in the stock of the Boston and Maine actually purchased?—A. No.

Q. Will you make any statement respecting the character of that control?—A. That was largely through personal influence.

Q. It was not, then, by actual purchase?—A. I purchased enough of the stock to give me what we call a standing with the rest of the stockholders of the property, and by that I persuaded them to make me president of the road, but I could not control the company by actual vote—nothing like it.

Q. Is not that situation typical of the situation of many other roads in the country, namely, that the actual control of far less than a majority of the capital stock gives virtual control of the policy of the company?—A. That depends largely upon the standing and influence of the party who holds a large interest; that is, the personnel enters very largely in an arrangement of that kind, as you can readily understand. An objectionable party certainly, as you know, can not buy a small interest in a road and control it.

Q. But parties in good financial standing might by getting absolute control of 30 per cent of the stock of a railroad dictate its policy in many instances, owing to the apathy of the remaining faction of the stockholders?—A. If they dictated a policy that was in the interest of the majority of the stockholders, I imagine they would get along all right; but if it was not, I do not think they would stay there very long.

Q. (By Mr. KENNEDY.) I would like to ask you, Mr. McLeod, what effect the strike of 1900 had upon the price of coal?—A. It had a tendency to advance it, and did advance it. I will give you another instance. We had a strike the latter part of 1887 and the first part of 1888, when the price of coal went up immediately; I will show you how the average price went up. For instance, in 1887 the average price was \$3.67; but as the result of that strike from the last day of the month, 1887, running into 1888, the average price for the whole year of 1888 was \$3.86.

Q. I would like to ask you whether, in your belief, the strike of 1900 was one that was welcomed by the railroads as a good thing in their interest?—A. No; I think they did all they could to prevent it.

Q. One gentleman said in New York on that line that Mitchell and the Mine Workers' Union did what the coal roads and coal producers had never been able to do; that they brought about a complete stoppage of work, and the owners were thereby enabled to work off their surplus stocks at increased figures, and therefore that the strike was a good thing for the railroads, a good thing for the independent operators, and a good thing for the miners.—A. That has been the practical result. But I know personally, because I know all those men at the head of these properties, that they did not want a strike; they did all they could to avert it. The very fact that they granted the miners' demands shows that they did not want any strike.

Q. Did political influence have much effect in settling that strike?—A. Oh, that I know nothing about.

Q. (By Mr. CLARKE.) Who made the money when the price advanced?—A. The miners, I think. That is the way it looks to me up to this time. I do not think coal has gone up enough to let them out yet.

Q. How about the middlemen?—A. The middlemen always get about the same. Their commissions are about the same, no matter what coal costs or what price it brings.

Q. Did not the middlemen advance the price before there was any advance in the price at the seaboard?—A. They may have done so. Probably they took advantage of the situation to ask an advance on some coal they had on hand—naturally.

Q. I would like to inquire now, although it may possibly be a little out of the connection, how the coal is mined by the coal companies—whether by employing men or by contracting the work?—A. By both methods. Usually in the mine there are some of the miners who work on a contract. They get so much a yard for cutting coal and they employ their own help. Then, a great many work by the day, and I can give you the average that those men make on the surface and under ground. The average wage for above-ground foremen, for instance—you know there are foremen above ground and foremen under ground—is \$2.71 a day, and the average for mechanics above ground is \$1.92. The average for laborers above ground, \$1.29; boys under 16, 62 cents. Below ground foremen get \$3.05; miners, \$2.40; laborers, \$1.63; boys under 16, 89 cents a day.

Q. Does that mean steady employment during the year?—A. No; the average is about 200 days a year.

Q. (By Mr. KENNEDY.) I was going to suggest that Mr. McLeod should put in his testimony a very great deal of material that he has that may not be brought out by our questions.—A. I would be glad to do so, because I feel that the more this subject is talked about and ventilated, the better it will be for everybody. For instance, a committee of the legislature of New York was appointed to investigate the subject when I leased those properties, and there was a great hue and cry that I was trying to make a combination to increase the price of the necessities of life, and all that, and I said: "Gentlemen, I wish to go before you and tell you everything I know. I would like to bring our books and show you what we have been doing, because I believe that the more that is known about these things and about this business, the more our methods will appeal to your sense of justice and fairness." And I think so now; and while I am not directly interested in the business at this moment, I have not changed my mind a bit. I think that the more this subject is brought to the attention of people like yourselves, who are interested in making laws for the protection of everybody, which means fairness to man and man, the better it would be for the people and for the corporations too. Of course, all that I think and believe is in the direction, as you understand, of just what is being done, because I believe that the close control of these corporations will produce better results to the people and better to themselves than if they were allowed to run down by ruinous competition until finally the people will have to pay more money for coal. I say that because, as I have said here before, you can only mine and you can only distribute anthracite coal to the consumer within a short period of the year—not over 6 months. There are 6 months that you can scarcely give it away. You might, approaching the season when they want to consume it, but after, in the spring months, you can not do anything with it; and the only way that you can mine and handle and distribute in the interest of the people is to have it done by the great corporations. Corporations having large capital, who can mine and produce cheap coal and give it to the consumer when he wants it, and you can not do it in any other way. You can readily see now if this coal was not mined in May, June, July, and August, and if those mines were idle all those months how it would be. The interest on the investment in the plants and on everything is accumulating all the time, your fixed charges are going on, and the investment would have to be doubled if the companies had to mine and move the coal during the months when consumers will take it. Then no individual would be capable of conducting the business in the way in which it must be conducted. It must be done by a large aggregation of capital and thorough organization on a large scale. Bituminous coal mining is very different. Bituminous coal is taken the year round in about equal proportions. But anthracite is a commodity that is manufactured, practically—put through these breakers and all this process—and it is only needed within certain times of the year. And I tell you if it is not done in this way it will cost the consumer very much more money than it is costing now, and sometimes, unless done in this way, consumers would not be able to get it at all. You can not mine and move coal as fast as it would be needed during those months of the year when everybody wants it.

Q. Last fall, as we understand, the mine workers had only about 12,000 men of that anthracite region in their organization. We now understand that they have upward of 80 per cent of the men organized, and that they are moving in the direction of getting recognition for their union; that is, that they shall confer and arrange a scale of prices and fix conditions for every succeeding year, as is done in the bituminous regions. I would like to ask you what is your opinion as to the wisdom of the managers of the railroads and coal carriers and operators meeting them on this question of arranging a scale of prices every year for them?—A. I can best answer that question by stating what I did. When I was in a position of authority and had strikes on my hands—I have had some of the largest strikes that we have had in this country—my policy was never to raise the issue as to whether a man belonged to a labor organization or not. He would come and see me; if he was respectable and respectful when he was in my presence I did not care who he was; and I found that that way of treating with men was the very best. That is a practical answer to your question. I believe that the best way to deal with men is to look them square in the face and talk to them and try to arrive at something that is reasonable and fair without resorting to force on either side. I believe in that policy, and I believe it can always be pursued.

Q. Do you not believe that the men can get better results for themselves by going to the corporation in an aggregate capacity and conferring with them in that way?—A. I do. I certainly think that men make a mistake when they delegate their power to some other party. I think that men would always get what is fair in the end if they would be frank and go to their own people. I do not believe

there is an employer in the country—if there is I am very sorry—that will not meet with his men, no matter whether they belong to a labor organization or not. Men have the right to organize, in my judgment, just as well in the capacity of labor as they have in any other. I do not believe in discriminating.

Q. I would like to ask your opinion about the present emergency which seems to be upon the people in the anthracite coal business. The men are organized, over 80 per cent of them; they want the companies to meet their representatives in conference and fix the price and fix other conditions, more for recognition of the union than anything else. If that does not mean an increase in the wages, which we understand it does not at the present time, but just a recognition of the union as it is recognized in the bituminous fields, do you think it is the part of wisdom for the mine operators to hold out against giving this recognition that they desire and thus bring about a cessation of work and perhaps a higher price for coal?—A. Their action one way or the other means nothing. It is mere words, because when they advanced the wages of the men they gave them all the recognition that they needed. As you say yourself, there were only 20 per cent of them in the organization before that and now there are 80 per cent in it. There is a substantial recognition. Now, no matter whether they meet them or not, those men are in the organization; they are there, and it is a mere matter of words which do not change the facts at all as I view it. And it does seem to me that there ought to be some way when you have got a great body, an army of 145,000 or 150,000 men, of meeting them, so long as they are respectful. It does seem to me so. Of course, if meeting them means that they are going on demanding, and are not satisfied with obtaining reasonable concessions, then it becomes a question of business policy. One concession, I am sorry to say, often means to men of that kind another demand. They lose their heads and they think they can get anything they ask for, and they are so likely to go on and crowd the employer to the wall. In other words, they will simply make the employer say, "I will not do anything; you may strike if you wish." That is the danger.

Q. They are human, and the employers and capitalists of the country are human too; and you think there is also danger of the combined capital of the country going on and crowding more and more because it has the power to do it?—A. No; I do not.

Q. Do you think the capitalists will be more reasonable than the men who work for their daily bread will be?—A. Why, you have an instance right here. One company has been buying into another recently, and the very first time the miners asked an advance they got it; and they are more likely to get it under those conditions than they are under the other. The individual operator could not have afforded to give them that advance without the corporations had backed it up, and they are more likely, in my judgment, to get better wages as a result of the harmonizing influences which are going on.

(Testimony closed.)

Whereupon, at 4.50 p. m., the commission took a recess until Monday, March 18, at 10.30 a. m.

WASHINGTON, D. C., April 2, 1901.

TESTIMONY OF MR. IRVING A. STEARNS,

President, Coxe Bros. & Co., Incorporated.

The commission met at 2.45 p. m., Mr. Phillips presiding. At that time Mr. Irving A. Stearns was introduced as a witness, and, being first duly sworn, testified as follows:

Q. (By Mr. PHILLIPS.) Will you state your full name and address and your business position?—A. My name is Irving A. Stearns. I am president of the Coxe Bros. & Co., Incorporated. Our main office is at Drifton, Pa., but I spend most of my time at 143 Liberty street, New York, and my residence is at Wilkes-barre, Pa.

Q. Have you any official relation to other corporations engaged in the coal-mining industry or transportation?—A. I am president of the Delaware, Susquehanna and Schuylkill Railroad Company, which is owned by the same parties that own Coxe Bros. & Co.

Q. Will you describe the location of these enterprises?—A. The mines of Coxe Bros. & Co. are located in what is known as the Lehigh region. They are scattered over considerable territory. [Indicating on chart.] Everything as shown here in purple evidently belongs to Coxe Bros. & Co.; but as to the location, as shown by this map, I can not designate each colliery.

Q. Will you describe the location of the Delaware, Susquehanna and Schuylkill Railroad in general, its length and its principal connections?—A. It connects with the Pennsylvania Railroad at what is known as Gum Run Junction and extends to Hazleton, to Drifton, and to Beaver Meadow and Onelda, connecting all the collieries of Coxe Bros. & Co., Incorporated; and it also connects with the Pennsylvania Railroad, the Lehigh Valley Railroad, the Philadelphia and Reading, and the Central Railroad of New Jersey.

Q. Before proceeding to take up in detail the different topics, have you any general statement which you are prepared to submit respecting the state of the anthracite coal industry, or any movements in progress?—A. No.

Q. In what way are the rates upon anthracite coal made up at the present time?—A. That is a question that does not come to me at all, as all of our coal that goes to tide water is shipped over the Lehigh Valley Railroad on our own cars, in our own trains, and with our own crews. All our western and line coal is shipped over the Pennsylvania Railroad to line points, except what we ship by lake, which goes to Buffalo, over the Pennsylvania all the way now, though it formerly went over the Pennsylvania to Emporium. We have nothing whatever to do with making rates.

Q. Are there any individual operators who ship over your line?—A. No. We purchase coal from Mr. C. Pardee, at his breaker, and of course that goes over our lines, but it goes as our own coal.

Q. Have you knowledge of the system under which coal is generally shipped by the individual operators, or the relations which exist between independent operators and the railroads?—A. For several years past the great majority have sold their coal to the railroad companies on a percentage basis; that is, 60 per cent of the tide water price to the operator, and the railroad company received the other 40 per cent. the railroad company guaranteeing the sales and paying all of the expenses of them.

Q. So that the system under which coal was formerly shipped by Coxe Bros. & Co. prior to the construction of the Delaware, Susquehanna and Schuylkill Railroad was on that basis?—A. No; I think not. I do not think they ever shipped under that special contract. I do not speak from knowledge, but only from hearsay. They had some traffic arrangements with the Reading Railroad Company.

Q. Will you describe the causes which led to the construction of the Delaware, Susquehanna and Schuylkill Railroad by the firm of Coxe Bros. & Co.?—A. I am not in a position to state them definitely, as I have only been in their employ for 3 years, and the only two men who could probably answer that question are Eckley B. Coxe and E. B. Ely, who are dead. But I have understood the object in building this railroad was to connect all their collieries, so they could deliver their coal to any of the different roads with which they connect, and which I mentioned—the Pennsylvania, the Lehigh Valley, the Reading, and the Central Railroad of New Jersey.

Q. Coxe Brothers is a firm?—A. It was a firm up to December 31, 1895. Since then it has been a corporation.

Q. Is the corporation independent of any particular line of railroads in making its shipments?—A. Except to tide water. We have a trackage contract with the Lehigh Valley Railroad by which, as I stated before, we run our own cars, our own trains, and our own crews to tide water.

Q. Are there any other firms or corporations which have similar relations to the railroads, to your knowledge?—A. No; not that I know of. I am sure there are not.

Q. Are you aware of any proposition made to the independent operators for an increased proportion of the tide-water price?—A. Yes; they have made an offer, I think of 65 per cent for their coal, 35 per cent to go to the railroad company for freight. This result was arrived at, I think, by a committee of individual operators and a committee representing the railroad companies. They had sessions lasting over several weeks, and that is the result of the conference. That is the proposition made by the railroad companies to the individual operators on the different lines.

Q. Was such proposition uniformly offered by all the railroads in this territory?—A. I understand it was.

Q. Substantially identical in all companies?—A. Yes.

Q. Have you any knowledge as to the reception given to this proposition by the individual operators?—A. Only by hearsay. I have been informed that some of the individual shippers on the line of the Pennsylvania Railroad have signed these contracts. I have also been informed that none of the operators on the lines of the Lehigh Valley, Jersey Central, and other railroads had signed them up to 10 days or 2 weeks ago, which was the last I heard.

Q. (By Mr. PHILLIPS.) How much per ton or car is this price which they get, of 65 per cent and 35 per cent?—A. It is 65 per cent of the tide water price per ton.

Q. What is the price?—A. That varies. They take each month by itself. The take the average price received for the coal at tide water on prepared sizes.
 Q. And fix the price of freight accordingly?—A. Yes. If coal were selling at \$4 per ton at tide water, the operator would receive 65 per cent of \$4 and the railroad company would take the other 35 per cent for freight. Then on the smaller sizes there is a different rate. I am speaking from memory now, but I think it is 50 per cent for pea and 40 per cent for the smaller, although I am not positive, as we are not interested in these contracts and it is only hearsay.

Q. (By Mr. RIPLEY.) For the sake of the record, will you describe the distinction between the prepared and small sizes?—A. A prepared coal includes all sizes from chestnut up to broken. Small sizes include everything from pea down to what we call barley coal. I think I can give you the meshes, if you want to know the different sized meshes over which they are made.

Q. (By Mr. C. J. HARRIS.) When you say the freight charge is 40 per cent, you mean over the selling commissions and all, do you not?—A. The railroad company pays the operator 65 per cent, and the 35 per cent goes for freight, selling expenses, and all the rest. That is what the railroad gets.

Q. (By Mr. PHILLIPS.) The railroad does the selling?—A. Yes.

Q. (By Mr. RIPLEY.) The railroad assumes the actual title to the coal at the breaker?—A. Yes.

Q. And the individual operator from that time forth ceases to have an interest in the coal, otherwise than in the price which the railroad company receives at tide water?—A. He has no responsibility. He has nothing to do with selling the coal. The railroad company pays the 60 per cent, or the 65 per cent, whatever the percentage may be, of the tide-water price for the month.

Q. Who fixes the price to the consumer?—A. The different companies.

Q. Will you state the distance by the shorter and also by the more roundabout routes, in general figures, from the coal centers to tide water?—A. I have not looked that question up, and do not think I can give the information. I know the distance we ship is 125 miles—from the junction with the Lehigh Valley road to Perth Amboy. It is more than that, of course, from the Lackawanna region and some others.

Q. (By Mr. C. J. HARRIS.) Is there to be an equitable difference in the rate, according to the distance they haul the coal? Suppose your mine is 100 miles nearer than some other anthracite mine, do you get the same percentage? Do you get 65 per cent of the price of the coal at tide water and the man 100 miles farther on the same price that you get?—A. That condition does not exist in the anthracite region. When I speak of the 125 miles we haul that coal, down to the junction, I do not include the haul from the collieries. We haul it part way over our own road.

Q. (By Mr. PHILLIPS.) What would be the probable distance from these coal centers to tide water?—A. The difference in the Wyoming region is very slight; not very much difference. From the Schuylkill region they ship largely to Philadelphia.

Q. (By Mr. KENNEDY.) What object have the railroad companies in view in offering this 65 per cent of the tide-water price to the independent operators of the coal region?—A. That, I think, had better be answered by some of the officers of the railroad companies who are interested in those contracts. We are not.

Q. Do you not know by hearsay and by general knowledge what the object is?—A. I could only give you what my opinion would be. It would be that it is done in order to control or consolidate the business and prevent competition and the cutting of prices.

Q. They also insist upon having a clause in the contract that they shall have the entire output of the collieries that come in under that agreement?—A. I can not say about that. Not having any personal interest in these contracts I have not given them the attention that I otherwise would.

Q. (By Mr. RIPLEY.) Do you know what the life of these contracts was to be—for a limited term of years or in perpetuity?—A. The 60 per cent contracts were for a limited term. Most of them expired 2 years ago. The proposed contracts are in perpetuity, I think, with the exception of those of the Pennsylvania Railroad.

Q. Would this not mean, then, from the date of signing such a contract, that the individual operator so signing would cease to be independent? Would not his output be dictated to him by the railroad company?—A. Not necessarily his output, but the price would be fixed.

Q. He would be obliged to accept the price fixed by the railroad at tide water, either directly or in cooperation with other railroads?—A. Not the price fixed by them, but the price received by them. It is settled on the prices received the month previous; the actual average price received.

Q. How do the numbers of individual collieries at the present time compare with the number in existence 10 years ago? Is there a tendency toward their disappearance?—A. Quite a large number have been purchased by the different companies in the last two years. They are decreasing.

Q. Will you state some of the causes which have induced that absorption?—A. I think that generally the individual operator finds he can make more money selling out than by continuing in the business.

Q. Has there been complaint among the individual operators that the rates charged for the transportation of their coal were excessive as compared with the rates on bituminous coal?—A. At times.

Q. How do those rates compare in general?—A. They have been higher; but how much I can not say.

Q. Very considerably higher?—A. Yes. I understand there has been an increase in the bituminous freights, but what it is I do not know.

Q. Were not the proceedings instituted by Coxé Brothers & Co. before the Interstate Commerce Commission made because of complaint that the rates were unjustly higher on hard coal?—A. So I understand.

Q. From your knowledge of the cost of mining and transporting, is there justification for such a discrimination against hard coal as in favor of soft? Does it cost more to transport the one than the other?—A. The cost of transportation, I should say, would not be in excess; but this difference prevails to a certain extent. The cars loaded with anthracite coal as a rule almost always return empty. I think they have a return load more in bituminous coal than anthracite, but I do not like to express an opinion on the bituminous business, because I do not know anything about it.

Q. You have been formerly connected with other companies?—A. I was connected with the Pennsylvania Railroad for 12 years as manager of their coal companies.

Q. (By Mr. PHILLIPS.) Was that company managed for the benefit of all the stockholders of the Pennsylvania Railroad?—A. Yes.

Q. They owned the mines and transported the coal, and the profits were divided—A. (Interrupting.) Among the stockholders.

Q. They have a right under their charter to do that business, have they?—A. I can not say that. Most of the coal properties owned and controlled by the Pennsylvania Railroad Company came to them by the purchase of other lines of railway. For instance, the property at Shamokin came through the acquisition of the Northern Central, or the Shamokin and Pottsville, which is a division of the Northern Central, and which owns certain properties in the Shamokin region.

Q. Then all these transactions at the seaboard are made for the benefit of the stockholders, and all the profit from the coal goes to the stockholders of the various roads, as I understand it?—A. I suppose so. I had nothing to do with that. They were entirely independent, so far as the organization was concerned. The Susquehanna was entirely independent, and so was the Mineral Railroad and Mining Company.

Q. These properties were taken over by the Pennsylvania Railroad and the profits were divided, as per understanding, between the stockholders?—A. Whatever the profits were went to the stockholders of the coal company.

Q. Not of the Pennsylvania Railroad?—A. Oh, no; no.

Q. (By Mr. RIPLEY.) Was not at least a controlling interest in the stock of these companies owned directly by the Pennsylvania Railroad?—A. Yes; I think all the stock of the Susquehanna was owned by the Pennsylvania; also of the Lykens Valley and of the Summit branch and of the Mineral Railroad and Mining Company. Speaking from memory, I think they owned a controlling interest in all these companies, and all the stock of the Susquehanna Coal Company.

Q. As a rule is not most of the stock of these mining companies that operate in connection with railroads owned by the railroads?—A. Yes; so I understand.

Q. They are simply subsidiary companies for the transaction of certain kinds of business?—A. As I understand it.

Q. Are the accounts of the two companies kept entirely distinct?—A. Yes. I am speaking now of the accounts of the Pennsylvania Railroad. They were kept entirely distinct.

Q. Are the coal companies of the Pennsylvania Railroad charged exactly the same for the transportation of coal that the individual producers pay?—A. No.

Q. Was there any discrimination?—A. On the contrary, they did not give them the benefit of the 60 per cent rate. They charge them the same rate as any operator shipping over the line. They pay the full rate the same as anybody else.

Q. Do you recollect what that rate was?—A. That would vary from time to time.

Q. There was no advantage, then, to the Pennsylvania Railroad or to the coal company from the connection between the two?—A. Not the slightest.

Q. Were the accounts kept so distinct that the cost of mining to the mining company could be estimated?—A. They were kept absolutely separate from the Pennsylvania Railroad Company accounts.

Q. Is that the practice, to the best of your knowledge, of most of the railroads?—A. As far as I know, the coal company accounts and the railroad company accounts are entirely separate and distinct.

Q. It would be possible for a railroad company to favor its own coal company as against individual operators if it so chose to do; that is, it would be possible for a railroad to transport coal from its own companies at less rate than it charged individual operators who had no financial interest with them, would it not?—A. Well, I do not know whether they are legally allowed to do that or not.

Q. What remedy would exist in case such discrimination was shown?—A. If I were a shipper over a line of road, and I knew the management were charging somebody else less than they charged me, I would try to see if I could find some way to stop it.

Q. (By Mr. LITCHMAN.) There would really be no difference if they owned all the companies?—A. It would simply be taking out of one pocket and putting it in another.

Q. (By Mr. PHILLIPS.) Have you heard any complaints of these individual operators of discrimination in favor of these companies?—A. I never heard of any. I never heard any complaints of that kind.

Q. (By Mr. RIPLEY.) Have you known of instances in which money has been loaned or advances made to individual operators for the development of properties?—A. I have heard that such loans have been made. I can not speak from personal knowledge, however.

Q. Would not such loans, if made, tend to render the acquisition by purchase of those properties simpler by the railroads than if the collieries of the independent operators were in fact entirely independent?—A. I do not see why it should, unless the loan was so great that the individual operator never had any chance to get out of debt, like a mortgage on the property.

Q. Mortgages of less amount, however, placed on these individual collieries have been held by the railroads, have they not?—A. I can not say that.

Q. You have known of instances?—A. I have heard that certain companies had advanced money to the operator for certain improvements, but I speak without personal knowledge.

Q. In what part of the anthracite coal region are most of the individual operators located, or where were they located?—A. In the Wyoming, the Lackawanna, and the Lehigh regions, and some in the Schuylkill region—fewer in the Schuylkill.

Q. Fewer in the South than in the North?—A. Yes.

Q. Can you give us any information as to the percentage of coal mined in this field which is produced by individual operators at the present time?—A. No; I could not. It has changed so rapidly in the last few years.

Q. How much was it three or four years ago, in round numbers? Was it 10 per cent?—A. That I do not know. I think it was more than that.

Q. It has substantially decreased in the last few years by reason of absorption and purchase by the railroad companies?—A. Yes.

Q. Has this tendency to absorption been the result of distress among individual operators, or has it rather been attempted by purchase at substantial remunerations? Has it been more profitable to sell out by reason of fair or very good prices offered for the properties, or have the individual operators been forced to sell out through the power which the railroads were able to exercise?—A. I do not think they have been forced to sell out, but that they did so because they could realize a very good profit and get a very good price.

Q. Do the laws of Pennsylvania prohibit a railroad from operating as a coal mining company?—A. I do not know. I think they do.

Q. You maintain two independent corporations, one of which mines and the other transports?—A. Yes.

Q. Are there any other companies, so far as you know, that mine directly themselves?—A. I do not know of any. Now, I can not say about the Delaware, Lackawanna and Western; they formerly had another company under which they operated, but how it is now I can not say.

Q. On what lines are the larger operators or individual operators, or were they a few years ago?—A. I would say the Lehigh Valley.

As to the laws of Pennsylvania, understand I do not know whether the company can operate coal mines or not. We have two separate organizations.

Q. In what manner is settlement generally made with the independent operators; do you know? Are they paid at the time the coal is delivered at tide water or do they receive payment at the time they deliver the coal at the breaker?—A. As soon as the prices for the month are determined they are paid; generally early in the month following. For April coal they would be paid as early in May as the aver-

age price was determined. I do not know whether the contracts specify a certain time or not.

Q. Do you know whether those contracts of which you have spoken as recently submitted to the individual operators and signed by some on the line of the Pennsylvania permit a certain amount to be mined each year, or is the quantity limited?—A. I can not say.

Q. You have not seen the contract?—A. I had a copy furnished me with the terms paid.

Q. What are those terms?—A. Sixty-five per cent for prepared sizes, and, my recollection is, it is 50 per cent for pea and 40 per cent for buckwheat. It was some time ago that I saw the contract, and it was not the final proof.

Q. You have said that in your own case you have a long-time trackage arrangement with the Lehigh Valley Railroad.—A. I think it has about 7 years to run.

Q. Does it permit the coal mined by Coxé Bros. & Co. to be transported at cheaper rates to the seaboard than you could have obtained as independent operators not controlling a railroad?—A. I can not answer that question, for the reason the present arrangement involved a very large expenditure of money in purchasing equipment, such as cars and engines; and the depreciation, of course, on that plant is quite material. Then we have the selling expenses to pay, which an operator shipping under a contract with a railroad company does not have to pay. We have to take the chances of all bad debts, which an individual operator does not have to do. So, taking the cost of the equipment, the depreciation of the plant, the cost of selling, and the bad debts, I would not like to say whether we get any the better of it or not.

Q. You enjoy the benefit of joint rates, do you not?—A. Oh, no; we pay so much per ton per mile; no joint rate about it.

Q. Would you be willing to say that the ownership of a line of railroad does not give you an advantage in the price paid for transportation to the seaboard?—A. I could not say that because of the conditions I have mentioned. I have never made any calculation on it. I know, of course, that our depreciation is very large on the plant; there is a question of new cars coming up very shortly.

Q. What proportion of your coal goes west and what east, respectively?—A. I can give it to you exactly, if you would like to know. [Referring to table.] Coxé Bros. & Co. in the year 1900 shipped 1,032,577 tons. They sold at the mines 29,077 tons. They used for the company's use, steam, etc., 191,838 tons, making a total of 1,246,592 tons. We purchased from Mr. C. Pardee 529,021 tons, making a total shipped from the mines, including the Pardee purchases, 1,561,593 tons. Of the amount shipped the figures will not check up with what I have given already because we had a certain amount in storage at Roan. We shipped to Perth Amboy 1,071,357 tons, and to line points east 119,209 tons. We shipped to Buffalo for lake shipment 199,870 tons, and west by rail 160,446 tons; total, 1,580,882 tons.

Q. (By Mr. KENNEDY.) That is what percentage of the entire output of the region?—A. It is about 3½ per cent.

Q. Is there entire freedom on the part of individual operators, so far as you know, to produce more or less, as the case may be, according to their own disposition, or are they allowed to produce a certain amount and held to that allotment?—

A. I can speak for ourselves on that point. My instructions have always been to mine all the coal that we could sell without sacrifice—without cutting prices. That is the principle we are working on.

Q. Is there not, however, between the different railroads concerned what is known as an annual allotment?—A. Several years ago there was. The presidents of the different railroads got together and agreed on a percentage that each company should ship, but I do not think that any attention has been paid to that for some time. Everybody ships all he desires to ship. Any company can ship all the coal it can, and fill the cars all up, and do anything it likes.

Q. As a matter of fact, has not the proportion each year remained about constant?—A. Yes, naturally; for the reason that allotment was based upon the respective outputs of the companies, and they would necessarily follow very close to those figures.

Q. Will you give the name and address of the official who prepares and publishes these official statements of allotment?—A. There is no statement of allotment made.

Q. Of the tonnage shipped?—A. I can not give you his address. His name is W. W. Ruley, of Philadelphia.

Q. He, however, stands in no official relation to any of the railroad companies, as far as you know?—A. Not as I understand; no.

Q. Has Coxé Bros. & Co.'s proportion held in the last 5 or 10 years or has it increased?—A. I think it has been about stationary for the last 3 or 4 years.

Q. Has the proportion been stationary for the most of the other railroad companies; referring, for example, to the table published in the New York Financial and Commercial Chronicle?—A. I could not give you those figures. That is a matter easily determined from the statistics. In general I think it is about the same.

Q. Has there been complaint on the part of the Reading Railroad that its allotment was too small, considering its facilities?—A. Not to my knowledge.

Q. The Reading Railroad is, however, the most important producer, is it not?—A. It is the largest producer: yes.

Q. So far as you know, you have never heard a complaint on the part of the Reading Railroad that it deserved a larger proportion?—A. It does not follow that they have not made that complaint.

Q. Do the sales agents or the presidents of the different roads meet at any time officially or unofficially, so far as you know, to determine what amounts shall be allotted to each road?—A. Not to my knowledge.

Q. Do they meet in conference to consider the question of production each season?—A. Not to my knowledge. It will be 4 years in August since I became president of Coxe Bros. & Co., and I have not been called to such a conference and I have never heard of a conference to fix such allotment.

Q. Were such conferences held regularly 4 or 5 years ago?—A. I was not in a position to know.

Q. You have no knowledge of meetings of the sales agents?—A. I do not think they have regular meetings, but they do meet occasionally, probably twice a year, or something like that. I do not think they ever lay down fixed or positive prices. I think their meetings are more for discussion as to about what price they should receive.

Q. There is, however, an agreement as to what a fair price under the conditions of each season should be, is there not?—A. I think so. We do not attend these meetings.

Q. Suppose to-morrow, or next week, or next month, the Reading Railroad, or the Lehigh Valley, or the Pennsylvania Railroad, or your own road, should double your output by some means, what would be the result?—A. It could not sell the coal.

Q. Could you not sell it by shading the price somewhat?—A. I do not think it would be possible.

Q. Could not that be done in the fall of the year, when the demand for coal is somewhat greater?—A. To do that would demoralize the whole coal trade, and the producer so selling would have to stop mining, because the price received would be less than the coal had cost, and you can not do business on that basis very long.

Q. Have you ever heard the complaint or statement that the coal was mined at a loss by many of these coal companies owned by the railroads, but that the railroads were so enabled to mine at a loss because they made a profit in transporting the coal for themselves?—A. I have heard that statement.

Q. What is your judgment in respect to its soundness?—A. I am not in a position to know of the companies, excepting our own.

Q. Speaking of your own experience, would that be true?—A. No; I think we would make a small profit on the mining.

Q. It was testified before this commission some weeks ago that the cost of coal at the breaker was on an average \$1.71. What is the price at tide water, fixed on the 1st of April, as published in the papers; do you know?—A. I think the price is \$4 per ton for stove and nut.

Q. Have you received notice from the other companies or from any persons to the effect that this would be the price for this season?—A. I think the only company that sends out an Eastern circular is the Philadelphia and Reading. We receive a circular from that company announcing its prices. I read a newspaper article which stated, and I think it is correct, that the present circular and net prices f. o. b. the harbor were: Broken, \$4; egg, \$4.25; stove, \$4.50; chestnut, \$4.50. But it goes on further and says that these are the regular prices that have been prevailing, and that sales may be made with the following discounts or reductions from the price: April, 50 cents a ton off these prices; May, 40 cents off; June, 30 cents off; July, 20 cents off; August, 10 cents off, and September, the full circular price.

Q. (By Mr. KENNEDY.) You are speaking of the Philadelphia and Reading prices, are you not?—A. Yes. That is practically the price of all of them.

Q. You said the Philadelphia and Reading is the only company that gives out a circular?—A. I think it is the only one.

Q. It sends to the other companies?—A. Yes.

Q. The other companies follow the prices the Reading names in the circular?—A. Not necessarily. If we can get more we do so.

Q. Is it not the rule to follow the Philadelphia and Reading price list?—A. I think generally all do.

Q. The Reading people fix the price themselves?—A. I do not know whether they do it without consulting the other companies or not. I can not say that. They may agree or not, but as far as we are concerned we always sell our coal for all we can get for it, and usually get a little more than the circular price, especially on the Lehigh coals, which are a higher-grade coal.

Q. (By Mr. RIPLEY.) Repeating a question which I asked before, the effect of any one of these railroads exceeding what has been a customary proportion of the annual shipment would be to demoralize the trade, would it not?—A. I think it would; yes.

Q. What do you mean by demoralize?—A. Understand me: you stated the proposition, if the Philadelphia and Reading or Lehigh Valley should double the shipment. In that case somebody else would start in to get even with them, and the result would be the demoralization of the trade, and everything would go to pieces. That would keep up as long as they could stand it, and then they would have to stop.

Q. Such demoralizations in price have been frequent in the past, have they not?—A. Yes.

Q. Can you state when the last serious one took place?—A. I think it was about 3 years ago in the fall, when prices went to pieces pretty badly.

Q. As a whole, prices have been steadier the last few years, have they not?—A. Yes.

Q. Have they not been higher also than during the range of a number of years preceding?—A. No; I think not. They are not as high as they were along in the early nineties.

Q. They are higher at the present time, however, than they have been for any long time at once, are they not?—A. They have been higher since the strike, caused by the market being denuded of coal, and the old rule of supply and demand rather enhanced the price.

Q. What is your judgment as to the price of coal at the present time? Is it about as high as the trade will stand?—A. Do you mean before this reduction?

Q. Yes; through the last winter.—A. I think so.

Q. It would not be to the interest of the producers, then, to advance the price beyond that of the present time?—A. I do not think it would be, because that brings into competition other fuels. Anthracite coal is largely a luxury, except the small sizes for steam purposes.

Q. Will you speak of the nature of such competition in fuel as the anthracite coal is obliged to meet?—A. For steam and manufacturing purposes, of course, bituminous coal, for household consumption, gas stoves and gas ranges are coming in, and oil stoves; and in the large cities, in the apartment houses, where anthracite coal was formerly used, a good many are using bituminous coal now.

Q. Is not the demand for all kinds of anthracite coal increasing year by year, however?—A. Not very materially. I think the largest increase has been in the small sizes more than in the large sizes. It is only a few years since all of what are known as the small sizes were thrown away; in fact, prepared sizes were used for steam purposes at the mine, and egg and stove coal were burnt under the boilers. What is known now as pea, barley, buckwheat, and rice were thrown away; and I think the large increase in the consumption of anthracite coal for the last 10 or 15 years has been more due to the consumption of the small sizes than to an increase in the large sizes.

Q. Is there not, however, a definite relation between the amounts produced of these 2 sizes? Are not the small sizes simply a by-product, incidental to the mining of the other sizes?—A. Certainly they are; but at the same time the conditions of the market have changed the proportion of sizes mined. Twenty years ago, or less time than that even, where an operator could sell 10, 15, or 20 per cent of lump coal, he can not sell any to-day, and it has to be broken into smaller sizes; and when you break down coal you increase your percentage of small sizes. We are making practically no lump coal to-day, nothing above broken. That means breaking everything down, and it means a large increase in the percentage of small sizes.

Q. So you would say that the principal increase in the last 10 years has been in the small sizes?—A. Largely due to the increased consumption of small sizes.

Q. And that the competition of other kinds of fuel with the prepared sizes has prevented a great extension of the demand?—A. Yes.

Q. You have spoken of the percentage rates to tide water. In what way are the rates to Chicago and the West made up? Under what conditions do you ship your coal to the West?—A. I think we get rates in the spring. Whenever they make any change they send us a circular stating what the rates are, and we pay on the all-rail coal a certain fixed rate. There is a certain rate to Buffalo.

Q. Probably the regular published rates that are on file with the Interstate Commerce Commission?—A. Just the same.

Q. And to the best of your knowledge these are the regular rates paid by all individual operators alike?—A. Yes.

Q. Without discrimination or favor?—A. Yes.

Q. (By Mr. FARQUHAR.) You shipped about 200,000 tons to Buffalo last year. Was that for local consumption or did part of that go by lake?—A. It all went by lake.

Q. And you say you shipped 160,000 tons by all-rail for the West?—A. All-rail for the West and intermediate points.

Q. You use the transportation of the Pennsylvania road on the lake?—A. No; boats.

Q. Your own boats?—A. No. We charter from whomsoever we can get boats.

Q. You simply use the Pennsylvania railroad tonnage to Buffalo?—A. The Pennsylvania tonnage to Buffalo.

Q. Are your lake rates uniform at Buffalo?—A. They vary very much. They have varied from month to month since I have known of them. They have been as low as 20 cents from Buffalo to Chicago and as high as \$1.25.

Q. Have you had an advantage in taking wild or independent boats and not regular liners?—A. Oh, no.

Q. Are your selling rates the same as those of others—the Delaware and Hudson and the Lackawanna—in Buffalo?—A. We do not sell in Buffalo.

Q. No local market?—A. No.

Q. Are there any parties who buy from Coxe Brothers, Incorporated, and supply the city government and others with your coal?—A. I do not know of any. There may be, but I mean to say we do not do any retail business there, or anything but rail delivery. There are points in the vicinity of Buffalo where we ship by rail, and of course we supply them.

Q. Do you ship to Chicago?—A. We ship to Duluth, Chicago, and Milwaukee.

Q. Are the sales made through your own agents in those ports?—A. Entirely.

Q. Is it a common market and is the price common there?—A. Yes.

Q. So that you are just as well advantaged as the regular liners? You get as good a price as the Pennsylvania or the Lackawanna for coal in the Western ports?—A. I think so.

Q. Do you know of any other independent shippers who do that?—A. I do not think any of the independent operators ship their coal west.

Q. You get just as good rates to Buffalo as any other shippers?—A. We get the same rate.

Q. (By Mr. RIPLEY.) Have there not been at times, however, cutting of rates in favor of certain shippers?—A. Not since I have had anything to do with the rates; not to my knowledge.

Q. Was the Pennsylvania Railroad ever inconvenienced by discrimination forced upon it by its connections?—A. I could not answer that question, as I would not know anything about a matter of that kind.

Q. Is it possible to get at the cost of mining coal at the breaker?—A. [Laughing.] That is a very difficult question.

Q. Will you explain some of the difficulties?—A. Preparatory to coming down here I read over Mr. Coxe's testimony before a commission several years ago, and he said it was a question he had been trying to find out all his life, and had never succeeded. The local conditions will vary in every locality and in every mine, and in the seams of every mine. To-day a seam may be in good condition and everything going on smoothly, and to-morrow you may have an explosion of fire-damp that will cost considerable money; or you may have a fall of roof, or you may have a flood in your mine, and those conditions are in every locality, in every mine—in fact, you may say they are in the same seam of the same mine.

Q. (By Mr. RIPLEY.) Under those circumstances, then, would it be possible to operate a mine at a very close margin of profit on mining?—A. No, sir.

Q. The profits have got to be broad enough and large enough to cover contingencies?—A. They ought to be. There is another question that is seldom figured in the cost of mining—the cost of developing a property. An anthracite coal mine takes a very large amount of capital, and the depreciation of the plant is very seldom taken into account; the depreciation of your property, if you are a land owner, is very seldom taken into account. In other words, where a man at present is receiving a royalty on coal land and he spends that royalty he will be minus his property in time, and it is the same way in mining.

Q. Is the practice of setting aside a certain amount for depreciation, or for exhaustion of property, followed by any of the companies of which you have knowledge?—A. It was by the Susquehanna Coal Company; as to the others, I can't say.

Q. In other words, a company which does not set aside something out of the earnings each year will, at the exhaustion of the mine, find it is without capital?—A. Yes, sir.

Q. The wisest business policy then, following your argument, would be to set aside a stated amount for that purpose?—A. Yes.

Q. Does the competition of coke in New England territory, for example, threaten an embarrassment?—A. I have not heard anything about it.

Q. You are aware of the experiments made in the line of producing coke from Cape Breton coal?—A. Oh, yes.

Q. Is that regarded seriously as likely to affect the consumption of anthracite coal in that part of the United States?—A. I can only speak for ourselves. We have not so considered it.

Q. Do you ship any large amount into New England?—A. Yes; we ship considerable there; I can't say the amount, but we ship considerable.

Q. Do you sell it at the wharf in New England, or do you deliver it at interior points?—A. We sell it usually f. o. b. Perth Amboy; sometimes we sell it delivered to points reached by water transportation.

Q. If it is sold delivered in New England that arrangement includes all freight charges?—A. I do not think we ever sell the New England purchaser at delivered price. The purchaser has to take care of the freight rates. I do not think we ever go further than the water rates. Understand, I am not very familiar with the details of the sales department.

Q. You have no knowledge of freight rates which are charged to interior Boston points upon coal that goes by rail from Boston?—A. No, sir.

Q. Is the consumption of hard coal or soft coal increasing most rapidly; which?—A. I think the consumption of soft coal is increasing more rapidly.

Q. Soft coal, then, threatens to be the most serious rival in the future?—A. I think so.

Q. Is there any definite relation between the price of soft coal and hard coal? Do they move together in sympathy at all?—A. I think not.

Q. Is there to-day a certain relation between the prices of soft coal and hard coal which will compensate for the superior quality of hard coal as fuel for domestic purposes?—A. We have never considered the price of soft coal in fixing our prices at all.

Q. Do you know the difference of the heating power of a ton of soft coal and a ton of hard coal, if any?—A. It is usually considered that a ton of good George's Creek bituminous coal will make more steam than a ton of anthracite.

Q. Under a boiler or locomotive?—A. Under good conditions.

Q. (By Mr. LITCHMAN.) Is that due to quicker burning?—A. Because the hydrocarbons in bituminous coal have a much higher heating power than carbon.

Q. (By Mr. C. J. HARRIS.) There is some relation between the price of hard and soft coal, is there not? You said just now, as I understand, that there was not.—A. No; I said we did not take the price of bituminous coal into account in fixing the price of anthracite, speaking for ourselves.

Q. What I wanted to get at was this: You could not place an unlimited price per ton on your hard coal; you could not raise the price indefinitely higher than a certain limit without taking the risk of having soft coal used in its place, could you?—A. That is right; we could not.

Q. And do you not find, or do you, that when the price of anthracite coal becomes perhaps temporarily very high that there is a tendency to use bituminous?—A. To use bituminous coal, yes. What I meant to be understood as saying was that we did not figure any fixed price as between anthracite and bituminous. We know perfectly well if we advance prices on small sizes which come in competition with bituminous coal beyond certain prices, the bituminous coal will take the market.

Q. That would be true, of course, of steam coal more than of coal for domestic use?—A. Yes.

Q. Would not that same competition come in eventually in regard to domestic use?—A. Unquestionably; that is why I say that the price of anthracite coal can never be put to an excessively high point.

Q. (By Mr. PHILLIPS.) Do you know the difference between the heating power of a ton of coke and a ton of anthracite?—A. It is a question I have not had occasion to look up for a good many years.

Q. (By Mr. C. J. HARRIS.) What effect has the recent large combination of coal railroads, so called, had on independent producers?—A. In what way?

Q. Well, what I meant to say, would it eventually drive them out of the business entirely? Would it do away with the independent producer?—A. No; I do not think so.

Q. Would he be able to come in and compete, if they wished to freeze him out entirely?—A. I think so, for this reason: Any attempt to freeze out an individual operator would mean a reduction in the price of coal—the price of a very large volume of coal—which would hurt the large interest much more than it would

the small interest, and there would not be any object in doing that. The combination of capital, whether large or small, I do not think would be apt to throw away a large amount of money to squeeze out the small individual.

Q. (By Mr. RIPLEY.) Are there not other ways open to freeze out a small individual, viz, by discrimination against that individual in freight rates or in delay in getting cars or in lack of other facilities of that kind?—A. Well, with the 65 per cent contract I do not think that either device would have any effect.

Q. I understand that contract has not been signed. Did you not make that statement?—A. The last I heard it had not been signed. I have no definite knowledge.

Q. Has there not been complaint at times within your knowledge of a lack of cars and facilities in certain instances?—A. Yes.

Q. (By Mr. C. J. HARRIS.) Have you heard of any lack of cars or any other matter of that kind that has worked any special injustice of late years?—A. For the last three and a half years I have not come in contact with that phase of the problem, but while I was in the Pennsylvania Railroad Company I heard plenty of such complaints: and my experience with the Pennsylvania Railroad Company was that it took a great deal better care of the individual operators than it did of its own coal companies, and I used to protest very vigorously because they would send cars to individual operators, including Coxé Bros. & Co., when we could not get cars to run our own collieries.

Q. (By Mr. RIPLEY.) Was that the policy, however, pursued by many of the other large roads, the Reading, for instance, Lehigh Valley, etc.?—A. The Reading—I know nothing about their policy. I think, as far as I know, the Lehigh Valley tried to distribute cars as fairly as it was possible to do. There are times, of course, when no railroad companies have cars enough to go round to supply the demand. I think the policy of all the roads, as far as my knowledge extended, was to treat the individual operator as fairly as they treated their own collieries.

Q. There was, however, complaint sufficient in the case of Coxé Brothers to lead to an institution of proceedings?—A. That is going back further than I am familiar with. I am speaking of the last few years.

Q. The specific complaint of Coxé Brothers Company at that time was that a discrimination against hard coal was made, the rates being so much higher than upon soft coal?—A. Yes; but not any discrimination against furnishing cars is the point I was making.

Q. (By Mr. C. J. HARRIS.) What do you say of the price of coal now as compared with the price of coal at this time of last year and the year preceding? Is it much higher now?—A. It is about the same.

Q. Is it about the same?—A. Yes.

Q. (By Mr. PHILLIPS.) About what percentage of the anthracite coal fields is controlled now by this recent combination of interest?—A. That would be merely a guess on my part. I should say, roughly, possibly 80 per cent.

Q. (By Mr. RIPLEY.) It would be possible to compute that, would it not, from the table of shipments which is officially printed, if you knew which roads were controlled in that respect?—A. Yes; I could—

Q. (By Mr. PHILLIPS.) Is 80 per cent of any commodity like anthracite coal sufficient to give a monopoly of that commodity, in your judgment?—A. You mean in fixing the price?

Q. Yes.—A. No; I do not think so. I think I could take 20 per cent of anthracite coal and break the market any time.

Q. (Mr. LITCHMAN.) Suppose you could not get transportation to market.—A. Then of course I could not do it.

Q. (By Mr. PHILLIPS.) This combination is between the coal people, the owners, and the railroads, is it not? This recent combination embraces 80 per cent of coal and all the railroads, does it not, leading into the field?—A. It would embrace whatever coal the railroad companies controlled.

Q. But they are all working in the same interest; all the railroads are combined leading into the anthracite fields at the present time, are they not?—A. All except the Pennsylvania Railroad, the Ontario and Western, and the Delaware and Hudson.

Q. (By Mr. RIPLEY.) What do you mean by "combination," Mr. Stearns?—A. I did not use the word.

Q. I understood you to use the word.—A. No; I quoted the word. "Community of interest," I think it is called now.

Q. (By Mr. PHILLIPS.) The roads are at least working in harmony, and as a rule the directors of one own stock in each others' roads, do they not?—A. That is a question I know nothing personally about, except as you do—through the newspapers.

Q. Would it not be possible, even if they had equal transportation facilities, for

a large and wealthy concern to follow a person having 10 or 20 per cent of a commodity, to follow it into a given market and sell there at a lower price, and then follow it to another market, thus pursuing what we might call a "clubbing policy?" Is not that frequently done where persons have large control of a commodity, thus driving others out of the market?—A. I have never known it to be done in the anthracite coal business, and that is the only business I have ever been connected with, except engineering.

Q. (By Mr. FARQUHAR.) Do you think that you could force 20 per cent more anthracite on the people than you supply now?—A. No.

Q. Could you shove 10 per cent more upon them?—A. No.

Q. Suppose you made an exorbitant rate; suppose you owned 95 per cent of the output and made an exorbitant rate; would not bituminous coal come in and compete and knock the rate down?—A. It would knock the price of coal down.

Q. (By Mr. LITCHMAN.) What is the total product of anthracite coal?—A. About forty-five million and some thousand tons in 1900. The year before it was forty-seven million and some thousand tons.

Q. An increase, then, of 50 cents a ton would be a very handsome return, would it not, to controllers of that output?—A. It certainly would, if they could get it.

Q. (By Mr. RIPLEY.) It is about 50 cents a ton higher at tide water than it was before the strike.—A. Fifty cents on prepared sizes. I think on the average total output it would be about 30 cents.

Q. Thirty cents at tidewater on the total output?—A. Yes.

Q. Are there not certain peculiar circumstances in the coal industry which make it to the interest of the operator to increase his output? I refer to the fact of a dull season, when facilities must be all maintained for a full production in the fall. Will you explain whether that is so or not?—A. To a certain extent it is, for the reason, at this time of the year, for instance, when the demand is small, it requires so much space to stock anthracite coal and so much money that it is impracticable to regulate your year's supply by the output in the months when the trade is in a depressed condition, and in order to supply the demand in the fall and winter months, which is brisk, you have got necessarily to have your mines developed to a capacity much in excess of what would be needed if you could run uniformly through the year.

Q. (By Mr. RIPLEY.) There is, then, this powerful incentive which would tend to increase the capacity of each company?—A. Yes.

Q. What holds the company down to the constant proportion which has been maintained for a number of years, as I understood you to say, in the past?—A. Every company has certain collieries becoming gradually exhausted, and that circumstance, of course, takes off a part of the increased output made by new openings and additional capacity.

Q. I suppose, too, the available supply for future years varies very greatly as between the different railroad companies, does it not?—A. Oh, yes.

Q. Will you specify any of them which are supposed to have a vast reserve for the future?—A. The Reading is generally considered to have the largest amount.

Q. And which company after that, so far as your general knowledge of the trade goes?—A. I should say the Lehigh Valley. The Delaware, Lackawanna and Western have a large reserve also.

Q. How about the Jersey Central?—A. I am not so familiar with their lands in the Lehigh region. I do not know what proportion of those are undeveloped, but I think their Wyoming lands are pretty well developed. I do not think they have much virgin coal left.

Q. (By Mr. KENNEDY.) Have you made any estimate as to how long your mines will hold out?—A. No, sir; I have never made any.

Q. (By Mr. RIPLEY.) A consolidation now of the Reading, the Erie, the Lehigh Valley, and the others which you have named as having the greatest reserves would give such a combination a most important strategic position 50 years from now, if the remainder of the coal fields were exhausted, would it not?—A. Certainly it would. Understand, when I am speaking of the amount of unmined coal these companies have, it is not from actual knowledge, but general opinion.

Q. You are acquainted with all the official and geological reports, such as those made by Griffiths and others?—A. Yes.

Q. The general impression is as you state among scientific men?—A. I think so.

Q. Do you understand that the companies which have a vast supply in reserve for the future are paying interest charges upon that capital so invested out of earnings made at the present time?—A. I do not know; I can not answer that question.

Q. You are aware of the circumstances under which the fields of the Reading

Railroad were acquired, are you not?—A. No. That transaction occurred a good many years ago, and I was not interested in coal mining then, except as an engineer.

Q. (By Mr. PHILLIPS.) Would it be possible now for a new company to go into the anthracite field, if it could procure or had procured an eligible body of coal, and open that mine up and have the same facilities for transportation and opportunities at the market as those who are now engaged in it?—A. I think so, undoubtedly.

Q. It could have the same facilities that you have in mining your coal?—A. It could come in on the same basis as anybody else; I do not think there would be any discrimination whatever.

Q. Then it is your understanding that this recent combination is not to discriminate against others or independents or new operations in the field?—A. I think not.

Q. (By Mr. C. J. HARRIS.) Would it be possible to find any territory that an independent operator could get hold of now?—A. There is some. I understand there are some lands in Schuylkill County that are not owned by any of the companies, that are on the market. They come up every once in a while.

Q. The anthracite fields, however, have been pretty well exhausted?—A. Oh, yes; the desirable coal land is all owned by parties who are operating.

Q. It would be very improbable that any new anthracite coal fields would be discovered in Pennsylvania?—A. Yes.

Q. (By Mr. RIPLEY.) I quote the following statement from the New York Journal of Commerce of February, 1901:

"The Delaware and Hudson, so the independent operators were informed, could have its coal carried to tide water by the Erie Company for 60 cents per ton. The independent operators, then paying nearer one dollar sixty a ton for the service, not unreasonably failed to get the D. & H. as an ally to this plan."

According to that statement it would appear that the independents, perhaps, were paying \$1.60 a ton when the Delaware and Hudson Railroad were getting the service for 60 cents a ton. Have you seen in recent years or had knowledge of the existence of any such conditions or discriminations?—A. No.

Q. Would that be possible so far as you have any knowledge?—A. I would know nothing about any arrangement the Erie and the Delaware and Hudson would have.

Q. So serious a discrimination must, however, if it existed on any large scale, be a matter of common knowledge in the trade. You have no knowledge?—A. I have no knowledge whatever.

Q. You have never heard of any such?—A. No.

Q. Will you make a statement respecting the attempts within the last year to build independent lines to tide water, so that the independent operators might secure an outlet?—A. Within the last year? I think there was an independent line started three years ago.

Q. There have been other attempts and projects within the last year, have there not?—A. Yes. The first attempt was a line going from Scranton to tide water. The next was the line which followed the old Delaware and Hudson canal and terminated at Kingston, on the Hudson River, in connection with the Pennsylvania Coal Company.

Q. Were the franchises for these lines actually secured?—A. I do not know whether they were finally secured. They were in litigation on the charter for a long time as to certain rights of way, and whether they ever completed the litigation I do not know.

Q. What was the understood object of those attempts to construct more independent railways to tide water?—A. To get a lower rate of freight.

Q. In other words, the individual operators were sufficiently dissatisfied with the rates charged upon coal to be willing to agree to ship over a new line if it were built?—A. That is my understanding.

Q. Have any of these lines been built in part or entirely?—A. Not at all.

Q. And what prevented the consummation of the plans?—A. Bought out.

Q. Bought out by whom?—A. By the different community of interests, the different roads that are now considered as—

Q. (Interrupting.) Have you ever heard of the Temple Iron Company? And if so, will you make a statement respecting what you know of it, what it is, and for what purpose it was created?—A. The Temple Iron Company's collieries were formerly owned in part by Simpson & Watkins, who were individual operators.

Q. (By Mr. PHILLIPS.) You spoke of these roads having been bought out by the community of interest. Would not the existing roads necessarily have to charge more for freight if they paid large sums to prevent this advantage in order to recoup and get that money back?—A. No; not necessarily.

Q. Would it not take money from the stockholders that belongs to them? It has to come from some source.—A. The assumption is that they are making some profit on the operation of these collieries and the transporting of the coal. You see they purchased these collieries, and now they own the coal instead of buying it.

Q. Oh, I understood you to state that they bought out the men who were going to build this railroad.—A. No, no; they bought out the collieries.

Q. (By Mr. RIPLEY.) Was the Pennsylvania Coal Company one of those purchased at that time in order to prevent the construction of those lines?—A. The Pennsylvania Coal Company was purchased recently, and the assumption among the public is that it was purchased to prevent the building of the new line to Kingston.

Q. Was any other action taken, for instance, by the New York, Ontario and Western road to that same end?—A. Not to my knowledge; I do not know.

Q. Were not a large number of individual operators bought out by that company?—A. By the Pennsylvania Company?

Q. By the New York, Ontario and Western.—A. Yes; they bought several collieries, but they were entirely separate.

Q. They bought them out to eliminate the individual operator who was seeking an outlet?—A. As I understand it, the collieries purchased by the Ontario and Western were collieries which would have been shippers over the new road had it been built.

Q. In other words, the parties already interested in this territory were exceedingly desirous that no new independent lines to tide water should be constructed?—A. Yes; naturally so.

Q. And in order to prevent that effect the individual operators in that territory were bought out, and among those the Pennsylvania Coal Company?—A. Yes.

Q. Have you seen in the newspapers a statement concerning the price paid for the property of the Pennsylvania Coal Company?—A. Yes.

Q. Does it seem to you a fair price or an excessive one under the circumstances?—A. It is considered by the coal men who are familiar with that property that it was a very fair price, a reasonable price.

Q. (By Mr. PHILLIPS.) What was the sum paid?—A. It was about 32,000,000, or somewhere near that.

Q. (By Mr. RIPLEY.) There was, however, a quotation for the stock at a rate which would bring the total very much higher than that for a long time, was there not?—A. I have not seen any of that stock quoted on the market for a good many years. I did not know there was any of it for sale.

Q. What would be the effect upon the general harmony of interests throughout the coal region by the elimination of these individual operators, including the Pennsylvania Coal Company? Would it tend to strengthen the community of interest throughout the remainder of the field?—A. I should say that it would.

Q. In other words, has not the independent operation in that northern section of the Wyoming field been a source of considerable trouble to the other roads in maintaining a fixed price for the product?—A. That is the general impression.

Q. So that that obstacle being removed it would be easier for the remaining roads to come together and operate harmoniously?—A. Yes.

Q. (By Mr. LITCHMAN.) I have here a clipping from the New York Journal of Commerce which alleges certain facts. One is that the Morgan roads, so-called, absolutely control 63.17 per cent of the output of anthracite coal; that the non-Morgan roads control 36.83 per cent, and that the reason for the community of interest agreement is that these Morgan and non-Morgan interests have all been brought substantially under one control, and that they represent 96 per cent of their entire output of anthracite coal. That being the case, what is the opportunity for an independent operator to operate against 96 per cent of the production of coal?—A. That being the case we are the ones that are up against that proposition.

Q. Is not your company the Delaware, Susquehanna and Schuylkill Company?—A. Yes; that is our road.

Q. That is a Morgan road.—A. Not a bit of it, not a bit of it.

Q. Well, that would only eliminate 31 per cent more. That would make it 93 per cent.—A. Then there are the Ontario and Western, the Delaware and Hudson, and the Pennsylvania Railroads.

Q. The Ontario and Western is non-Morgan, but has recently been brought into the community of interest by virtue of the purchase of a controlling interest.—A. That is a newspaper report. I do not know anything about it.

Q. You own your transportation?—A. For only part of our coal.

Q. If the time comes when you find there is a shortage of cars for shipment to tide water then you will be apt to feel this competition, will you not?—A. I do not know.

Q. (By Mr. RIPLEY.) Is not that the reason why you built this road, 40 miles long, known as the Delaware, Susquehanna and Schuylkill, that you might obtain such transportation irrespective of any action?—A. The only person who could have answered that question is Mr. E. B. Cox. Mr. Cox stated, in some testimony at Harrisburg, that he built the road to connect his collieries, some of which were on one road and some on another, so that he could send his tonnage wherever he desired.

Q. (By Mr. LITCHMAN.) Has not the operation of that railroad, under the control of the Cox Brothers, been the means of obtaining the favorable terms upon which they operate their collieries at the present time?—A. They have no more favorable terms than any other roads, unless a trackage agreement to tide water can be so considered, and I do not know whether I consider that more favorable than the 65 per cent arrangement or not.

Q. (By Mr. RIPLEY.) Are you willing to submit that agreement?—A. As it is an agreement that affects only two interests, and not the public interest, I prefer not to do so.

Q. (By Mr. LITCHMAN.) This community of interest in the coal region is also the community of interest in transportation. Is it not, in that region?—A. The transporting companies control the coal companies.

Q. (By Mr. RIPLEY.) Is it not true that in the past the Reading Railroad has been the most uncertain factor in the situation as far as the maintenance of the regular output is concerned? Has that road not in general broken the customary allotment of shipments by increasing their output beyond that figure?—A. I do not know that it has.

Q. Would that not be true of 5 or 6 years ago?—A. I can not state without going over their shipments.

Q. You have no recollection to that effect?—A. No. Everybody complains about everybody else in the coal business the same as in any other business. They will damn the Reading one month and some other company the next, and so on. That has been the way.

Q. The incentive, however, on the part of the Reading to increase the output owing to improvements of that company is perfectly clear, is it not?—A. The more any company can increase its output and sell its coal the cheaper it can operate its mines as a rule.

Q. But in case of that company there is a large proportion of coal land lying idle which is eating itself up with interest charged, is there not?—A. Doubtless that is true.

Q. (By Mr. LITCHMAN.) Do your records of shipment show the prices of coal at tide water for, say, covering a period of 10 years?—A. Yes; I have the record.

Q. Could you furnish a statement showing that range of prices?—A. Yes.

Q. I want to show whether there has been any marked variation, and whether that variation has been affected by dull times and good times, and perhaps by these combinations that have taken place within that 10 years, and I take it that the operations of your company are of sufficient volume to make testimony on that point desirable.

Mr. Stearns thereupon submitted the following tables of prices:

[Coxe Bros. & Co., Incorporated.—Average f. o. b. tide prices received during years shown for coal mined by Coxe Bros. & Co., the Cross Creek Coal Company, and Coxe Bros. & Co., Incorporated.]

PREPARED SIZES OF ANTHRACITE COAL.

Month.	Perth Amboy.						All tide points.			
	1900.	1899.	1898.	1897.	1896.	1895.	1894.	1893.	1892.	1891.
January.....	\$3.744	\$3.389	\$3.56	\$3.653	\$3.164	\$3.382	\$3.941	\$4.327	\$3.591	\$3.804
February.....	3.596	3.349	3.564	3.624	3.197	3.261	3.819	4.227	3.482	3.722
March.....	3.616	3.317	3.619	3.649	3.152	3.293	3.805	3.97	3.504	3.661
April.....	3.465	3.416	3.651	3.638	3.311	3.183	3.542	3.979	3.561	3.671
May.....	3.577	3.442	3.735	3.655	3.473	3.207	3.579	3.774	3.674	3.728
June.....	3.551	3.466	3.737	3.743	3.567	3.196	3.611	3.87	3.803	3.817
July.....	3.707	3.517	3.554	3.807	3.689	3.196	3.61	3.962	3.945	3.845
August.....	3.654	3.477	3.489	3.881	3.892	3.183	3.448	4.054	4.078	3.829
September.....	3.896	3.504	3.555	3.937	3.974	3.162	3.375	4.073	4.259	3.874
October.....	4.103	3.60	3.579	3.859	3.921	3.216	3.578	4.165	4.263	3.837
November.....	4.14	3.620	3.523	3.772	3.896	3.34	3.267	4.088	4.215	3.96
December.....	4.243	3.72	3.42	3.589	3.787	3.333	3.329	4.047	4.223	3.854
Average.....	3.761	3.49	3.589	3.716	3.516	3.237	3.535	3.967	3.81	3.769

ANTHRACITE PEA COAL.

Month.	Perth Amboy.					All tide points.				
	1900.	1899.	1898.	1897.	1896.	1895.	1894.	1893.	1892.	1891.
January.....	\$2.292	\$2.298	\$2.151	\$1.953	\$1.893	\$2.593	\$2.55	\$2.472	\$2.177	\$2.631
February.....	2.306	2.296	2.300	2.147	1.91	2.511	2.075	2.04	2.313	2.548
March.....	2.275	2.280	2.300	2.165	1.955	2.49	2.829	2.522	2.395	2.487
April.....	2.248	2.241	2.271	2.232	2.154	2.363	2.700	2.571	2.52	2.526
May.....	2.279	2.137	2.314	2.143	2.27	2.232	2.685	2.558	2.255	2.07
June.....	2.327	2.234	2.222	2.085	1.96	2.16	2.002	2.375	2.271	2.592
July.....	2.337	2.235	2.209	2.088	1.951	2.204	2.305	2.507	2.241	2.3
August.....	2.292	2.24	2.152	2.050	2.245	2.150	2.45	2.545	2.189	2.33
September.....	2.331	2.303	2.13	2.031	2.009	2.209	2.522	2.533	2.195	2.382
October.....	2.241	2.177	2.118	2.041	2.122	2.355	2.412	2.520	2.223	2.387
November.....	2.409	2.237	2.081	2.059	2.195	2.263	2.319	2.312	2.289	2.322
December.....	2.604	2.092	2.17	2.042	1.93	2.11	2.453	2.408	2.848	2.274
Average.....	2.324	2.217	2.198	2.079	2.019	2.289	2.513	2.409	2.274	2.43

ANTHRACITE BUCKWHEAT COAL.

January.....	\$1.81	\$1.782	\$1.775	\$1.76	\$1.637	\$1.878	\$1.978	\$1.659	\$1.651	\$1.708
February.....	1.90	1.935	1.78	1.718	1.512	1.827	2.391	1.712	1.668	1.892
March.....	1.974	1.792	1.74	1.747	1.521	1.862	2.118	1.789	1.905	1.794
April.....	1.941	1.724	1.722	1.723	1.67	1.836	1.981	1.709	1.982	1.858
May.....	1.963	1.657	1.80	1.637	1.688	1.774	2.073	1.967	1.713	1.912
June.....	1.862	1.684	1.818	1.690	1.729	1.709	1.97	1.721	1.733	1.66
July.....	1.811	1.733	1.761	1.699	1.706	1.775	1.979	1.74	1.642	1.625
August.....	1.835	1.723	1.757	1.690	1.732	1.757	1.881	1.777	1.675	1.66
September.....	1.865	1.715	1.72	1.674	1.472	1.846	1.877	1.732	1.675	1.628
October.....	1.953	1.777	1.737	1.637	1.541	1.874	1.958	1.92	1.633	1.650
November.....	1.976	1.733	1.693	1.620	1.534	1.821	1.90	1.965	1.648	1.697
December.....	2.016	1.822	1.748	1.67	1.784	1.857	1.872	1.928	1.682	1.651
Average.....	1.905	1.739	1.753	1.684	1.599	1.824	1.988	1.769	1.672	1.706

ANTHRACITE RICE COAL.

January.....	\$1.491	\$1.467	\$1.423	\$1.524	\$1.341	\$1.51	\$1.162	\$1.151	\$1.389	\$1.562
February.....	1.494	1.431	1.45	1.537	1.23	1.469	1.53	1.144	1.309	1.841
March.....	1.504	1.429	1.429	1.533	1.355	1.48	1.556	1.291	1.387	1.403
April.....	1.514	1.403	1.536	1.518	1.304	1.382	1.882	1.286	1.40	1.481
May.....	1.505	1.438	1.654	1.451	1.405	1.387	1.525	1.292	1.326	1.494
June.....	1.463	1.41	1.411	1.431	1.362	1.369	1.526	1.193	1.399	1.417
July.....	1.469	1.385	1.452	1.449	1.315	1.349	1.38	1.286	1.380	1.317
August.....	1.451	1.358	1.41	1.43	1.340	1.353	1.468	1.315	1.393	1.266
September.....	1.456	1.382	1.42	1.389	1.422	1.399	1.479	1.365	1.384	1.383
October.....	1.577	1.375	1.43	1.408	1.402	1.34	1.497	1.345	1.39	1.382
November.....	1.467	1.39	1.447	1.394	1.412	1.373	1.465	1.342	1.307	1.395
December.....	1.44	1.397	1.404	1.42	1.431	1.35	1.437	1.393	1.158	1.399
Average.....	1.49	1.402	1.466	1.445	1.352	1.397	1.481	1.295	1.374	1.416

ANTHRACITE BARLEY COAL.

January.....						\$1.30	\$1.30	\$1.294	\$1.339	\$1.479
February.....						1.408	1.403	1.330		1.422
March.....						1.50	1.35	1.429		1.317
April.....				\$1.65	1.35	1.35	1.35	1.317	1.319	1.386
May.....						1.40	1.35	1.578	1.32	1.35
June.....						1.40	1.35	1.518	1.330	1.832
July.....						1.55	1.35	1.476	1.30	1.837
August.....							1.35	1.50	1.301	1.330
September.....						1.35	1.35	1.50	1.292	1.297
October.....						1.35	1.35	1.50	1.25	1.352
November.....								1.330	1.041	1.330
December.....								.809	1.330	
Average.....				1.55	1.403	1.335	1.424	1.277	1.34	1.175

ANTHRACITE PEA AND DUST (SCREENINGS MADE AT TIDE SHIPPING POINTS).

Month.	Perth Amboy.						All tide points.			
	1900.	1909.	1908.	1907.	1906.	1905.	1904.	1903.	1902.	1901.
January.....	\$1.50	\$1.497	\$1.50	\$1.50	\$1.50	\$1.50	\$1.501	\$1.605	\$1.50	\$1.097
February.....	1.504	1.484	1.50	1.50	1.472	1.50	1.573	1.50	1.478	1.512
March.....	1.499	1.499	1.50	1.50	1.504	1.498	1.50	1.50	1.429	1.50
April.....	1.514	1.498	1.50	1.50	1.389	1.486	1.574	1.548	1.50	1.081
May.....	1.549	1.496	1.522	1.50	1.431	1.508	1.596	1.573	1.387	1.061
June.....	1.515	1.50	1.529	1.507	1.35	1.50	1.653	1.504	1.465	1.096
July.....	1.50	1.50	1.50	1.50	1.462	1.48	1.388	1.50	1.473	1.505
August.....	1.50	1.50	1.496	1.50	1.50	1.50	1.508	1.50	1.504	1.504
September.....	1.495	1.496	1.50	1.49	1.496	1.488	1.53	1.50	1.658	1.335
October.....	1.496	1.50	1.50	1.497	1.50	1.527	1.501	1.488	1.537	1.502
November.....	1.50	1.50	1.50	1.40	1.50	1.529	1.554	1.488	1.564	1.553
December.....	1.523	1.449	1.509	1.476	1.403	1.105	1.538	.....	1.513	1.585
Average.....	1.509	1.504	1.504	1.487	1.455	1.557	1.538	1.525	1.489	1.602

ALL SIZES ANTHRACITE COAL.

January.....	\$2.714	\$2.528	\$2.00	\$2.684	\$2.378	\$2.632	\$2.874	\$3.34	\$2.821	\$1.223
February.....	2.568	2.636	2.502	2.769	2.21	2.746	3.093	3.305	2.917	3.127
March.....	2.741	2.587	2.85	2.871	2.348	2.705	3.049	3.067	2.989	2.962
April.....	2.906	2.303	2.681	2.932	2.477	2.641	3.192	3.132	3.023	2.988
May.....	3.06	2.349	2.756	3.00	2.826	2.648	2.924	3.015	3.179	3.243
June.....	2.724	2.355	2.717	2.815	2.551	2.459	2.852	2.927	3.07	3.109
July.....	2.74	2.688	2.557	2.661	2.411	2.432	2.859	2.761	2.67	2.705
August.....	2.425	2.496	2.694	2.605	2.621	2.411	2.824	2.911	2.954	2.928
September.....	2.05	2.421	2.05	2.52	2.435	2.549	2.777	2.906	3.426	2.906
October.....	2.492	2.601	2.501	2.573	2.673	2.769	2.737	3.067	3.125	2.951
November.....	3.151	2.615	2.417	2.667	2.341	2.722	2.671	2.624	2.852	2.929
December.....	3.271	2.704	2.556	2.907	2.746	2.731	2.591	2.622	3.128	3.051
Average.....	2.815	2.528	2.636	2.725	2.495	2.625	2.817	2.991	3.035	3.026

Q. (By Mr. PHILLIPS.) What effect, if any, has this recent combination had upon the distribution of coal in the great cities, such as Philadelphia and New York? Are there the same number of persons engaged in the marketing of this coal as there was before, or does this combination expect to handle the coal itself and retail it?—A. I do not think it has made any change as yet, but about plans I know nothing whatever.

Q. Or whether they are going to distribute it from certain depots in the cities?—A. I have seen statements to that effect, but I know nothing whatever about it.

Q. (By Mr. RIPLEY.) Coming to the question of labor and wages, how many men do you employ?—A. About 3,700, or a few over of men and boys.

Q. Were your men concerned in the strike last fall?—A. Yes.

Q. Have you any statement to make respecting their attitude or behavior during that time?—A. Our men did not strike except at one colliery. The strike commenced on September 17. I think only 54 of our men went out the first day of the strike, and they continued to work until intimidation was commenced, and they were threatened, called scabs and everything else, and every influence known to labor organizations and that class of people was used to intimidate them and keep them away from work. They continued to work until October 11, when, as a result of rioting, they killed one of our watchmen, shot another one in the face, wounded several others, and we concluded to stop, and posted the following notice:

"NOTICE.

"After nearly 1 month's struggle with intimidation, raiding, etc., and the lack of adequate protection from the proper authorities, and with the feeling that this company has reached a point where it is unable to properly protect its employees, notice is hereby given that all mining operations, from this date, will be suspended until further notice, to avoid loss of life.

"COXE BROTHERS & Co., Incorporated.

"DRIFTON, PA., October 11, 1900."

Q. (By Mr. RIPLEY.) It was not then a strike of the operatives in that case, so much as concessions to prevent difficulties?—A. Yes. We had to protect those

that did go to work, and we were running about half our capacity when we stopped, but during the early part of the strike the men came out nearly full-handed.

Q. What were the wages of the different classes of employees in your mines, distinguishing the miners, common laborers, and boys?—A. There are probably 60 or 70 different classifications. It would be impossible for me to give them.

Q. Can you make any specification at all?—A. No.

Q. Will you make a statement respecting the average wages?—A. For the month of August, before our men quit, the last month we worked, the average earnings in the mines, including those of the boys, were between \$13 and \$14 net, after making all deductions.

Q. What proportion of your operatives are boys?—A. I should say in the mines one-half are miners, possibly. We don't have the small boys we have outside in the breakers, and I think no one under 14 is allowed to work in the mines. We speak of the driver as a boy and the doorkeeper as a boy. About one half are miners, and the other half are laborers, door boys, drivers, runners, and timbermen, and everything of that kind.

Q. That average, then, is compounded by the wages paid to a great number of boys for these various kinds of work, and also the common day laborers as well as the miners?—A. Yes; it is the total pay roll divided by the total number employed.

Q. Will you say that rate per month was typical throughout the year?—A. No; because in August we worked more days than in some other months in the year.

Q. That showing was better than could have been made in any other month in the year?—A. Not necessarily better than any other month.

Q. As good as any month in the year?—A. Here is a statement of the number of days worked in every month of the year:

[The Cross Creek Company—Coxe Bros. & Co., incorporated after March 31, 1900.]

Hours worked in 1900.

ALL BREAKERS.

Month.	Drifton.	Eckley.	Stockton.	Beaver Meadow.	Der.	Oneida.	Total.
	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>	<i>h. m.</i>
January	246 30	226 00	145 30	247 00	230 30	230 30	1,416 00
February	205 40	182 30	105 20	182 55	181 18	210 00	1,067 42
March	219 15	211 26	121 05	204 10	174 19	129 06	1,050 21
April	190 20	208 36	72 20	182 10	196 01	156 41	1,015 06
May	215 39	248 84	131 05	Idle	220 42	231 23	1,047 43
June	214 00	232 27	103 12	88 05	202 04	213 07	1,032 55
July	222 15	241 00	101 55	148 05	223 43	225 22	1,162 28
August	224 00	201 11	122 50	125 28	235 40	232 48	1,232 00
September	212 01	242 48	200 32	174 48	218 32	210 50	1,250 31
October	102 00	117 30	82 00	100 00	100 00	89 00	500 30
November	237 32	240 43	178 22	160 00	245 47	220 21	1,242 45
December	235 24	240 26	190 00	134 30	215 22	209 57	1,234 30
Total	2,543 36	2,653 27	1,563 20	1,747 11	2,433 58	2,439 14	13,380 46

The WITNESS. This statement shows the number of days worked in each one of our collieries. I want to say in this connection that the Beaver Meadow Colliery was idle entirely through the month of May and a good part of June, for the reason that we were building a new breaker, and we had to disconnect the tracks to do that work; consequently they worked much less time during the whole year.

Q. (By Mr. PHILLIPS.) Speaking of the strike, were or were not the men justified in making a demand for better conditions last year when that strike was instituted? Were or were not their claims just?—A. Some of their claims were just.

Q. Were all of them engaged in mining or were only a certain percentage of them miners?—A. Only a certain percentage. They made a good many claims, but possibly it would be well to explain the system on which wages were fixed in the Lehigh region.

Q. Yes.—A. In 1875 the operators agreed upon what they called the basis wages. That is, the price of each class of labor was fixed at a certain price when coal sold at tide water at \$5 per ton. For every 10 cents advance or decline in that price the wages advanced or declined 1 per cent. The price of powder and the prices of other supplies were fixed in order to determine the price to be paid per car. The rates of freight at the time and the price of coal at tide water had gone down to

so low a point that their wages, if they had adhered strictly to the basis, would have been very low, and they never did fall down to the bottom of the basis; but, owing to the fact that the rate of freight was \$2.50 a ton, in order to put wages on the same basis as they were when this contract was made, the price per ton of coal at tide water was taken, the rate of freight paid at the present time deducted, which gave the price per ton at the mines, and then \$2.50 was added for the freight, which was the same rate as paid in 1875, when this contract was made. Upon that the wages were based for each month. There had been, I think, an advance of 6 per cent through the summer on account of the price of coal going up. Then they demanded that the basis be abolished; that their wages should not be made to go up and down with the prices of coal. They also demanded an advance, and I do not know what all. There was a 10 per cent advance granted then, and the price of powder, which had been \$2.75, was reduced to \$1.50, and they went to work.

Q. Would those concessions have been granted had they not struck?—A. I think they would. I know a reduction in the price of powder would have been granted.

Q. Didn't the operators try to reduce the price of powder and have the wages remain as a basis of settlement later?—A. I do not think the offer was ever made. There was a very strong sentiment in favor of reducing the price of powder.

Q. Do you think they would have gotten these conditions without the strike, or not?—A. They would undoubtedly have gotten a reduction in the price of powder; there is no doubt of that.

Q. But not an advance in wages, perhaps?—A. That might have been a question, but I think there would have been an advance.

Q. Do you think now that the wage is too high, or is it not reasonable?—A. As long as we can keep the price of coal to cover that advance; but when we can't we are going to lose money.

Q. (By Mr. RIPLEY.) Is not the price of coal, however, more in excess of the price of coal before the strike than the present wages are in excess of past wages?—A. Yes; but you must remember the conditions which existed just after the strike were very different from what they are going to be now for the next 6 months. When the strike ended we met a market depleted with coal. There was no coal in the market, and winter came on; but now the market is full of coal, and we can't realize those prices, and the prices are back now to where they were before the strike.

Q. Has not there always been a reduction of about 50 cents a ton the 1st of April?—A. Usually; yes.

Q. Is there, then, this year any abatement of the rule? In other words, have you done anything more this April than to go back to the figure that prevailed for April before the strike—than you do each spring to go back to the fall prices?—A. No; the price is always lower in the spring months, for the reason that it is desirable to induce customers who can afford to do so to lay in their winter supply of coal at lower prices, and thus keep the mines at work; or, in other words, keep our collieries in operation. It is impossible to work our collieries full time and sell coal that the people don't have any use for, but simply have to store away until winter comes and they can use it, without making concessions in prices.

Q. But, allowing for the season, you are still at as high a level as in previous years—as you were immediately following the low prices.—A. No; I think the price is about the same as a year ago.

Q. (By Mr. PHILLIPS.) Can not coal be mined and shipped much more cheaply now than it was 10 years ago?—A. No.

Q. Have not the improvements in mining methods, in machinery, and in the cars and handling of the coal, the facilities for handling larger cars, and better tracks had a tendency to make a great cheapening of the price?—A. That is a cheapening of transportation. I am speaking of mining. The cost of mining has not decreased, but on the contrary has increased every year and will continue to increase. Our mines become deeper, more expensive to ventilate, and we have more water to pump, and the cost of mining will continue to increase.

Q. The cost of transportation has been decreasing, and will likely still continue to decrease?—A. I will not prophesy; but it has been decreasing.

Q. (By Mr. C. J. HARRIS.) Some coal mines would be more valuable now than they were 10 years ago if you took into consideration that you had to pay interest and taxes on those lands for 10 years. Is that factor figured in the price of coal at all?—A. That was what I was speaking of a short time ago—whether in endeavoring to arrive at the cost of mining a ton of coal depended on whether you took all those things into account or not.

Q. (By Mr. RIPLEY.) They ought to be included, ought they not?—A. Somebody has to pay for them.

Q. Has not the price of coal got to pay the interest and carrying charge upon

all the money invested in reserve coal lands?—A. It ought to, as a business proposition, get the money out of it that has been put in.

Q. Does it not, necessarily, if those companies are to remain solvent?—A. If they get their money back they have got to get it that way; certainly.

Q. Was that not the reason for the financial difficulty which the Reading Railroad was involved in some years ago?—A. I would not like to answer that question. I do not know.

Q. (By Mr. PHILLIPS.) Returning again to the proposition regarding the investment, do you think it is essential to the good of the community at large that persons should buy up a very large amount of coal or iron or anything else and charge the community interest against that investment? Would not the community be better served if they were held in smaller holdings and mined as the community needed the commodity? Should the community, in other words, be taxed for carrying a very large body of anthracite coal or bituminous coal by any large corporation?—A. I do not think that question has ever come into the cost of mining or selling coal at all. I do not think any companies ever figured on that. They are too glad to get out what their actual cost in labor and material is, with a small profit over it, and their royalty.

Q. (By Mr. LITCHMAN.) Can you tell us something about the nationality of the operatives in the coal regions?—A. Of the miners or the employees?

Q. Yes.—A. Yes; we have 20 different nationalities working for us. We have 1 Jew and 1 Spaniard and 1 Frenchman. The majority of our employees who are employed on the railroad are Americans.

Q. Are not the employees of foreign extraction about three-quarters of the entire number?—A. A good many of those that are rated Americans, you know, are American born from foreign parents.

Q. Then that would make the percentage still larger?—A. Well, they are rated American; they are American born.

Q. You have given a total of 3,350, and of those you classify as American 999?—A. Yes.

Q. That would be a little more than two-thirds actually of foreign birth, and a portion of that 999 are of foreign extraction, but of American birth, you say?—A. Yes.

Q. (By Mr. A. L. HARRIS.) It was stated by the press a few months ago, on what was said to be good authority, that some 9 railroads control about all the anthracite coal in the State of Pennsylvania. Is that true?—A. Yes.

Q. It was stated in the same connection by the same party that it cost three times as much to transport the anthracite coal per mile as it costs to transport the bituminous coal. Is that true?—A. I should think that estimate was excessive; that would be my opinion. You have doubtless had a good many gentlemen before you who are much more capable of testifying on that point than I am.

Q. There is an excess, then, in the transportation of anthracite over bituminous, is there?—A. Yes.

Q. On what ground is that justified?—A. I should say, first, that bituminous coal does not have to be classified in all the various sizes, of which I think there are 8 in anthracite. We have got to classify that coal into sizes in cars, and we can not send a car of stove and a car of pea, and mix the cars all up. It is classified into sizes, so that when it reaches tide water or destination it can be unloaded directly into the boats without rehandling cars containing other sizes. Bituminous coal does not have to be classified. And then again, the anthracite coal cars almost invariably return empty. They have a load only one way; whereas bituminous cars—a great many of them—return loaded; they are used for iron ore and for various other purposes. In our cars, for instance, we never have a load back except some scrap, or something of that kind from a wreck; nothing that amounts to anything. They are loaded one way and empty the other.

Q. In your opinion, does the coal transportation get a fair and liberal rate?—A. Yes; I think so.

Q. (By Mr. LITCHMAN.) I want to find out whether the proportion of foreign operatives in the region generally would be the same as that stated by you as applying to your own employees, so far as your judgment goes?—A. That, of course, would be impossible to say; but I would not think the ratio would vary very much.

Q. How long have you been familiar with the nationality of the employees in the region?—A. I have been connected with mining now for 16 years, and I have been engaged as a mining engineer since 1869.

Q. Have you noticed a change in the personnel of the miners in that region?—
A. Very decidedly.

Q. Can you give us a little information on that point in a general way, showing the change from one nationality to another?—A. In old times, 20 years ago or thereabouts, all of our miners were Welsh, Irish, Germans, very few Americans, few English. There were a good many Cornish men, but they were mostly employed in rockwork; and we had no Hungarians, Polanders, Austrians, and men of those nationalities. Now the younger generations have come along of the Welsh and the Irish, and they have not gone into the mines. The parents have been ambitious to give them a little better education than they had, as every parent is, regardless of nationality: to put them in a little better condition; to give them a little better chance, and the result is that very few of the young Irish and the young Welsh and the young Germans are found in the mines, and these foreign classes have come in and taken their place to a very great extent; and it is not a very desirable change.

Q. Is it not true that this foreign element has been brought in by reason of strikes among the original miners and the sons of the original miners?—A. No; I do not think there have ever been any men imported into the anthracite coal field.

Q. We have it in testimony that the first firm to import foreign labor was that of Cox & Brothers.—A. I have heard that statement. I have looked it up, and I find there is not one word of truth in it, absolutely none. There is a little peculiarity about it. A Hungarian comes to Drifton, and he goes to work, and he does very well, very much better than he ever dreamed of doing in the old country, and he immediately writes to his friends, and they come straight to Drifton. There was another colliery up on the Pennsylvania road above Shamokin, Hickory Ridge, and they came there in droves. They did not know any other place in America but Hickory Ridge. That is the way they come, in schools and droves. I mean that is the way they started, because now they have friends scattered everywhere all over both bituminous and anthracite regions.

Q. It is substantially true that the older miners have been very largely supplanted by the Hungarian and Polish miners?—A. Very largely so; very largely so. I think we have a larger percentage of the old miners than any other collieries in that region, for the reason that we have given them better conditions. We have better houses. For years we had a hospital where they were attended carefully, free of charge, until the State built a hospital at Hazleton, when ours was abandoned. They have had exceptionally good treatment in many respects.

Q. (By Mr. KENNEDY.) I would like to ask whether these Poles and Hungarians show a disposition to become American citizens and to remain in this country?—A. Not very largely. Both political parties look after getting them naturalized, when it comes near election time, a little too close for the public good; but even if they do get naturalized, when a strike occurs they will go back. Last fall they went home in droves, saying they would come back when the strike was over. They get enough money to make them independent over there.

Q. From the point of view of making them citizens, they are not as desirable as those who come from the British Isles?—A. I think the Polanders make good citizens. Some of the young Polanders are very bright fellows, and some of the other nationalities will doubtless make good citizens.

Q. (By Mr. RIPLEY.) You mention Polanders; are they not Polish Jews?—A. No; I mean regular Polanders.

Q. (By Mr. PHILLIPS.) Is there some additional statement that you would like to make?—A. About the only statement I wish to add in reference to the anthracite coal trade is, that the production is a good deal in excess of the market. That is a condition that has existed for a good many years past. We have a capacity of say 60,000,000 tons, and a market for 45,000,000 tons now. That has been one of the difficulties in maintaining uniform market conditions.

(Testimony closed.)

WASHINGTON, D. C., April 16, 1901.

TESTIMONY OF MR. JOSEPH S. HARRIS,

Former president Reading Company.

The commission met at 2.50 p. m., Vice-Chairman Phillips presiding. At that time Mr. Joseph S. Harris, former president Reading Company, appeared as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. RIPLEY.) Will you state your full name, address, and occupation?—

A. Joseph S. Harris, Reading Terminal, Philadelphia. As to my occupation, I am at present not in business.

Q. How long were you president of the Reading Company?—A. Nearly 8 years.

Q. And what was the nature of your occupation and your profession before that time?—A. I am an engineer.

Q. And your official position recently?—A. I was president of the Lehigh Coal and Navigation Company for 11 years. I was also receiver of the Central Railroad of New Jersey during that time and afterwards vice-president of the Central Railroad of New Jersey.

Q. Will you state the relation at present existing between the Reading Company and the various operating companies through which it acts.—A. The Philadelphia and Reading Coal and Iron Company owns a large body of anthracite lands; the Philadelphia and Reading Railway Company owns, leases, and controls a large mileage of railroad; the Reading Company owns the stock of these roads—the stock of the railroad company, and the stock of the Coal and Iron company.

Q. The Reading Company, then, is a finance corporation primarily?—A. I do not know that you could accurately call it that.

Q. (Interrupting.) I will ask the question in another way. Is the volume of bonds and stocks issued by the Reading Company equal in amount to the aggregate bonds and stocks of the other two companies you have mentioned?—A. No. The chief obligation of the Reading Company is the general mortgage. That is secured by the properties it holds in these other companies. These other companies have a large volume of obligations of their own.

Q. Independent of the Reading Company?—A. Yes. You see the Philadelphia and Reading Railway Company is the successor of the Philadelphia and Reading Railroad Company, which had a large volume of securities of various grades. The Coal and Iron company was also a corporation that existed long before the reorganization of 1896 and had its own obligations. The Reading Company in its present form has only existed since 1896, and the general mortgage, which is the chief security issued by the Reading Company, took up the old general mortgage, which was based on the property of the Railroad Company, and of the Coal and Iron company. That is its chief obligation, and there was, as I say, a large volume of obligations of the subsidiary companies. The Atlantic City Railroad, the Central Railroad of New Jersey, and many others of them, the East Pennsylvania Railroad, for instance, have their own obligations.

Q. Is the aggregate volume of stock and bonds of the Reading Company equal to the aggregate amount of the stock and bonds of the companies of which it is composed?—A. No.

Q. Is it larger or smaller?—A. I suppose the stock and bonds are each larger.

Q. Can you give a rough indication of the amount?—A. No; because I have really no idea what the volume of the bonds of the subsidiary companies is.

Q. Can you state the relation between the bonds and stocks of the Reading Company constituted in 1896 and of the bonds and stocks of the railroad company which it superseded, in round numbers?—A. No; I could not tell you at all.

Q. That will appear from the annual reports?—A. Yes; it will appear from the annual reports. I could not even make an approximate answer.

Q. (By Mr. FARQUHAR.) How much greater was the second general mortgage of the Reading Company than the first general mortgage that was taken out?—A. I do not really know; I do not remember. I do not remember how great the general mortgage before was. There are many questions which the commission may ask me as to figures which I shall not be able to answer, because I am careful about what I say about such matters, and do not attempt to hold them in my memory, always having them to refer to when in my office.

Q. (By Mr. RIPLEY.) Are the stocks and the bonds of the Philadelphia and Reading Railroad Company still in existence?—A. No.

Q. What is the approximate value of the stock and the bonds of the Reading Company?—A. The Reading Company has \$28,000,000 of first preferred stock, \$42,000,000 of second preferred stock, and \$70,000,000 of common stock.

Q. Are there not in addition a certain amount of general mortgage bonds?—A. Yes.

Q. Do you recall the figures?—A. That figure is changing; there is at present somewhere about \$63,000,000. Under the plan of reorganization, additional general mortgage bonds can be issued until \$20,000,000 are issued, to come out at the maximum amount of \$1,500,000 a year. My impression is that when the maximum amount is issued there will be \$135,000,000, but this includes a number of bonds or prior liens which have not matured.

Q. Adding up the totals which you have stated, I find the figure to be approximately \$250,000,000 of stock and bonds?—A. Yes.

Q. How would that compare with the volume of stock and bonds of the companies superseded by the Reading Company?—A. I do not really know what the stock and bonds of those companies amounted to.

Q. It was considerably in excess of that figure, was it not?—A. I should suppose so, yes; I do not remember what it was.

Q. In excess by an amount perhaps as large as \$50,000,000 of stocks and bonds?—A. I do not know whether it is or not. The matter is all accessible in the company's reports. The bonds I should say were about \$30,000,000 in excess, but as to the stock I do not know. I came into the Reading originally as one of the receivers, and it was placed in the receiver's hands before I became president, so that many of those details of the old company did not impress themselves on my mind particularly, as I did not make the plan of the reorganization.

Q. Will you state the causes which led to the reorganization of 1896?—A. It was the setting of the Reading companies on their feet again after bankruptcy.

Q. What was the cause of bankruptcy?—A. They did not have money enough to pay their debts.

Q. Can you describe a little more in detail?—A. It seems to me that is actually what the trouble was. They did not have money enough to pay their interest. They went into bankruptcy. They were placed in the receiver's hands on a suit of one of their creditors.

Q. Do I understand you to say that after the reorganization which followed the volume of the indebtedness, stock, and bonds was increased?—A. Yes.

Q. That would seem to require an explanation?—A. The explanation is a very simple one. You can not put a company into bankruptcy because it does not pay dividends on the stock, but you may if it does not pay interest on its bonds.

Q. The change, then, which principally took place in 1896, was a change in the volume of the company's charges?—A. Yes.

Q. And will you state the object of that, or what the relation of the decrease of the volume of the company's charges was, and the increase in the amount of stock. The point I would like to bring out before the commission is this—what the effect of the reorganization of 1896 was upon the volume of securities, and what the capitalization upon it was, the earnings that are now made and were made?—A. I can not answer that question except vaguely. You see you are asking me to testify in regard to a great many questions upon which my testimony would not be worth anything at all unless it was accurate. I can only say that the effect in connection with that reorganization was to lessen the fixed charges, and it did start after the reorganization at less fixed charges than it had before, but as to how much less I would be simply guessing. The figures are not in my memory at all. I think I should fairly say, perhaps, that my labors have been mainly in relation to the business of the company, and the finances were taken care of by the bankers who undertook the reorganization. If I had planned the reorganization I probably should have the figures more definitely in my mind.

Q. Complaint is made that the rates for transportation of hard coal are unduly high as compared with rates upon soft coal and other commodities. Will you state what relation, if any, exists in practice between capitalization and the rates charged? In other words, does the increase in the volume of securities, which, as you have said, took place in 1896, necessarily involve upon the public higher rates for the transportation of the product?—A. Directly there is no connection. The rates are made on the commodities by the freight agents, and the main thing that actuates them in making rates is the rates of their competitors.

Q. Are there any competitors in the case of the anthracite coal-carrying roads at the present time, or do they in general work in harmony?—A. They are working in substantial harmony, but not in exact harmony. For instance, in the case of the Pennsylvania Railroad, its relation to its competitors in the anthracite coal business does not differ, so far as I know, from the relation to its competitors in the merchandise business.

Q. Is that true of other railroads, however, such as the New York, Ontario and Western?—A. I should say yes, with the New York, Ontario and Western. The New York, Ontario and Western is one of the more lately formed roads, and never has worked in particular harmony with the other interests.

Q. Will you make a statement respecting the general proportions of the total output controlled by the different roads? What is the proportion of the Philadelphia and Reading Company of the total tonnage; the share of the output that it ships?—A. It ships about 20 per cent of the total.

Q. Do you include in that the shipments over the Central Railroad of New Jersey?—A. No.

Q. That is about how much more?—A. That, I think, is about 12 per cent.

Q. Those two roads, however, are now one and the same for all practical pur-

poses, are they not?—A. The Reading Company owns the majority of the stock of the Central Railroad.

Q. The policy of that road, then, may be dictated by the Philadelphia and Reading Company?—A. Yes.

Q. But would a small proportion of the annual shipment be able to disturb the rate situation?—A. Yes. It would disturb it in this way, doubtless: A very small proportion might be ignored, but a considerable proportion, if it were sold in Boston, for instance, at a much lower rate than the other parties were selling, would of course affect the previous rate.

Q. A statement has been publicly made in the press and also before this commission that somewhat over 90 per cent of the anthracite coal tonnage shipped is controlled practically by a combination of interests, either absolute ownership or community of interest, and that a small proportion, perhaps from 6 to 7 per cent, is not so controlled. Would that 6 or 7 per cent be able to disturb the price of coal or the rates charged?—A. I do not know that the statement is accurate. The Pennsylvania Railroad certainly, with about 12 per cent, would have to be considered an outsider. I should think the Delaware and Hudson would, with about as much coal; New York, Ontario and Western with about 4 per cent; the Coxe interests, with about 4 per cent, are not in any way closely affiliated with the others; Coxe's is an entirely independent ownership.

Q. Are you aware of any desire on the part of the railroad companies to harmonize their interests in this way?—A. Undoubtedly.

Q. Will you state what certain advantages and disadvantages would follow from such a policy?—A. I think your question is a little too large. Be a little more definite.

Q. Will there be any economy in operation incident upon such a consolidation or harmony of interest? Can coal be mined more cheaply and put upon the market more cheaply at a saving to the consumer, if this consolidation takes place or this harmony of interest is attained?—A. I suppose so, yes. I suppose, for one thing, the cost of marketing it might be very much decreased.

Q. Would that follow unless common agencies for distribution at terminal points were constituted?—A. That would be one way of doing it. The way in which an economy would be made would be by the elimination of a great number of middlemen—men who are interested as commission merchants. It would probably eliminate the commission merchant to a great extent, and put the business in the hands of direct agents of the several companies. That would make a noticeable economy.

Q. Would that not make it necessary that those agents should act as a unit?—A. Not necessarily. They never have so acted. They are just like the freight agents of the country. Their interest is to act together, but they don't do so.

Q. Great difficulty has been experienced in the past, has there not, from cut-throat competition of one coal road with another?—A. Yes; competition has gone in many cases beyond the point where it was wise or to anybody's interest—either the interest of the producer or the consumer, or the carrier—as it has in the general freight business of the country.

Q. Are there any factors, however, peculiar to the anthracite coal industry which would make such a combination or consolidation of interests more desirable from the point of view of operation than in the case of general railroad business?—A. It does not occur to me at the moment how the anthracite business differs from any other interest in that respect.

Q. (By Mr. PHILLIPS.) Was or was not an effort put forth lately to control the anthracite output, both as to mining and shipping?—A. Control in what way? What do you mean by control?

Q. Such control that there would be no cut in freight rates.—A. I have to ask these questions because there is a very great amount of vague talk in the papers, and we will have to get down to closer lines before I can answer intelligently. I do not really know exactly what you have in your mind about control.

Q. The anthracite coal field is limited in extent?—A. Yes.

Q. And there are only certain railroads that run into that field?—A. Yes.

Q. Heretofore there has been a very considerable cut in freight rates. Now, by this harmony of interests have they advanced the rate?—A. There has not been a considerable cut in freight rates in any of the recent years. Freight rates have been very fairly maintained.

Q. Then what relation do present freight rates bear to the rates prior to this consolidation of roads?—A. Freight rates on the whole have gone down in the last 6 or 8 years. They are considerably lower to-day than they were 6 or 8 years ago.

Q. (By Mr. RIPLEY.) Are you speaking of the average rates, or are you speaking of the rates of hard coal transported by the Reading Company?—A. I am

speaking of the rates on hard coal. That is what we are talking about, I understand. The general rate on hard coal from the mines to tide water a few years ago for some years was about \$1.70. It is considerably lower now.

Q. Can you state the specific figure at the present time?—A. I should say probably \$1.30. It varies very much.

Q. (By Mr. LITCHMAN.) Why not get the price of coal at the mine and at tide water, showing relation the freight has to the price of coal.

Q. (By Mr. RIPLEY.) Will you make a statement respecting those points, the price of coal on the properties of the Reading Company at the mine mouth as charged to the railroad and at tide water at the present time?—A. The Coal and Iron Company does not sell its coal to the railroad company. It does not put its coal at the mine to the railroad company at any price. It delivers its coal to the railroad company for transportation, and sells the coal itself when it gets to destination.

Q. Do the other railroads stand in the same relation to the railroads which serve them as the individual operators do?—A. In some cases, yes; and in some cases, no. There are still in the Reading territory operators who mine their coal and put it aboard cars and sell it when it gets to destination themselves. They stand in relation to the railroad company just as the Coal and Iron Company does. There are other operators who sell their coal to the railroad company at the colliery.

Q. A greater proportion of them, however, sell at collieries to the railroads, do they not?—A. A greater proportion in the other regions do; yes. I do not really know whether the volume of coal that is transported by us for private operators is or is not greater than that of coal bought by us at the collieries from private operators.

Q. The amount produced by independent collieries in your territory is exceedingly small, is it not?—A. Not exceedingly small. I should say perhaps a million tons.

Q. Out of a total of how many?—A. Out of a total of 8,000,000 or 9,000,000 tons. In other words, practically one-eighth of your tonnage shipped is produced by independent collieries?—A. I should say so; perhaps more.

Q. Do I understand that you mean that the company has no interest in those collieries, no agreements, no financial relation?—A. In some cases absolutely none. In some cases they have some. For instance, I have in my mind a colliery in the Hecksherville district which started by leasing ground from private parties. When they got to the boundaries of that territory, they came to the Coal and Iron Company and asked for leave to run into our territory. They offered in return for that privilege that they would let the Coal and Iron Company run into their territory; so things became quite mixed up there. The limits of the mines and the way in which they are worked depend very largely on the geological conditions. That they should mine certain coal on our property and we some on their property was found to be economical for the general interests, both theirs and ours. That is the way they started originally. We had absolutely no interest whatever, and neither the Coal and Iron Company nor the railroad company had any interest originally in that coal except in the transportation to the tide. As time has gone on that relationship has changed some, and the Coal and Iron Company has some interest as it gets a royalty on the coal mined from its property.

Q. In the case of the properties of individual operators in your territory, what rate do you charge per ton for transportation to tide water?—A. There are several rates; one is the rate to Philadelphia tide and the other rate to New York tide.

Q. Will you make a statement in either or both cases?—A. I really can not tell what the figures are; I do not remember.

Q. Are these accessible?—A. Yes; they are published whenever there is a change in freight rates.

Q. Can you state approximately what the amount is?—A. Well, I should say to New York tide it is somewhere about \$1.30 a ton; to Philadelphia tide it is probably something less.

Q. Do I understand you to say that in the case of coal mined by the Philadelphia and Reading Coal and Iron Company that that coal is transported by the railway company as the property of the coal company?—A. Yes.

Q. Do you charge in accounting the same rate upon coal which is transported for that coal company as you charge the individual operators?—A. Also not.

Q. There is no discrimination whatever?—A. None whatever in any way, shape, or form; absolutely the same.

Q. Has that been the rule ever since the reorganization of the Reading Company in 1897?—A. Yes; and before. That has always been the rule.

Q. Complaint has been made at various times and voiced in the Anthracite Coal Operators' Association letter that discrimination against the individual operator and in favor of the coal companies is made.—A. That has not been true in regard to the Coal and Iron Company.

Q. Such discrimination does not exist in your company?—A. Absolutely not. I can not make that assertion too strong or too plain from the beginning. There is another thing that is sometimes charged, that the Reading railroad companies are absolutely free from. It is charged that there has been discrimination in the distribution of cars, that one party would get a larger proportion of cars than another one. In the Reading district the method of apportioning cars is this: There is a subordinate officer of the railroad company whose duty it is to visit every colliery and ascertain its productive capacity. He finds that one colliery can produce 50, another 40, and still another 30 cars daily. He goes to everybody shipping coal over the Reading lines and estimates the amount which each one can produce. The sum of these makes an aggregate and whatever cars there are to distribute are distributed on that basis. That has been done so accurately and so thoroughly in all past years that you can not find anybody, any private operator or official in the Reading division that would not tell you that has always been done equitably. So they have no reason to complain. I know something about the Reading's affairs for 30 years, and know that in many respects the Reading Company's record is above reproach. It is absolutely fair.

Q. Do I understand you by that to imply that if the individual operator was to try to increase his output the railroad company has no objection?—A. The plan works in this way: Suppose a man's colliery rating, as it is called, has been 50 cars a day. He goes to this colliery inspector and says, "I have done so and so; my capacity is about 60 cars a day." The man goes and examines his collieries, and if he finds it is so he is put down at 60 cars a day.

Q. And if that operator desired to increase his plant and to double his output he is perfectly free to do so?—A. Absolutely. Nobody has ever had anything to say to him about that at all.

Q. Is the Reading Company free at the present time in a similar way to increase the output as it pleases irrespective of the action of other roads?—A. Yes. Let me amplify that statement a little. No company ever criticises another as to what it does about its collieries. It can have fewer or more collieries as it pleases. Nobody says anything to me if I choose to double the output of the colliery. That is nobody's business.

Q. I find in Bradstreet's of 1895 a statement to the effect that a great deal of difficulty in the anthracite coal trade has been encountered by the constant desire of the Reading Company to increase its allotment. Are you aware of any such desire on the part of the company?—A. If it has such a desire it has not shown any indication of it. This should fairly be said: I think it is true that the Reading Company is the only one of the large companies that is entirely controlled about Philadelphia or has been in the past. It has no special representation in New York, and on the principle that the absent is in the wrong, a great many of the evils of the coal trade have been charged to the Philadelphia and Reading Coal and Iron Company. Now, the Philadelphia and Reading Coal and Iron Company has taken no measures that I know of to justify any such criticism as that at all; that is another idle story.

Q. It, however, has resources undeveloped greater than those of any other company?—A. It has greater resources than any other company; yes, but it is not correct to say that it alone has undeveloped resources. There are a number of the other companies that have undeveloped resources.

Q. It has, however, a proportionately larger undeveloped amount?—A. Yes.

Q. Would or would it not, then, be a strong temptation to that company, especially would it not have been in the past when it has been in financial straits, to increase its output, to take a reduction of prices, perhaps, in order to gain a market?—A. If there has been such a temptation it has been virtuous enough to resist it. The output of the Reading Company to-day is not proportionately larger than it was 20 years ago.

Q. What is the proportion at the present time?—A. About 20 per cent.

Q. Was it not larger 10 years ago than to-day?—A. No; not larger 10 years ago. It was larger many years ago, but 10 years ago it was about the same. It has not varied very much in 10 or 15 years. The proportion was larger many years ago because the Reading territory was developed earlier than the others. There was a time when it had half of all the output, and while it has gone on growing it has not grown as fast as the others. You see, there are several reasons for that. One of them was that the Reading in the old days practically only had access to the markets of the East, whereas the other companies had access to the markets of New York State and Western States. That is not now true as to Reading, but it was so for a good many years.

Q. (By Mr. KENNEDY.) I want to ask about what the market takes. I understand it takes about 50,000,000 tons a year.—A. It never has taken quite 50,000,000. I think the largest output was 46,500,000.

Q. I read a statement that it was 49,000,000 last year.—A. There are several

ways of making that up. Probably the statement you saw included the coal that was burned at the mines. I am quite sure that 46,500,000 was the output of 1895, and that was for some years the record year. It may have been a little more last year; I do not remember: but it has never reached 50,000,000 shipped from the mines.

Q. I want to ask if the Reading could not if it chose to work its coal lands to the full extent supply the entire output now?—A. By no means. The best proof that it could not is that we never have shipped, even in October, when all companies ship to the limit of their capacity, much more than a million tons in a month. A million tons a month would mean we could not ship over 10,000,000 in a year; so you see we would not have more than one-fifth of the output; that is the limit of our collieries.

Q. I am not speaking about collieries; I am speaking of reserve coal lands.—A. There is no telling what we could do there. We could ship more coal if we could go on and develop the whole of our region, but it costs to develop a first-class colliery now anywhere from \$300,000 to \$700,000.

Q. Don't you recognize that you have a certain percentage of the market and that you are not to exceed that percentage, so as not to encroach upon the supply that the other roads may take to the market?—A. Yes.

Q. (By Mr. FARQUHAR.) What is the policy of your company in respect to your reserve fields? Is it that instead of present developments there is an advantage in holding as against the ultimate market or a condition that may insure better prices for coal?—A. I think you might consider coal as analogous to anything else. For instance, copper. You may have a very large tract of copper lands. You might be asked why you did not make more output, and you would say that you had to be governed somewhat by the cost of developing and somewhat by the amount you could sell. If we were to attempt to add 50 per cent to our output, it would take us, I suppose, 8 or 10 years and possibly require the expenditure of \$5,000,000 to reach that point, and by doing so we would disturb the market, so that we would lose money on that advance. There are a great many conditions, as in all lines of business; you have to keep fitting your action to the condition of your business in coal as in other lines.

Q. Is the field for the consumption of your products circumscribed?—A. Yes; circumscribed by the price. We send some coal around the Great Lakes and to some distance beyond the Great Lakes, because lake transportation is very cheap; but I do not know what proportion of the whole output. The anthracite companies, I imagine, do not sell more than 5 per cent of coal to the Great Lakes of the country and cities tributary to them, because it is a fancy article there—a luxury.

Q. If the owners of the mines transported 10 per cent more in the market, would the price go down?—A. Yes.

Q. What is the competition in respect to natural gas, electricity, and bituminous coal? Are you circumscribed by them also?—A. Yes; by natural gas largely, by bituminous still more largely; by electricity I should say not much, because electricity is a product, you might say, of the second order. You have to burn coal to produce electricity.

Q. Your proposition as to the analogous condition of the mines, a copper mine and coal, is similar to conditions usually confronted in the West, that a man will produce, say, 2,000,000 year in and year out for a continuous time, making a dividend of 10, 12, 14, or 16 per cent, and the stockholders are satisfied with the profit. Would you say that in your output of coal the Reading is satisfied with its profit, with its division of the output?—A. Yes; as to the division of the output, that point has been reached after many years of conflict. We have been fighting over that question for 30 years. It is very curious that whether we have been working in reasonable harmony or absolutely out of harmony, the proportion we take amounts to about the same thing. It varies very little. Each company has certain natural advantages. The companies in one of the regions have a natural advantage over the others with respect to shipments to New York State. We, of course, have a natural advantage in Philadelphia. Nearly 25 years ago we got to a state that almost bankrupted everybody. The proportion each of us took did not differ materially. There was about the same proportion mined by each. Again we find that certain people like certain coals. The coals burn differently, and you can not change this preference any more than you can change the brand of flour they prefer to buy. One set of people like one brand of flour; another set of people another. It was true to a singular extent, that whether we were fighting or were not fighting, each company had pretty nearly the same proportion of output.

Q. (By Mr. RIPLEY.) Did that proportion hold pretty constantly during the war of rates and prices which followed the resignation of Mr. McLeod from the presidency in 1893?—A. Yes; pretty closely.

Q. So that allotment of the different roads, so called, remained pretty nearly constant, whether the price is high or low?—A. The amount of coal that the several companies transport amounts to about the same whether the rates are higher or lower. You will find that to be true by looking back over the statistics. I do not believe any company went at any time 2 per cent away from the amount that was ordinarily shipped.

Q. New companies are, however, coming into the field all the time, are they not; referring, for instance, to the New York, Ontario and Western?—A. Yes; but the New York, Ontario and Western has simply taken the output of some one else; it has not developed any new coal, to speak of. This is what has happened. Possibly the Delaware, Lackawanna and Western, and some other railroads, formerly mined some coal which the New York, Ontario and Western has now taken. They have opened no new fields; they simply bought collieries that had been shipping on some other road.

Q. Was there not some apprehension that the construction of an independent line to tide water within the last year—I refer to the Erie and Wyoming Valley—would disturb rates and prices?—A. Yes.

Q. The amount it could have shipped would have been proportionately small, would it not?—A. I suppose it could possibly have secured 7 per cent, or something of that sort—some three million tons.

Q. (By Mr. KENNEDY.) If your company were to operate upon the old lines of competition to get out as much as you can, and get as much of the market as you can, the price of coal would be cheaper to the consumer, would it not?—A. Probably; yes.

Q. (By Mr. RIPLEY.) Is not the price somewhat above the average this year—considerably above the average?—A. Somewhat above the average of prices for the preceding year.

Q. What is the price at the present time of, let us say, any of the standard prepared sizes of your coal?—A. I can not tell you. I think it is \$4 a ton in New York.

Q. Is not that about 50 cents a ton higher than it was last year?—A. No; I think it is the same price.

Q. Is it not higher than it was previous to the strike last fall?—A. I think not; I think it is the same price that it was this time last year. It is 50 cents lower than it was a month ago.

Q. Is that not, however, the usual reduction at this season of the year?—A. Yes. Q. The fair comparison would be, then, April of this year with April a year ago?—A. I think the price is the same.

Q. It has been testified before this commission that the price is appreciably higher. Of course that is a matter of public knowledge?—A. Absolutely; yes. I think the price is the same as it was this time last year. I think the price is the same as it was after the drop made in the spring.

Q. The point I would like to bring out is this: Would an increase in the price, supposing that it took place to the amount of 50 cents a ton, correspondingly increase the net receipts of the company? That is to say, is it financially to the advantage of these companies acting in harmony to put the prices up?—A. I should say not, and I should say that that is very generally understood by the companies. If the anthracite producers controlled the coal market of this country it would undoubtedly be to their advantage to have prices advanced, but it is bituminous coal that controls the coal market of the country, and we know perfectly well that by putting the price up we should limit the market. I do not understand there is any disposition to put the price above what it was during last winter.

Q. It has been as high as it is to-day a number of times in April in past years?—A. Yes; and higher.

Q. In your judgment would an increase of price above the present figure, however, operate disadvantageously to the companies?—A. Yes; and that is the general judgment of the companies, I understand. They do not think it would be wise to put the prices higher.

Q. (By Mr. PHILLIPS.) Still you admit if there were free competition and no combine, prices would be lower?—A. Prices would be lower, and we would all be in bankruptcy probably.

Q. (By Mr. RIPLEY.) Is the price made by joint action of all the railroad companies?—A. No.

Q. Who makes the price of coal to-day?—A. It is made by the general supply; and by conference among the selling agents of the coal companies.

Q. It has been testified by at least two witnesses in the coal industry that a circular letter is sent around each year by the Reading Company stating the price which it will make for that season, and that that price is acquiesced in by the other

companies?—A. The Reading Company does issue and always has issued a circular of prices at which it sells coal. Whether that price is acquiesced in or not by others is a matter entirely for the companies themselves to say. Sometimes it is and sometimes it is not.

Q. Do you mean to say that if it were not acquiesced in, that if other companies sold at 10 or 15 cents below the figure that you fix in your circular prices, you would still adhere to your prices?—A. That would be a matter for the exercise of judgment. In many cases we enjoy this difference because some of our coals sell more readily and in some places we have an advantage. I do not suppose there has ever been a year that we did not for a considerable time vary from the prices. Some companies' coal is not as readily salable.

Q. (By Mr. LITCHMAN.) Is that more true at competing points?—A. Yes; we have ourselves coals that sell at 75 cents or \$1 more than other of our coals, as you can see on any of our circulars.

Q. (By Mr. KENNEDY.) A president of one of the large coal roads testified that as a rule his company follows the prices fixed in this circular of yours. I would like to ask if it is not your understanding, as well as that of others, before you send the circular out, that they shall follow the prices you make?—A. No. If he testified he did it I have no doubt it is true. We make our price and send out the circular, but they frequently do not follow the price.

Q. As a rule do they not follow it?—A. They frequently do, but it is a matter entirely of their own volition. We do not do anything to make them do so. We fix a price at which we think we can sell our coal. Now, last year there were several cases where people did not follow our prices. They were not satisfied that that was the right price, and they did not do what we did.

Q. (By Mr. RIPLEY.) Has there been any absorption of any individual coal operators in the territory served by your company during the last year or two? Have purchases of collieries been made?—A. No.

Q. The map upon the wall, showing by colors the location of the different coal properties, was prepared by Mr. Griffiths from plans published in the Bond Record. Does it represent the situation at the present time? In other words, have any considerable changes taken place since 1895 and 1896 as to the ownership of coal properties?—A. Not in our region: no. We have bought little pieces of coal land, 50 to 100, 200 acres—little pieces outlying here and there—but I do not think there has been a single large purchase of coal land made in the last 8 years by the Reading Company.

Q. (By Mr. KENNEDY.) Mr. McLeod had bought about all there was in sight up to that time?—A. Mr. McLeod did not purchase any coal lands. They were all bought by Mr. Gowen.

Q. Mr. Gowen, I mean.

Q. (By Mr. RIPLEY.) There were quite a number of purchases made, too, by Mr. McLeod?—A. No, I think not.

Q. You think not?—A. I think not. I do not recall any purchases made by Mr. McLeod.

Q. (By Mr. LITCHMAN.) The claim has been made that the bankruptcy of the Reading Railroad was due to the fact that it had bought out a lot of coal lands in anticipation of future needs, and therefore loaded itself down beyond its capacity to carry. Have you anything to say on that point?—A. Yes; I should say that was a fair statement. Those purchases were made mostly from 1870 to 1875, I should say, by Mr. Gowen, and I think Mr. Gowen did push that policy too far.

Q. Was it the policy of the road to charge a certain portion of expense to those purchases to meet the cost of carriage?—A. I do not quite understand your question.

Q. It is charged that a certain portion of the expense of the road is due to the cost of investment in these unproductive lands bought in anticipation of future needs. Is there any such thing as that?—A. No; there is not.

Q. (By Mr. RIPLEY.) What pays the interest?—A. On the coal and iron company?

Q. No; on the new lands?—A. There are no interest charges specifically based on the new lands.

Q. As I understand Mr. Litchman's question, it is whether the expenditures for interest and for taxes, etc., are not a charge upon present earnings, and whether they do not help to fix the price of coal higher than it would otherwise be?—A. I think not. I am not sure that I yet quite understand your question. What the coal and iron company does is this: It mines its coal, puts it on cars, sells it when it gets to its destination, pays the railroad company the same rate that anybody else pays for carrying it, and out of its net earnings arising therefrom it pays its cost of mining and its interest. There is no mixing up of the finances of the two companies.

Q. But is not the expenditure made for those coal lands still an important fac-

tor in the total value of stocks and bonds out?—A. I think I can put that question possibly a little more plainly. If you ask me if the Reading Coal and Iron Company had not expended any money for coal lands whether it would have less interest charges, I should say, certainly.

Q. (By Mr. LITCHMAN.) Well, then, is it not true that an interest charge is paid for this land that was bought in anticipation of future use? Is it not true that that is a charge upon the Reading company at the present time?—A. Undoubtedly; the interest on the purchases is still a charge.

Q. And the taxes on this land that is held also are a charge?—A. Undoubtedly.

Q. Then if that charge were eliminated it would enable the Reading, on the same earning capacity, to pay a higher rate of dividend on the stock?—A. And similarly if it had not built its railroads, the railroads would not have cost anything and the company would have paid more on its stock. All railroads are built in anticipation of use, and to develop business.

Q. Is that a fair comparison with the purchase of the lands?—A. I should say that the purchases of the lands went further ahead of present needs than the building of the railroads. Those are matters which, of course, lie in individual judgment. Doubtless Mr. Gowen did what he thought was best for the interests of the company. In some respects he may have bought more coal lands than were necessary. I think, myself, that he did.

Q. Understand that these questions are not asked in criticism, but they are made because we thought you were in a position to give us information ex cathedra.—A. It can not be denied, of course; it is a perfectly patent thing that if fewer coal lands had been bought, or if they had been bought for a less price, there would to-day be a smaller interest charge. There is no question about that. Similarly the Reading company and every other company that I know of made mistakes in building railroads. They built railroads in some places which did not turn out to be the best places, and which you would call more expensive than they might have been.

Q. (By Mr. PHILLIPS.) Is that charge, then, taken from the stockholders for carrying this debt?—A. Yes; unquestionably. That is, there is a certain amount of net earnings of the railroad company and the coal and iron company, and these interest charges necessarily come out of that amount. There is therefore less to pay the stockholders than if that sum did not come out.

Q. (By Mr. RIPLEY.) The significance of this circumstance would be less, perhaps, if it were not for the fact that the charge is made by the coal companies that do not carry as large a reserve supply as does this one company?—A. There is nothing in that, absolutely nothing.

Q. (By Mr. LITCHMAN.) The significance is also greater when the claim is made that the bankruptcy of the Reading Railroad was caused by these lands?—A. That is unquestionably so.

Q. (By Mr. PHILLIPS.) Was the receivership caused by competition?—A. The two things came in. If there had not been so much competition there would have been more earnings and they might have been able to carry these loads. Of course, if you have half a dozen merchants doing business in town, the man who has loaded himself up with unwise investments is probably the one that will first go to ruin in time of competition. That comes in every business. The man who has no debts will last longer if his business is conducted wisely.

Q. (By Mr. RIPLEY.) Have you an estimate of the amount of lands that are owned by the Reading company, and how long the supply from those lands will last?—A. Yes; I have estimated it. I do not remember what it is. It has been published several times, but I do not recollect what the figures are.

Q. (By Mr. KENNEDY.) Two hundred years?—A. No; I should say not. I do not think the lands would hold out. I do not think at the present rate of production there will be very much left of the lands in a hundred years, and I think the output of anthracite has nearly reached its maximum. (Witness refers to map.) I doubt whether it ever reaches 60,000,000 tons a year, and the reason for that opinion is that about half the land in all this territory from Pittston east has reached its limit of production, and I doubt whether it will ever produce more coal in any year than it does now.

Q. (By Mr. LITCHMAN.) Is any exploration being made to ascertain whether there is coal deeper than the coal that is being developed now?—A. Yes; the mines have been very thoroughly explored there. A good many of these properties are now working out—you will see in that report of Mr. Griffiths. Mr. Griffiths states, in regard to some of the companies there, that they only have a few years' coal left.

Mr. RIPLEY. Nine years in one case.

The WITNESS. There is a very great amount of coal in this part of the region (indicating the western part).

Mr. LITCHMAN. In the western part of the field.

The WITNESS. And the reason of that is because it is deeper there. Here (indicating the eastern part) anybody could develop coal cheaply. Here (indicating another point on the map) in some cases they have to go down 2,000 or more feet.

Mr. RIPLEY. In speaking of the conditions will you not kindly name the sections by towns or districts?

The WITNESS. The district which will soonest be exhausted is the eastern end of the Wyoming coal field, which is sometimes called the Lackawanna coal field. The western end of the Wyoming coal field will last much longer. The group of small basins known as the Lehigh region has passed its maximum production, and will not produce nearly as much as the other fields. I doubt whether the Mahanoy and Shamokin region will ever produce more than it is producing now. There are lands in the western end of the region which are not fully developed, and there are lands in the eastern end of it which are very nearly exhausted. Some of our Reading collieries are exhausted, and some are approaching exhaustion. The Schuylkill region is the great reserve of coal. More than half of the coal in Pennsylvania is there.

Q. (By Mr. PHILLIPS.) You speak of mines being exhausted. Is that demonstrated by following the veins down to the bottom for the coal?—A. Yes.

Q. Where it does not exist?—A. Yes.

Q. What is about the depth of the anthracite vein from the top?—A. That differs very greatly. In some cases you will enter the anthracite at the surface of the ground. In some cases the basins will not be more than 100 or 200 feet deep; but about Pottsville, in the Schuylkill region, the bottom of the basin is supposed to be about 5,000 feet deep. It is sometimes charged, I think, that the Reading has not developed this region because it has been holding it back. The real reason is that this coal is deeper and it is more costly to mine, and therefore it could only be developed at a certain rate in comparison with the coals that were farther to the north—in the Wyoming region, for instance. In the Wyoming region the coal is very much less disturbed in its stratification and very much less interstreaked with slate. So marked is the difference in this respect that in some parts of the Schuylkill region it costs nearly as much to prepare the coal after you get it to the breaker as it does to get the Wyoming coal out and prepare it. In the property of the Lehigh Coal and Navigation Company there is coal which is called Lehigh coal, notwithstanding it is in the eastern end of the Schuylkill region. That brings in another matter: In that region the coal is hard at the extreme eastern end, and it grows softer and softer as it goes toward the western end, until you get the Lykens Valley coal. At the extreme western end we reach a spot which belongs to the Pennsylvania Railroad. And in some of our own collieries at the eastern end it is extremely hard. But in the Lehigh Coal and Navigation Company's mines I estimated, when I was in charge of them, that we had to raise to the surface about three tons of coal and about ten tons of water from an average depth of 600 feet, for every ton of coal we sent to market. I have seen a whole train load of mining cars come out of the Lehigh Coal and Navigation Company's mine, and you could stand and look into the cars and you would say there was nothing there but slate and dirty water. Nothing else was to be seen. It is because, for these reasons, coal is so much more costly to prepare in the Schuylkill region, that the development of that region has been retarded and the other regions have been gone into in advance of it. These drawbacks have had a disastrous effect upon some individuals. Since I have known the Schuylkill region there have been three sets of people, one from New York and one from Boston and one from Scranton, that have come into the Schuylkill region to buy up coal lands and make fortunes there, their theory being that the reason people could not make money mining in the Schuylkill region was because they were too dumb. But they have all gone home without their money. It is an entirely different proposition mining coal down there from what mining it in the Lehigh is. And it is proper to say that that is why the Reading company's task has been harder than that of some other companies. The cheap mining in the Wyoming region and by the Lehigh company has been mostly done, and that is the reason why the Reading company can hold its own better than it could formerly.

Q. (By Mr. RIPLEY.) In other words, the outlook is for a slightly increased cost in comparison with formerly?—A. Absolutely. I should say that coal costs, perhaps, from 75 cents to a dollar more to mine to-day than it did 20 or 30 years ago.

Q. (By Mr. LITCHMAN.) Before we pass from the element of cost, let me ask how much increase has there been in the cost of the labor of mining coal?—A. The cost of labor has varied very much at different times. Immediately after the civil war the cost of labor was very high. Twenty years ago the cost of labor was much lower than it is now. I mean to say the wages that were paid varied very greatly. I should say there had been a considerable increase in the cost of labor, and that partly for the reason that 20 years ago only the finest veins and the most

easily operated were mined. Now, a mined vein in some cases is not more than 2½ feet thick. There is a great deal more cost of labor in those thin veins than there is in the wide veins. For instance, in the Lehigh Coal and Navigation Company's mines sometimes we would put a shot into a mass of coal, and men would load out of that place for a couple of days without ever putting in any more powder, for that company has the thickest of all coal deposits. In the thin veins you have to be using powder all the time. The cream of the coal, as a general thing, has been mined.

Q. (By Mr. KENNEDY.) You say these conditions that you describe meant that there would be a gradual increase in the price of coal. Other gentlemen who have testified on this subject say that in view of the possible competition from bituminous coal they think that the price is now about as high as they can afford to put it?—A. Yes; so do I, as a rule.

Q. Then, there will not be this gradual increase?—A. We are speaking of two periods of time. One is the immediate future and the other is the distant future. There will necessarily be an increase in 20 or 30 years in the price of anthracite, or it can not be mined. Sometime ago—30 years ago, you could open a colliery, perhaps, for \$100,000. To-day some collieries will cost \$1,000,000 before they get in a position where the coal can be profitably worked. Instead of going down 200 or 300 feet, you have to go 1,500 feet. You have to put in an enormous pumping apparatus. You immensely increase the cost of maintaining your mine because of this enormous superincumbent weight which, when you take the coal out, is always tending to crush in.

Q. (By Mr. PHILLIPS.) Is there not still a large amount that can be reached very readily from the surface?—A. No; the surface mining has very largely been done. There is a small proportion relatively that remains. But the greater proportion of coal that can be readily reached from the surface has been taken.

Q. (By Mr. LITCHMAN.) As an engineer, do you consider it advisable to tunnel from a low level to reach the veins in mining?—A. That has been done in some instances. For instance, there is a considerable part in our Schuylkill region where the coal is below the level of the seas. Tunneling is possible to a limited extent, but as a rule it is not. About Pottsville the deepest part of the basin is 4,000 feet below the level of the sea. Did I make myself clear in reply to Mr. Kennedy's question? We were speaking of two things. In the immediate future, the price of anthracite is not likely to increase materially, but it is unquestionably true—I am willing to be a prophet to that extent—it is unquestionably true that the cost of coal, or the price at which coal is sold, is going to be increased in the distant future; or the anthracite coal mining has got to stop. I do not know of anything that is likely to work the other way. I do not know of anything that is likely to cheapen it. There may be something found or better methods of mining, of course. We are working at that problem all the time. It is the same proposition as in England. You know they will never have any cheap coal there again.

Q. (By Mr. RILEY.) You were president of the Philadelphia and Reading Railroad at the time of the purchase of the Central Railroad of New Jersey recently?—A. Yes.

Q. Will you make any statement about the terms of the purchase so far as operation and finances are concerned?—A. It has no bearing on the operation at all. It was simply a purchase of the majority of the stock.

Q. The statement has been made in one of the New York papers that this purchase may conduce to economy of operations, in that the Central Railroad of New Jersey may carry a good deal of the tonnage more directly to tide water than it could otherwise go over the Philadelphia and Reading road. Is that true?—A. The New Jersey Central and the Reading do naturally constitute one system. All business of the Reading that comes from the South or Southwest goes to New York markets over the New Jersey Central about 30 miles. We get a good deal of bituminous coal at Shippensburg, coming in from the Baltimore and Ohio fields lying down in the mountains of West Virginia. Now, that very largely goes over the Reading road to Allentown, and from there 90 miles over the New Jersey Central Railroad to New York. The business that comes from the Northwest—from Buffalo, for instance—comes to a considerable extent down over several of the systems of roads to Scranton, where the New Jersey Central road commences, and then down to Bethlehem over the New Jersey Central road, and from there to Philadelphia. So you will observe that the two systems supplement each other. The business is gathered at Philadelphia, whether from the ocean or otherwise, and this business and the products of the manufactories of Philadelphia going to the Northwest go over our road to Bethlehem, and then over the New Jersey Central to Scranton. In many directions, indeed, the two roads are supplementary. For thirty years our business has gone over the New Jersey Central lines in that way.

Q. The statement is made publicly that the next step proposed in an alleged

consolidation of these roads will be the absorption of the Lehigh Valley.—A. I have no reason to think that is true. So far as I know, it is not contemplated at all. That is simply a newspaper guess. Of course, anything is possible in matters of that kind, but it is not at all the present intention.

Q. Have there not been purchases, however, of considerable blocks of stock, for instance, such as those owned by the Packer estate?—A. Purchased by whom?

Q. By those interested in the Reading company.—A. Now, you are getting too deep for me. What they are doing in New York in the way of buying up stock I do not know.

Q. The amalgamation, however, of the Erie, the Reading, the Lehigh, and the Central of New Jersey would control more than half of the anthracite tonnage, would it not, and give a practical monopoly of the field?—A. No; not by any means a practical monopoly. The Reading has about 20 per cent, the Lehigh Valley about 16 per cent, the Central about 13, and the Erie about 9, I think. That would be about 57 per cent, roughly speaking.

Q. Have you included the Pennsylvania Coal Company, recently purchased?—A. Yes. I think, taking in all those, the Erie has about 9 per cent. It may be 11.

Q. Would there be a difficulty in the way of this consolidation owing to the independent action of the Pennsylvania Railroad Company? Has it in the past acted somewhat independently of the other roads?—A. Yes; quite so; quite independently.

Q. And so long as that railroad remained outside would it practically prevent a total monopoly of these coal-carrying roads?—A. Yes; and the Delaware and Hudson is quite as independent, as is also the railroad belonging to the Coxé interests. The New York, Ontario, and Western is also independent.

Q. It would not, however, be a serious matter for one of those railroads to purchase the collieries of the Delaware and Hudson and for that company to be absorbed as a part of the New York Central?—A. I do not know whether it could be done or not. It is wholly a matter of money. All things are possible, but I do not know of any movement in that direction.

Q. At what figure, do you know, was the purchase of the stock of the Central of New Jersey made in order to control the majority of this stock by the Reading?—A. It was purchased at 160.

Q. Was that considerably above the ruling rate of stock quotation?—A. Not very much. It had been, I think, 150 or over.

Q. Has it been so in recent years—that is, with the exception of the last year?—A. No.

Q. Has it not run very much lower than that during the 90's?—A. Yes; it has been very much lower. The Central Railroad, however, has been paying dividends, I think, of from 5 to 7 per cent for some years past, and it ran along at about the same rate, I think, as the Delaware and Hudson; possibly a little lower.

Q. Is 160 the price at which it is accepted in underwriting or under the mortgage bonds issued?—A. Of course, that price had to be taken.

Q. Had to be covered by the issue of securities?—A. Yes.

Q. And the total volume of capitalization of the combined companies, of course, is increased by that amount?—A. Yes; it is. The stock of the New Jersey Central has gone into the ownership of the Reading at that price.

Q. Has not the combined volume of new mortgage bonds issued by the Reading company exceeded, however, the value of the stock purchased with those bonds?—A. Those bonds were put on the market below par. To that extent it has.

Q. The point I wish to bring out is whether the effect of the consolidation under the terms of this purchase resulted in still further swelling the capitalization of these combined companies upon which they have got to earn dividends.—A. Perhaps this suggestion will throw some light on that point. The rate at which the Jersey Central is earning the dividend which it would pay out of its earnings would carry the cost of that stock to the Reading company; so that in that case, if that money had not been paid as dividends to the Reading it would have been paid as dividends to the individual owners. The purchase simply changes the personnel of the ownership. The Reading company becomes a stockholder instead of John Doe.

Q. Do you see any way in which the consolidation of these two roads might affect the Baltimore and Ohio or the Pennsylvania disadvantageously?—A. No.

Q. The Reading company is a competitor of those roads in the carriage of coal?—A. No; not at all a competitor with the Baltimore and Ohio. The Reading company furnishes in its territory a market for a very large freight of the Baltimore and Ohio. The Reading stands to the Baltimore and Ohio somewhat in the same position as the Jersey Central territorially stands to the Reading, as being an extension of its road. For instance, the Baltimore and Ohio uses the Reading from Philadelphia east and from Shippensburg east, and the Baltimore and Ohio and the Reading are strong allies on that account.

Q. The Baltimore and Ohio and the Pennsylvania are supposed to be owned in common, are they not? Does not the Pennsylvania control the Baltimore and Ohio?—A. Yes, I so understand.

Q. Do not all these things indicate that the several roads in the hard-coal territory are getting together, either by lease, original purchase, or harmony of action?—A. Yes.

Q. And, so far as you can see, that would not result disadvantageously to the public, but merely in economy in the operation of the roads themselves?—A. That is a very large question. My own belief is and has always been that no combination of that kind can be made so large as absolutely to govern the situation. The situation will govern the roads. None of these plans have ever worked out, and I do not believe they ever will.

Q. (By Mr. PHILLIPS.) They do for a time, do they not?—A. Perhaps so; yes. I believe that some advantages will occur through the cheapening of methods. I am speaking of the public now; but I do not believe the advantage will be wholly with the public. That is not what the people who are buying these things are doing it for, of course. I think we might fairly say that they are doing it to prevent the sacrifice of their own securities, to prevent ruinous competition, and my own belief is very strong, and it is a subject that I have thought about a good deal, that the public is not interested in ruinous competition. I do not believe the public is interested in having great industries and great masses of capital sacrificed. I think that all human affairs go on with a conflict between those two interests and neither of them is unselfish.

Q. (By Mr. LITCHMAN.) You consider the desire to prevent ruinous competition the reason for the acquisition of the New Jersey Central by the Reading?—A. I do not know that I am able to speak of the motives, and I do not know that I have a right to speak of the motives that led to that acquisition, for it was not primarily by the Reading. It was the action of the bankers who control the Reading. Just what their motives were I do not know. I think you gentlemen would be quite as able to infer what their motives were as I; but I think I can fairly say it was not advised by the management, but advised by the owners of the road.

Q. If it be true, as alleged, that the Reading controls the Jersey Central, and there is a community of interest between the Baltimore and Ohio and the Reading, and the Pennsylvania controls the Baltimore and Ohio—A. (Interrupting.) Now, let us pause as we go on there. What do you mean by the community of interest between the Reading and the Baltimore and Ohio? There is no more community of interest between the Reading and the Baltimore and Ohio than there is between any two roads that give business to each other—absolutely none. What the Reading does, for instance, is this: The Baltimore and Ohio hauls coal to Cherry Run, and we take it from there and haul it into our territory. The community of interest between those roads is this, that they are freight producers and we are freight consumers.

Q. I started by saying, "If, as alleged"—A. Why do you say, "If, as alleged?" You can allege anything.

Q. If the interests, as alleged, that are back of the Reading are also back of the others—A. (Interrupting.) You have got entirely out of my depth.

Q. If you know nothing about it, I will not ask the question.—A. No; I do not. My function has been to manage the Reading Railroad and do its work as cheaply and earn as much money for it as I could; but what is in the bankers' minds they never told me. That was not in my department at all. I was the operating officer.

Q. (By Mr. KENNEDY.) You said that the acquisition of the New Jersey Central was not primarily the action of the Reading Railroad, but that the bankers brought it about. Who are those bankers to whom we may go for information?—A. What I said was, that it was not the act on of the Reading Railroad, speaking of myself as the manager. The people who have represented the Reading Railroad to the world since the reorganization have been J. P. Morgan & Co.

Q. (By Mr. RIPLEY.) You have referred to a possible motive on the part of those bankers. Do you know what commissions were paid in that transaction, namely, the purchase of the majority of stock of the Jersey Central by the Reading Company?—A. I think all the information that the public have, and all that I have, is stated in the circular of those bankers. I do not remember the figures, but there was a bankers' circular issued in connection with the purchase.

Q. You have said in connection with that, have you not, however, that the new bonds, collateral trust bonds, issued upon the stock of the Central Railroad of New Jersey exceeded considerably in amount the amount of those stocks. Did I so understand your statement.—A. I did make the statement. I was thinking whether it was correct.

Q. What is the volume?—A. I was mistaken about that. The volume was not

greater. It was just about the same—the amount of stock and the amount of bonds that were issued. The amount of bonds issued was just about the same amount as the stock, at the figure I gave you.

Q. In order to make this a matter of record, what was the amount of stock of the Central Railroad of New Jersey actually purchased?—A. One hundred and forty-five thousand shares at an average cost of 160.

Q. Does the amount of new collateral trust bonds issued by the Reading Company exceed 145,000 shares at 160 a share?—A. No. If you will figure that out, you will find that 145,000 shares at 160 a share cost \$23,200,000. If I said differently, it was incorrect. The reason why I hesitate to speak about figures is because many of the figures I do not remember accurately. The figures at which the stock was bought I remember, but there are a good many figures I do not remember.

Q. The profit to the bankers, then, for financing that deal would come presumably out of the difference between the price at which they acquired that stock and the price at which they turned it over to the Reading Company, would it not? Do I make the question clear?—A. Yes; it is clear. No; I think the bankers absolutely turned over the stock at the price they paid for it.

Q. There must have been a commission of a considerable amount for financing such a deal?—A. Yes; but that is stated in that circular of the bankers.

Q. The point I wished to make is this, whether the commissions in the case of operations like this are made a part of the future capitalization of the company or of the volume of security?—A. Undoubtedly the commissions are taken care of in some way. That is the case in all financial transactions. If a company puts out bonds that are sold at 95, the commission or discount has got to be taken care of. Observe, as is very often the case, you may fund a 6 per cent bond into a 4 per cent bond, sell that 4 per cent bond at 95, if you please, to the bankers, and yet have a lower interest charge than you had before. The banker and everybody makes money there. The only person that does not make money is the man who has money to loan who gets a smaller return.

Q. (By Mr. FARQUHAR.) Do you know that the bankers who made the transfer of those bonds of the Jersey Central asked or obtained any more than the usual commission in Wall street?—A. No; I should say they did not.

Q. You never heard that they ever did?—A. I know that they did not. It was a reasonable commission. That commission, I ought to say, is stated in that circular which they issued to the stockholders. I do not remember accurately what it was, but it was a reasonable and ordinary commission.

Q. (By Mr. RIPLEY.) Does the question of rebates or discriminations or anything of that sort against individual operators amount to very much at the present time since the number of those operators has so far decreased?—A. So far as the Reading is concerned, there is absolutely nothing of that sort; absolutely nothing.

Q. Does it affect the price of coal, or does it not?—A. I do not quite catch the force of your question. How can it affect the price to the consumer if there is nothing of the kind? And I say in the most unhesitating, absolute way that the Reading Company has absolutely treated its individual operators as it has treated its coal and iron company.

Q. Do you know what is the status of those 65 per cent contracts offered to the individual operators at the present time? Were many of them accepted by the individual operators?—A. So far as I know, they have not been pronounced operative as yet. I think the majority, so far as my information goes, of the individual operators are satisfied with them. There are but few people that have held out, so far as we know, trying to drive the railroad companies into buying their collieries.

Q. A witness made the statement here some few days ago that these contracts were rejected by all but a few operators along the line of the Pennsylvania Railroad, and they refused to sign those because they involved a perpetual lease along the life of the property.—A. That witness is in a position to know very accurately, and it is a matter that is more closely under his ken than it is under mine. I would rather his testimony would stand, because he lives in Wilkesbarre, where the most of these private operators are, and he would know more about it than I do. In our region no such question has arisen.

Q. Unless some such contract is signed by all these remaining individual operators they will still have their product carried at the rates customary to all operators?—A. That I do not know. That no man can foresee. That is a question that is under negotiation.

Q. (By Mr. KENNEDY.) What is the attitude of the Reading and the Jersey Central as to the labor engaged in mining?—A. I can not tell you about the attitude of the Jersey Central. I am not the president of the Reading; nor of the Jersey Central since that has been taken over.

Q. You are not president of the Reading now.—A. No; I resigned a few days ago.

Q. What was the attitude of the Reading toward organized labor when you were president?—A. That is a large question. Please make it a little more specific.

Q. I want to ask you if that attitude was friendly. Do you believe organized labor has a right to a voice in fixing wages, hours of work, etc.?—A. I think it has absolutely. There are several Reading companies. The Reading Coal and Iron Company has been more than friendly to labor. There has been less friction than in any of the other coal companies. I can illustrate best in this way: Three or 4 years ago, at the request of persons who charged themselves with the interests of labor, the legislature of Pennsylvania appointed a commission of the senate and house to go all through the coal region. They must have spent 3 months there. When they came into the Reading region, as they did at Shamokin, which is the western end of the Mahanoy and Shamokin field, some of the persons who claimed to represent labor—and I suppose they did—met that commission and said to them if everybody treated their labor as the Reading Coal and Iron Company did, there would not be any labor question.

Q. Do you believe that labor has the same right to organize as capital has?—A. Yes; certainly.

Q. Do you believe labor should have a voice in fixing the wages for which it shall work and the hours in which it shall work?—A. Certainly.

Q. And you believe that that right should be recognized by employers?—A. Certainly. The laborers not only have the right, but the power, which is more important.

(Testimony closed.)

WASHINGTON, D. C., April 5, 1901.

TESTIMONY OF MR. B. H. GRISWOLD,

General Freight and Passenger Agent Western Maryland Railroad.

The commission met at 11.20 a. m., Mr. Farquhar presiding. At that time Mr. B. H. Griswold, general freight and passenger agent Western Maryland Railroad, appeared as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. FARQUHAR.) You will give your name, address, and official position with the freight bureau to the commission.—A. B. H. Griswold; general freight and passenger agent Western Maryland Railroad; Baltimore. I understand I am summoned as chairman of the Baltimore freight committee.

Q. Have you any statement to make distinct from the examination?—A. I have not, further than to say that I was not aware of any intention to summon me until I received a notice Wednesday night a short time before leaving for Philadelphia, and I have had no intimation as to the object or the occasion of the summons.

Q. Would you state to the commission the composition of this freight bureau of Baltimore?—A. It is composed of representatives of lines either terminating at or passing through Baltimore, or which have representation in Baltimore. There are in the bureau some 14 individuals, some of whom represent 2 or 3 lines. I think each important railroad and steamboat line is represented.

Q. How long has it been in existence?—A. Since the 1st of January, 1898.

Q. Could you state to the commission what the causes were that brought it into existence?—A. It was brought about, I think, by some of the representatives of the larger railroad lines, like the Pennsylvania and the Southern lines, who had representatives in Baltimore, suggesting that it would be well to have their various representatives get closer together, with a view to securing uniformity of practice, for an interchange of views, for the purpose of keeping up with the situation generally, and for the purpose of discussing any questions that might come before it, as they might be brought to the attention of any of the members through shippers or through any railroad company or steamboat line. It does not meet regularly. The chairman can call the committee together at any time, and he must call a meeting on the request of 3 members. There has been no meeting for a month or so, there having been no special questions to consider.

Q. Are questions which come before your organization submitted to the roads afterwards, or have you any power of yourselves to make settlement?—A. If any question comes before the committee and is after discussion acted upon by a vote, the motion becomes effective if the vote is unanimous. If there is a single

negative vote it falls to the ground, and if a representative has not power to act he must state the fact and say that he must refer the matter to his traffic department before any action can be taken on his part. Sometimes matters are laid over until a letter vote is received from a member thus situated or until a subsequent meeting.

Q. Does your organization conserve the interests of Baltimore alone?—A. It is mostly interested in Baltimore.

Q. Do you know of any other like organization of the kind on the coast?—A. I think there are a number of local freight committees at various points in the interior and on the coast also. There is a Boston committee. I am not sure that there is one in Philadelphia, but I think there is an organization in New York; I am not sure, though.

Q. Have you the cooperation of the steamship lines with you in this board?—A. They are represented—that is, the coast lines. I do not mean the ocean lines.

Q. Does your body assume any authority on rates?—A. Only to a limited extent and when all the representatives have the proper authority from their traffic officials. There are a number of representatives in the association that have no authority, and they must obtain it from their traffic officials before they can act. There are a number of representatives who have authority to act for their own lines.

Q. In the case of differentials in which other ports like New York, Philadelphia, Newport, Norfolk, and others are interested, have you any authorization to meet with a joint commission or to take and consider terms of the differentials of the ports?—A. We would have no power to act as regards differentials. If the question was brought before the association and we felt it to be the interest of the lines and the community and Baltimore to take the matter up we would do so and place it in the proper course for consideration and discussion.

Q. (By Mr. RIPLEY.) I would like to ask about the differentials which Baltimore enjoys against other ports. Will you make a statement respecting the comparative Chicago and Atlantic coast port rates on wheat and other products?—A. Are you speaking now of all-rail rates?

Q. All rail, east bound; and also if you will designate between the rail and the water rates.—A. Am I to understand that your question refers to the effect of the present differential or to the reduced differential? You know there is a reduced differential.

Q. I would like to have you speak upon both if you will; that is, the origin and development of the system of differentials from Chicago and St. Louis to Eastern ports.—A. It is rather hard, without any previous consideration, to answer that question as I would like to have answered it if I looked it over afterwards. I think we all realize that in the early days of railroading each railroad was built without regard to any other, and to subservise some particular purpose. After a time those roads began to be connected together, and different lines formed associations to make through lines. These associations after awhile developed gradually a system of rate making from what was previously chaos as regards anything like through rates. The through rates originally were the sums of rates of the various roads over which traffic was carried, and after the roads began to get together to make through rates there necessarily was interference on the part of certain lines with other lines in competition, bringing about wars of rates. The competition was not confined to railroad lines, but embraced markets also. The result was that an understanding was arrived at, after these several railroad wars, to make certain rates to the seaboard and an agreement as regards differentials. Those differentials were arrived at in the first place, I imagine, by agreement and by compromise and by concessions on the part of some lines, and by meeting the demands for the control of the situation on the part of others, the shorter lines from the West to the nearest seaboard, of course, claiming the right to make a lower rate than the longer lines to more distant ports or to the same ports. In that way the differential as between New York, Philadelphia, and Baltimore was first established, and it developed finally into a system of making rates under which, so far as trunk-line business is concerned, Chicago and New York are taken as 100 per cent points, on which all rates are based.

Q. (By Mr. CLARKE.) Is the differential in favor of the shorter and more direct route, or in favor of the more roundabout route?—A. It is in favor of the shorter, more direct route, although it results in longer lines between the Western point and an Eastern point being obliged to make the same lower rate, and getting the benefit of the lower differential, which is fixed by the shorter line. What I mean is this: Suppose the Baltimore and Ohio Railroad from Chicago to Baltimore is 100 miles shorter than some other line, which may be the same distance from Chicago to New York as from Chicago to Baltimore. It results necessarily in the longer line from Chicago to Baltimore maintaining the same differential as the shorter line from Chicago to Baltimore.

Q. (By Mr. RIPLEY.) How many lines participate in this through traffic from Chicago and St. Louis to Baltimore? Does the Southern Railway participate at all in through business at the present time from the West?—A. I do not think the Southern Railway, the line through Washington, participates to a very large extent as far as the Western business is concerned. I am not in position to know the relative tonnage. It does participate to a certain extent in connection with our line, as far as its new acquisition is concerned, the Louisville, Evansville and St. Louis Consolidated, which is a line running from Louisville to St. Louis now owned by the Southern.

Q. Is freight hauled in competition with the Baltimore and Ohio, the Pennsylvania, and the New York Central from Chicago to the seaboard points via Cincinnati, or Louisville and the Southern Railroad on a long haul, then up through Washington to Baltimore or Philadelphia?—A. I do not think it is. If it is it must be to a limited extent. We have not seen it in our relations with other lines.

Q. The Chesapeake and Ohio, and the Norfolk and Western, however, participate in this Western business?—A. Yes.

Q. And they enjoy differentials?—A. No; not the all-rail lines. There is an all-rail line operated from East St. Louis, from the West generally, by the Southern Railway and the Louisville, Evansville, and St. Louis Consolidated through Louisville, and the Chesapeake and Ohio, the Norfolk and Western, the Western Maryland, the Philadelphia and Reading, and the Central of New Jersey to Baltimore, Philadelphia, New York and interior points, but it is not a differential line. That is, it maintains the differentials, the port differentials, but it has no differential as compared with the shorter lines like the Union, Empire, the Pennsylvania, and the other lines, and the Continental and Central States Despatch.

Q. What do you mean by those latter companies? They are not railroad companies?—A. No; they are not railroad companies. They are called cooperative lines. They are fast-freight lines.

Q. What is the relation between those fast-freight lines and the railroads?—A. They are simply lines within the railroad lines placed under direct control of a manager and his assistants, so that they can be operated as one line over 3 or 4 or more railroads.

Q. Are they represented by any independent issues of stock or bonds or by corporate existence?—A. No.

Q. They are merely trade names for a road?—A. That is all, for through movement, and their purpose is to secure through movement, through schedules, and give better service, enabling the lines to compete more efficiently for traffic.

Q. Do they assume any liability as a separate organization?—A. The liability is assumed by the railroads. The line, in the settlement of a claim for loss or damage, for example, would adjust it, but the railroads would reimburse the line, or the railroad where the damage occurred would do so.

Q. They maintain a separate fiscal officer—a treasurer—as a rule; the Union Line, for instance?—A. They have separate management in that way, but everything as regards the Union Line goes into the Pennsylvania Railroad, and I think their accounts are audited by the Pennsylvania Railroad in that case.

Q. May freight rates be made by these fast-freight companies without the knowledge or direct participation of the traffic officials of the railroad?—A. Power is sometimes given to the manager of the line to do so.

Q. So that in case he were to make a special rate to a shipper the railroad would not have information to that effect or control of it?—A. The railroad would have to participate in it, of course. The rate would have to be issued by the manager, and it would have to be carried out by the railroad, but he might make a rate under certain circumstances without first obtaining the direct authority of the line.

Q. If that were done, then, it would bind the company to the performance of the contracts, would it not?—A. Yes; I suppose it would, legally. I know in practice it is actually done. The rate would be protected upon acknowledgment made by the manager, but if it was objected to by any line the shipper would be notified at once.

Q. (By Mr. FARQUHAR.) Is there such a thing known in a case of this kind as a cooperative fiscal agent of one of these fast-freight lines making secret rates unknown to the general management of the road itself?—A. It might be possible, but the fact would develop when an adjustment of the accounts was reached; but it would be but temporary, unless, as might be the case, the attention of the traffic people was not especially called to it and it went through the auditing departments and the clerks' hands without the officers' attention being specially called to it. The rule is that the manager of the line can not make a rate on business originating on any line of railroad without that railroad company consenting to

his doing so. It is possible for the manager to make a rate with the concurrence of some one line, that line protecting the cut without the other roads being a party to it.

Q. (By Mr. RIPLEY.) The force of that cut, then, would fall upon the initial line shipping, or upon the fast freight line?—A. It would be borne entirely by the line making the cut. For instance, you have a fast freight line from Baltimore to a Western point, which operates over 5 roads, we will say. Now, the third road in that line might say to the manager, If you want to make a reduction in a through rate to secure certain business by this route as against any other, you are authorized, as far as we are concerned, to go to the extent of 2, 3, 4, or 5 cents a hundred pounds, but that road would have to make that deficit good; no other road would necessarily be a party to it.

Q. So that rates might be cut on a through line over the line of railroad without that particular railroad itself having made the cut?—A. Yes.

Q. Were any of these fast freight lines formerly separate in their corporate existence?—A. They were; yes. They originated under separate organizations.

Q. What was the general relation as to ownership by the railroads, so far as your knowledge extends?—A. I only know from being in the railroad business many years, and from hearsay. I have never had any actual personal knowledge. I know that in the old times of the fast freight lines their organizations were entirely distinct from the railroads as far as the ownership was concerned, and the ownership was to a great extent in the hands of the officers connected with the lines over which the fast freight lines operated; there was also some outside ownership.

Q. So far as you know, however, no such condition as that exists at the present time?—A. I do not know of any case.

Q. The fast freight lines are merely names for particular routes, but they have, however, a certain independence of action in the matter of rates such as has been described?—A. Yes, when authorized.

Q. (By Mr. LITCHMAN.) When authorized by whom?—A. By the railroad companies over which the fast freight line operates.

Q. (By Mr. RIPLEY.) Such cuts are usually authorized by the higher officials of the line, I suppose?—A. They would have to be; yes.

Q. That is to say, a local freight agent, or a freight agent in a particular city, would not have authority on his own part to make a special rate?—A. Sometimes a contracting freight agent or commercial freight agent at a local point is given some discretion in making rates, although there is very little of that now. There used to be a good deal of it, but if you asked me to name a case of that kind, I could not do it, because I don't know of one.

Q. Does the special cutting of rates appear to be less prevalent than some years ago?—A. Markedly so; decidedly.

Q. To what reason do you ascribe that change?—A. I think the attempt upon the part of the larger lines to bring about a better condition of affairs by agreeing to maintain rates and to cooperate in carrying out the requirements of the interstate-commerce act is the principal reason.

Q. What is the latest day at which the promiscuous cutting of rates from Baltimore west was practiced?—A. I think there was some cutting the last of last year in some merchandise business, but I do not think it was in connection with all-rail lines; at least we were not able to place it there.

Q. The rail and water lines are allowed to charge less than all-rail lines between St. Louis and Chicago and Atlantic ports?—A. Yes; there are differentials—

Q. (Interrupting.) Is there a rail and water line from Chicago to Baltimore, and one from St. Louis?—A. Yes; there is a rail and lake line during the lake season.

Q. To Baltimore?—Yes; there is the Anchor Line, that operates out over the Pennsylvania Railroad, and the Fairport Line, that works out over the Baltimore and Ohio to the lakes, and others.

Q. To what point?—A. To Chicago and Northwestern points during the lake season.

Q. But with an outlet at Baltimore?—A. Yes.

Q. Those routes would certainly be more circuitous than the trunk lines?—A. Yes.

Q. And yet they are allowed by these general agreements with the roads to charge somewhat less?—A. That is right; yes.

Q. What is the specific difference to-day on east-bound traffic between the rate from Chicago to New York and Chicago to Baltimore and Newport News?—A. You mean on the class rates?

Q. On grain?—A. I think the difference between New York and Baltimore on export grain is $1\frac{1}{2}$ cents.

Q. Is that arrangement on the percentage basis, or is it an absolute difference

per hundred pounds?—A. It is an absolute difference per hundred. All of those differentials applying to the seaboard are absolute differences, not percentage differences.

Q. What is the differential in favor of Newport News?—A. I do not recall it.

Q. Is it somewhat greater than that of Baltimore?—A. I think it is.

Q. That gives an advantage, then, to that port, in that respect, over Baltimore?—A. Yes.

Q. Has it had an appreciable effect upon the commerce of Baltimore?—A. I do not know. I think it has had some effect, and yet it is very hard to say, because we find that traffic to a point is influenced by so many conditions. As soon as the grain trade drops off at a port everybody in the grain trade and the railroads interested think that something has happened to draw the business somewhere else, and the next year, under the same condition of rates, etc., the business of that port may be greater than the business of the port that had the largest business the year before, relatively. So that I personally think that the idea that business is drawn from one port to another by the cutting of rates is very often erroneous and that it is due to conditions at the port itself. For example, we find in export business that a steamship line at one port will make some specially attractive rate to fill up, for the time is approaching when it will have a steamer to sail, which it doesn't want to send half loaded. It wants business, and will make a very attractive rate. The agents go to the railroad agents and say, "Can't you give us some business here? We will give you this rate." The agents at that port will wire to the Western agents and say, "Here is an ocean rate of so much." They get business in that way. They hustle around, and find that it is very attractive to the shippers, and they send a cargo to that port.

Q. At special rates?—A. Not necessarily at special rates. I am referring to the ocean rate, without reference to the inland rate at all.

Q. Would not there be a strong temptation for a railroad to offer a special lower rate over its own line in such a case, in order to induce that business?—A. Where there were two or three lines running to that port, and all had the same information, there would be a strong temptation to do so to secure that business.

Q. Is any community-of-interest plan going to be sufficient in force to prevent that condition?—A. The best plan, to my mind, for bringing about fair dealing among the roads is either a physical, if it were possible, which I doubt, division of the business, or pooling and dividing the earnings between the roads. Either plan would take away the incentive to cut a rate.

Q. (By Mr. LITCHMAN.) What would be the effect upon rates of the virtual control of the Baltimore and Ohio Railroad by the interests owning and controlling the Pennsylvania Railroad?—A. I do not think it would have any effect excepting to make the rates steadier, to maintain them, uniform them. I do not think it would have the effect of raising rates. I think the time has gone by when unreasonable rates can be charged, because the competition, from my experience, is not simply between railroads, it is a question of market and various other considerations. I think there are very few roads that even in their local territory have no competition.

Q. Would it not be the fact that if the same interests controlled both lines of railroad that this temptation which you have already spoken of—to cut rates—would disappear?—A. Yes. I thought you were referring to the rates themselves.

Q. No; I was referring to that point.—A. Yes.

Q. I understand you to say that the differential is in favor of the shortest distance?—A. What do you mean by "in favor?" We mean by "in favor" that it is a lower rate.

Q. I mean to say, is a lower rate given for the shortest distance?—A. I was speaking of the origin of these differentials. It does not follow now that the lower differential—and I tried to illustrate that—is necessarily by the short line.

Q. (By Mr. FARQUHAR.) When you made the differentials, was not there another great question that entered into consideration, namely, the facilities of your port in handling?—A. Yes.

Q. Did not Baltimore and Newport News make claims of that kind when that arrangement was made on differentials?—A. When the differential was first made I did not have any business in Newport News.

Q. Are not two features of your differentials now considered in making the differentials—the short line and the facilities of the port in handling?—A. That is true.

Q. Those are the only two features on which you make a differential?—A. You are going beyond me, because I am not connected with the trunk-line committee, or with a trunk-line road, nor am I a party to the making of those differentials.

Q. Does your differential in Baltimore cover your transfer charges?—A. It covers the delivery on board ship.

Q. (By Mr. LITCHMAN.) I am still befogged on this question. At the same rate from Chicago to the seacoast, would traffic preferably seek the shorter line?—A. Not necessarily. It would depend upon the facilities and the market.

Q. Assuming that the conditions are equal to the port of foreign exit?—A. Everything being exactly the same, markets and facilities, and everything of that kind, I should think the question of time would be a consideration, and that would necessarily be in favor of the short line.

Q. Why, then, in addition to that, is there a difference given to the lower rate for the shorter distance?—A. On the ground originally that the shorter line can operate more cheaply than the longer line.

Q. And that same reason exists at the present time?—A. As I said before, there are so many conditions now surrounding the transportation of freight that a great many of the original ideas have been entirely lost sight of. Take a local territory of our own, for instance, where we have a short line 87 miles to a given point. There is another line 104 miles to that point, and there is still another line that is 158 miles between those two points.

Q. (By Mr. RIPLEY.) What are those points?—A. I was speaking of lines between Baltimore and Hagerstown, Md. Our line from Baltimore to Hagerstown is 87 miles, that of the Baltimore and Ohio 104 miles, and that of the Pennsylvania Railroad is 158 miles. The rates by all 3 lines are exactly the same. Originally the rate would have been highest for the longest road.

Q. (By Mr. LITCHMAN.) That being the case, there is no inducement for a person to send by the longer route, I should think. Is that not true?—A. That is true to a certain extent. It depends upon the location of the shipper, the receiver, the terminal facilities, etc. A good many of those things come in outside of the question of the mere length of the line.

Q. Can you give any instance of a distance, say, of 120 miles between Baltimore and Hagerstown on the Pennsylvania road of the rate charged as compared with the rate charged Hagerstown?—A. I can not. I know that they have, as other lines have, a mileage tariff, which tariff is based upon distances, but that that is sometimes ignored. It has to be by the issue of class and commodity rates to meet the special conditions of the short line.

Q. In other words, when you strike a competing point the established tariff follows the conditions and not the schedules?—A. It is obliged to.

Q. And it might happen that for the shorter distance on their own line a shipper would pay a higher price than was paid to the terminal at Hagerstown?—A. No; that limits the rate to all intermediate points.

Q. That is what I asked, if you knew of any instance of a higher charge between the starting point and Hagerstown than the through rate?—A. I beg pardon. I misunderstood your question. I thought you asked if I knew of any charge on the Pennsylvania Railroad for a distance of 120 miles that was higher than our charge for 87 miles.

Q. No; I meant just the other way.—A. No; I do not know of any case where a higher charge is made to an intermediate point.

Q. (By Mr. RIPLEY.) Do you observe the long and short haul clause?—A. We do; we observe it not only in interstate business, but in intrastate business, because we find it is the only convenient way; we can't have two policies.

Q. You are aware of the existence in many parts of the South of a contrary practice?—A. Brought about by water competition?

Q. By water competition.—A. Yes.

Q. Are you aware of such violation of the long and short haul clause in any territory north of Virginia?—A. I am not.

Q. You said that you found it better practice for your road to observe that section?—A. Yes.

Q. Can you explain further what you mean?—A. It is a disadvantage to those located on the line of the road and it is a great inconvenience to the railroad company to have right in the same territory a different method of making rates for interstate business and intrastate business. We cross the State lines of Pennsylvania and West Virginia some 8 or 9 times; a good deal of our local business is interstate, and we feel that we would be going a good deal out of our way to have to adjust our mileage tariffs so as to make a higher rate to a point just within the State than to a point a mile beyond, just without the State. It would be a disadvantage to the community, and in that way a disadvantage to the railroad company, for I hold that the interests of the two are mutual, and that if we do anything that disadvantages any particular community or any set of shippers it redounds to the injury of the railroad, and not to the benefit of it in any way, shape, or form.

Q. Would you say that that assertion is universal in its application?—A. I think it is.

Q. Can you conceive of a case where it might be to the interest, temporarily we will say, of a railroad, or the particular manager of a railroad, to build up certain towns or sections at the expense of others?—A. I can conceive of its being to the interest of a railroad to build up a town, but not at the expense of others. We would be very glad at certain local points upon our road to offer inducements to large establishments to locate there. We would not pick out any particular place or particular town for them to locate in, but if a large concern came to us and said, "We want to put up a factory at this point; what will you do for us?" we would be very glad to aid them in every reasonable way.

Q. Would the conditions be the same, however, if that large establishment were a jobbing house—wholesale distributors of products—rather than a factory?—A. I do not think it would make much difference.

Q. Might it not be to the interest of that town to absorb and control the wholesale business of a large section, and might not the other towns be injured if special or peculiarly low rates were granted to that town?—A. We would not meet the case by granting special rates for their product. We might do this: We might say, "We will go to the expense of putting in a siding for you," or "We will make a special rate on your building material to erect your establishment," but it would be a direct discrimination, to my mind, if that establishment got rates not given to similar establishments on the line to other points. That we would not do. I do not know of any practice of that kind.

Q. Is that not the true effect of the basic point system of the Southern States, to build up certain towns at the expense of intermediate territory? Allowing that there is justification at the outset in the existence of water competition, is not that the effect of the system?—A. I am not familiar with the effects upon the Southern States of the policy pursued—of the present basis of rates.

Q. You referred to "commodity rates" a little while ago. What do you mean by commodity rates?—A. The rates on such articles as lumber, coal, iron, pig iron, articles of that kind that could not be handled or moved in large quantities under class rates.

Q. Have you ever heard of the inclusion of special commodities, of special products under the head of "commodities," which were not in bulk; that is to say, are commodity rates, so called, ever made a cover for granting lower classification on certain classes of goods?—A. For granting a lower rate, yes; they practically go in a lower classification.

Q. That is to say, commodities which might be classed as merchandise otherwise are taken out of the classified series and named as commodities?—A. Yes.

Q. So that the expression "commodity rate" does not necessarily apply to sending lumber or bricks, but it means any rate which is made special for that commodity?—A. Any rate that is made outside of the ordinary merchandise classification.

Q. Are such commodity rates on merchandise more frequently made now than they were? Is the practice common at all?—A. There are a great many commodity rates, but as compared with some years ago there has been a very great reduction; an immense number has been wiped out.

Q. To which classification is your road subject?—A. The official classification as a rule. The southern freight classification applies to some territory south.

Q. What are the differences between those two classifications in the main?—A. There are very considerable differences, and it would be hard to state off-hand what those differences are. I think myself as a rule the southern classification is higher than the official, although there are cases just the reverse; but I should suppose, taking it as a whole, that articles are classified a little higher.

Q. Is it more complex, more intricate, than the official, or the reverse?—A. I think it is more complicated.

Q. Can you assign any reason in the nature of the railroad business why this should necessarily be so?—A. There is a very decided advantage in a uniform classification.

Q. For the country at large?—A. For the country at large, very decided; but even with a uniform classification, on account of the varying character of the traffic, it would not work satisfactorily in all sections; and I take it, without having had anything to do with the making of the southern classification, that the reason it is adhered to is because they consider that it answers the purposes of the traffic to and from their section much better than the official classification would, although personally I would be very glad to see a uniform classification applicable everywhere.

Q. What is the general attitude of traffic officials, so far as you know, respecting the desirability of a uniform classification?—A. I think they would all agree that a uniform classification is desirable.

Q. Is there a noticeable tendency in that direction?—A. The official classifica-

tion, as you are aware, was the result of the endeavor to secure uniformity in classification.

Q. Are the official, the western, and the southern classifications becoming more uniform, or are they tending to draw apart?—A. I think that each is about holding its own. There may be a slight tendency to get together in some cases.

Q. Would there be any specific, any inherent difficulty from the railroad point of view in the application of a uniform classification for the entire country as regards the handling of traffic and making of rates? Will you suggest such objections as they exist?—A. I do not know of any objection. I think it would be a godsend to the railroads if we could have a uniform classification applicable everywhere. It is a very difficult matter to know what a rate is where two or three classifications apply, although this is not true to the same extent that it was some years ago when we used 10 or 15 different classifications.

Q. In making a rate from official territory into southern, which governs?—A. To certain southern territory the southern classification governs, and to territory which is governed by trunk-line conditions the official classification applies.

Q. To what territory do you refer?—A. For instance, via southern lines operating into East St. Louis or that territory the official classification applies. There are some exceptions: I am not sure exactly how they are limited. I only know that as far as the all-rail lines are concerned and in our own territory the official classification applies excepting to certain exclusively so-called southern territory.

Q. The classification, as now drawn up, is made without participation of shippers, is it not?—A. The shippers have a right to and do make their representations to the classification committee, either directly, or through some traffic official of some road that they are acquainted with and who knows the ground for their claims and who may be favorable to them, or otherwise.

Q. Would it be possible to favor certain interests in the preparation of such a classification?—A. It would be possible.

Q. Is such a practice known?—A. I do not know.

Q. In your experience, what would be the difficulty in allowing supervision over such classifications by the Interstate Commerce Commission?—A. The only difficulty that I could see would be that it would be similar to supervision over the work of experts by inexperienced persons.

Q. (By Mr. RIPLEY.) You admit, however, that it would be possible to make up a classification which should favor certain interests?—A. It would be; but those who prepare the classification represent so many varying interests that I think it would not be practicable to do it. It would be possible, of course, by an agreement on the part of all of those engaged in making up the classification to make the classification such that it would favor certain interests, but I do not think that is at all probable. I have never seen anything of it in our own tariffs or classification. I have seen things that we objected to.

Q. Do you have anything to do as a traffic official, or does the Baltimore freight bureau have anything to do, with classification?—A. No.

Q. Is your road represented upon the classification committee?—A. No.

Q. The preparation of such a schedule, then, is entirely independent of many roads in the country?—A. It is; but all of those roads, I suppose, judging from my own experience, have not only the right but are requested to make suggestions. Whenever there is a change proposed in the classification I always receive notice, with a request to make suggestions.

Q. Are such requests sent to shippers, so far as you know, or merchants' associations or others?—A. I do not know.

Q. Have you any knowledge as to whether they participate at all in making up the classifications, or is it entirely done by the railroads?—A. I understand that when the committee meets it considers all the suggestions that are made, not only from the railroads, but from shippers. Shippers do make suggestions. I have sent some suggestions as to changes myself that have been made through me by shippers.

Q. (By Mr. KENNEDY.) You are quite familiar with the different classifications, are you, Mr. Griswold?—A. I am more familiar with the official classification, as that is the one that we constantly use.

Q. I would like to ask you if there has been in the past year or so a very considerable increase, a practical increase, in the rates by changing articles from a lower to a higher classification?—A. There was a considerable change in classification, but afterwards a large proportion of those articles were embodied in a supplement to the classification, allowing a 15 and 20 per cent reduction from the advanced classification.

Q. Is it not true that rates have practically been increased considerably in the last year or two by changes in classifications?—A. I can not say that there has been, by a change in the classification, an increase all around. There have been some

increases in the particular respect of which you spoke just now: but, as a rule, outside of that I do not think there has been much advance in the classification.

Q. A gentleman who represented the business men of New York stated the other day that there had been a great many such changes, and he also said that an examination of the classification sheets will show that in many instances the profits of these great industrial combinations, or many of them, were not changed at all, instancing the International Paper Company; there had been no change made that affected them. But the changes were made, as a rule, against the small producers and manufacturers, and not against the great industrial combinations. Can you state from your familiarity with the classification sheet whether that is apparently so or not?—A. To properly reply to a question of that kind would require some examination particularly of the classification, with the object of ascertaining the correctness of that statement. I have not noticed anything of that kind that would affect especially the smaller shippers as against the large concerns. There have not been many changes in the paper rates, and my understanding of that particular case is that it is due more particularly to the fact that the Eastern lines maintain certain rates to Western points on paper shipments in carloads, and that the interior lines, the lines in New York, Pennsylvania, and Maryland, are so limited by reason of the rates that were made from the New England States that they could not make changes. In fact, we had at one time to make some reduction to meet the New England situation and put the shippers in our territory on as favorable a footing as we could in their competition with New England territory.

Q. (By Mr. FARQUHAR.) You can raise rates to shippers through classification without touching your tariff?—A. Yes.

Q. Within late years, since 1896, do you think that has been done?—A. I think there have been some advances in classification since 1896, but with the exception of the particular case that Mr. Kennedy spoke of I do not think it has been very general.

Q. (By Mr. KENNEDY.) I would like to have it explained how that could be done.—A. If an article in the classification placed in third class is taken and put in the second class, the change would have the effect of advancing the rate from that of the third to that of the second class.

Q. (By Mr. FARQUHAR.) You spoke of a supplemental schedule. Was not that supplemental schedule made to equalize the inequalities by raising the rates without changing the tariff?—A. The effect of the supplement to the classification was to reduce the rates in many cases, and thus remedy some of the inequalities of the classification.

Q. Without making an entire review of the whole schedule?—A. Yes.

Q. (By Mr. KENNEDY.) I want to ask if uniform classification is practicable?—A. It is very desirable. Whether it can be accomplished or not is a question that has bothered a good many railroad people and others, too, for years. There have been many attempts to bring it about, but I do not know whether it can be done or not.

Q. What are the principal obstacles in the way of uniform classification?—A. The varying conditions in different sections requiring different classifications on account of the volume of certain commodities and certain merchandise in one section, and the fact that one section may be a producer of certain classes of merchandise to a large extent. A railroad can afford to take a large business on a little lower basis than a road in another section that has a carload where, in the first section, we will say, the road may have a hundred carloads. The conditions are so varying.

Q. Those obstacles of that kind seem to be almost insurmountable, then?—A. As far as I can see, they are, up to this time. It is not so much, it seems to me, a reconciling of the railroads as it is a reconciling of the existing conditions in the different sections of the country.

Q. (By Mr. RIPLEY.) How is the rate on coal used by manufacturers to Baltimore fixed? Can you state what the rate on coal from, we will say, the West Virginia and Virginia fields is?—A. The rate is \$1.45 from the Cumberland and the West Virginia Central coal fields to Baltimore by the Baltimore and Ohio Railroad.

Q. Without distinction as to distance?—A. Yes.

Q. That is, from all places in that soft-coal field the rate is the same?—A. No; there is a territory beyond that section—I forget what it is called—from which the rates are higher and also the gas-coal field.

Q. Is that because there is a difference in the quality of the coal or because of the distance? How does the rate on coal from those fields to Baltimore and that from the same fields to Philadelphia compare?—A. I understand that they are the same. I would like to say that, while we are a carrier of that material as an intermediate line, the business in our case originates on the Baltimore and Ohio Rail-

road. I do not think I am as familiar with the conditions and the methods and provisions for the making of rates as I should be to answer those questions.

Q. But the rate is the same, whether it is to Philadelphia or to Baltimore?—A. Yes.

Q. Does not that occasion some complaint in Baltimore?—A. I think it does not. The matter was taken up by one of the papers, and as it dropped the subject I suppose it saw that if the contention and the methods as suggested were carried out logically it would work in some cases to the direct injury of Baltimore as against Philadelphia.

Q. In what way?—A. By reason of Philadelphia having its own coal fields, with some lines as short to Philadelphia and longer to Baltimore.

Q. In other words, Philadelphia enjoys the same rate as Baltimore does to the coal fields tributary to you because she has other fields from which draft might be made?—A. Yes, and the rate is the same. If I was representing the Baltimore and Ohio Railroad, I should say that the rate to Philadelphia was made the same as to Baltimore because of the fact that the rate from the Pennsylvania fields is the same to Philadelphia as the Baltimore and Ohio rate is to Baltimore, and that while it brings business to the Baltimore and Ohio Railroad to engage in the Philadelphia traffic it does not hurt Baltimore.

Q. In other words, if they raised the rate to Philadelphia, coal would come from other points?—A. If they raised the rate to Philadelphia, they would not haul any. The Pennsylvania would haul all the coal to Philadelphia.

Q. Have you any knowledge as to the relative proportion of soft-coal tonnage in Philadelphia from the two fields, the Pennsylvania and the Southern? Is the proportion increasing from the West Virginia and tributary coal fields?—A. I think it is, but I am merely judging from our own traffic in connection with it. I have no statistics at all. I am speaking merely from observation.

Q. You make a through rate from Baltimore to Northern ports—Boston, for instance—on coal?—A. I have nothing to do with that at all. I am not familiar with that question.

Q. Are through rates made to Northern ports by combined rail and water through Baltimore?—A. Yes.

Q. What is the principle of division that is usually accepted? Is there any rule?—A. I do not think there is any rule. I think, like all water freights, they vary as far as the water rates are concerned.

Q. It was testified before this commission a few days ago that Baltimore enjoys a distinct advantage below New York on west-bound traffic as well as east-bound. Is that so?—A. You are speaking about merchandise?

Q. About merchandise.—A. Yes.

Q. What is the differential in that case?—A. I think it is, first class 8 cents, and from that down to 3. I think it is 3 cents on sixth class.

Q. By which you mean if the rate on a certain commodity first class from New York is 50 cents to Chicago, the rate from Baltimore is 42?—A. Yes.

Q. In other words, you enjoy an 8 cent lower rate?—A. Yes.

Q. Does not this give Baltimore a distinct advantage in the importation of products from abroad?—A. I do not know that it does. As I said some little time ago, there are so many conditions surrounding transportation and traffic, merchandise business, and commerce outside of the actual freight rate that a low freight rate from a given point might not be attractive at all to a shipper as compared with a higher rate from some other point.

Q. Will you specify some of these conditions which might, for instance, make it not to the advantage of a shipper to go through Baltimore to Chicago when he could get a rate of 42 cents instead of 50?—A. Yes. The larger number of regular steamship lines plying between New York and foreign ports—and not only of regular lines, but of tramp steamers—where ocean rates might be made, and sometimes are made, lower than to Baltimore, which ocean rate in connection with the inland rate might be lower than the ocean rate via Baltimore in connection with the inland rate. For example, we will take Liverpool: Suppose, without any regard for actual figures or market figures, a steamship line made a rate of 20 cents from Liverpool to New York and of 30 cents from Liverpool to Baltimore on some Chicago business. The advantage in favor of New York, leaving out any other conditions, would be 2 cents a hundred pounds on first class.

Q. Ordinarily the rate is the same from Liverpool to Baltimore as from Liverpool to New York by water?—A. Generally about the same, although there are cases, especially where they are looking for business, where there are special rates.

Q. You spoke some time ago about reducing the differential. What did you mean?—A. I meant that the differential from Chicago was reduced now to 1½ cents on export grain, whereas it used to be 3 cents.

Q. It used to be 3 cents and was reduced to 1½?—A. Yes.

Q. To what extent do Baltimore merchants compete with New York merchants

in middle and southwestern territory? Are the rates so fashioned at all as to enable a large or considerable development in this direction?—A. I think Baltimore's principal business is in the southeastern territory.

Q. (By Mr. KENNEDY.) Are you familiar with the water rates down the coast?—A. Offhand I could not tell you the conditions, but of course we are governed by them.

Q. Is the rate by water from Baltimore down the coast to a coast place reached by one of these Southern railroads practically the same by water as by rail, or is there any great difference between them?—A. We find that the water-line rates are very much lower than ours.

Q. And the steamship lines are not controlled by the railroads that go into the same territory in the matter of rates?—A. No; I know that if the rail lines did control, in many cases the differentials would be done away with entirely, because the reason for those differentials no longer exists in our opinion from a railroad standpoint.

Q. But they do exist?—A. They do; but there are some exceptions as to their application.

Q. Can you say what the difference is between rail rates and water rates from Baltimore to a Southern coast town?—A. That is hard to state, because there are very large and very considerable differences. I forget how those differentials run.

Q. But you say from the railroad point of view there is no reason why there should be those differences in the rates?—A. That is, to common territory I think they should not exist. I know that other railroad traffic officials have said the same.

Q. Can you say why they should not be?—A. The reason why differentials between the water and rail lines, we will say, from Baltimore to certain Southern territory were allowed was because of insurance, and it is claimed, the disadvantage to the business in handling and the poorer time made. The water lines insure now and the shippers do not have any insurance to pay. They make just about as good time as the rail lines, and therefore we feel that there is really no difference in the service.

Q. You feel that there is no difference in the cost of the service; you mean to the different transportation lines, water and the rail?—A. I do not suppose there is much difference; there would be some. While I am not familiar with steamship and steamboat questions I know that the water lines have more handling at wharves than the rail lines, but, on the other hand, they have water transportation for a portion of the way, which is much cheaper than rail transportation.

Q. Are there any lines down the coast that are owned and controlled by the railroads that go into the Southern country?—A. I do not know of any from our section, from Baltimore.

Q. (By Mr. RIPLEY.) Is the Old Dominion Line entirely independent of the railroads?—A. I do not know; I never supposed or understood that it was actually controlled by any ownership of the railroads, although I do not know at all.

Q. Do you mean to say that the rates between Baltimore and Boston by rail and by rail and water are appreciably different at the present time?—A. I do not think that question came up before. It was the Southern points we were discussing.

Q. Would that same condition apply to Boston? Is there a differential allowed to steamship lines?—A. I think the rates of the Merchants and Miners' Line between Baltimore and Boston are lower than the all-rail rates between Baltimore and Boston. I am not sure about that. That is not in the direction of our traffic.

Q. Up and down the coast, then, either north or south, the steamship lines enjoy the privilege of charging lower rates?—A. Yes.

Q. Is there actual water competition, to your knowledge, at interior points on the Southern rivers which might have communication down those rivers by water with the ocean steamers along the coast?—A. At Memphis and points like that?

Q. At points like Memphis, or Macon, or Montgomery; I mean interior points.—A. At Memphis there is, decidedly. I think at all those points.

Q. Actual water competition—that is, steamers to ply up and down those rivers?—A. Oh, you mean via the rivers?

Q. I am referring to the rivers.—A. No; I do not know of any. I beg your pardon. I thought you were referring to the coast steamers to and from the Southern ports into the interior. I do not know of any competition of that kind.

Q. You know of no lines?—A. No; I do not know of any such river lines.

Q. Is not the justification for the lower rates given to many towns and cities based on the assumption that there is water competition from Northern ports?—A. I never knew of the rates being based upon such interior river competition. By water competition we have always understood the meaning to be the coast steamboat lines in connection with rail lines from the Southern ports.

Q. There is not supposed to be any actual active competition up those rivers,

making through water rates from Northern points to those interior cities?—A. I have never seen any from our territory.

Q. Does any cotton come north to Baltimore?—A. Yes.

Q. You mean for export?—A. The Baltimore and Ohio hauls cotton through Baltimore.

Q. Have you any knowledge of the rates charged on it?—A. No.

Q. Does any cotton go through Baltimore to New England points by rail?—A. I should think it would through the Baltimore and Ohio Railroad and the lines via Washington.

Q. Have you any knowledge of the difference between the Baltimore rates and the Norfolk rates? Is there any active competition in carrying cotton to New England through the lines which center at Pinners Point or Norfolk?—A. I will have to ask you a question: Do you mean by through Baltimore the same as through Pinners Point?

Q. Yes.—A. That is, that the cotton is brought to the seaboard by rail and thence via water to Boston?

Q. Yes.—A. There is, I think, much more brought through Pinners Point than through Baltimore. I do not think there is much via Baltimore.

Q. What is the difficulty in shipping through Baltimore?—A. I am not familiar with that. But there is only one regular steamship line from Baltimore to Boston, and that is the Merchants and Miners.

Q. They do not carry any cotton?—A. I do not think they do.

Q. What is the class of merchandise usually carried north?—A. It is very mixed, varied; but I am really not competent to answer those questions about the Merchants and Miners' Line and their business.

Q. The point I want to bring out is this: Whether the growth of Pinners Point and of Norfolk has affected in any way the commerce through the port of Baltimore?—A. I am not prepared to answer that question.

Q. (By Mr. KENNEDY.) I want to ask one question about Hagerstown. I believe you said there is one line that is 87 miles long from Hagerstown to Baltimore, and another 104, and another 158. I would like to ask you whether, if all three of those roads come practically under one management—I understand that two of them are now—what will be the effect, so far as Hagerstown and Baltimore traffic is concerned? Will it go over the one line?—A. I should say that is guessing a little. I do not know what the policy would be under those circumstances. In all probability I should think that the business would be taken by the shortest line; but, at the same time, each of those three lines have different locations in the city, and there is certain business that one line gets now as against the others that is simply due to location. It is more convenient for the shipper, because the time is about the same by all three; the longer line has to make good deal better time to make delivery.

Q. Is there too much railroad convenience between Baltimore and Hagerstown from a railroad point of view? We have heard a great deal about this extravagance of paralleling lines, etc. I would like to ask you whether, in your opinion, there is more railroad facility between Hagerstown and Baltimore than is necessary for the Hagerstown and Baltimore business?—A. Oh, yes. The whole business of that section could be handled by one railroad.

Q. Are they separate lines? They are not main lines at all, either the Baltimore and Ohio or the Pennsylvania, that you speak about?—A. No; the Baltimore and Ohio reaches Hagerstown through a branch line some 24 miles from the main line. The Western Maryland is a main direct line. The Pennsylvania is via the Northern Central division and the Cumberland Valley road.

Q. Would it be an object, in case all these three roads come under one management, to let one or more of the lines fall into disuse altogether, or any parts of one or more of those lines?—A. I do not see how they could. There is other business, much greater business, in various other sections entirely independent of the fact of these three lines running there, that would have to be conserved, and which would maintain the lines.

Q. (By Mr. RIPLEY.) You said sometime ago that the last time of which you had knowledge of rates being cut was at the close of last year. Is it not true that in the autumn, when a great deal of grain is moving east there is a strong incentive to cut rates in order to fill the empty cars west bound? Is not that—A. (Interrupting.) Well, theoretically there is. But I do not think that that cuts much figure when it comes to cutting rates. I think it is more due to the anxiety of the solicitors to secure business. I do not think they consider much the fact that the cars are going west empty.

Q. Have you heard of such a thing as a rebate sheet?—A. I do not know what is meant by a rebate sheet. I know what rebates are.

Q. Have you any protection against a shipper where you suppose he is mis-

classifying goods? Would it pay you ever to call for an investigation?—A. You mean similar to inspection?

Q. Yes; that is to say, are you not bound usually by the classification and specification which the shipper makes of the goods?—A. Yes. As a rule our agents and our receiving clerks are supposed to watch closely and see that the articles conform with the invoice furnished, but they can not know what the hidden contents of the cases are without examination, of course.

Q. If you were too particular about that would not the shipper be likely to send his goods by another road sometimes?—A. If one line has inspection and another has not, a shipper would be very likely to use the line that has no inspection.

Q. Have you an inspection bureau at Baltimore?—A. We have not. Nothing outside of our own agents.

Q. Does each line maintain its own inspection agents at Baltimore?—A. No; there is an inspection bureau in connection with the Baltimore and Ohio and the Pennsylvania railroads, but I think that has not been extended to any other lines out of Baltimore as yet.

Q. As a matter of fact, then, the shipper is put upon his own honor in classifying goods?—A. Yes.

Q. And by the shipper making misclassifications and by acquiescence in them by the railroad, rates might be practically cut, might they not?—A. They could be.

Q. Have you any knowledge of roads which are confessedly not too particular in that respect?—A. No; the lines with which we come in competition have their inspection, and our instructions to our own people are to inspect carefully.

Q. Would there be any advantage in subjecting such inspection to Government control in any way, and having inspectors, as they are appointed in the Western States, for grain and other traffic, to see that the classification corresponds exactly to the goods contained?—A. Under certain conditions, I think, at least it would save the railroads the expense of doing the inspecting.

Q. Would it not insure the equal treatment of all shippers, supposing the system worked honestly?—A. I think it would, and I think the present method of inspection insures equal treatment. The inspectors do not know who shippers are, and they are changed about from station to station.

Q. (By Mr. KENNEDY.) Have the jobbing merchants of Baltimore any just complaint that they are not equally favored with New York and Philadelphia merchants as far as railroad rates are concerned?—A. I do not think they have. That is a pretty broad question.

Q. (By Mr. LITCHMAN.) Is there any complaint that there is discrimination in favor of Baltimore at the expense of New York and other jobbing points?—A. I do not know of any. Periodically there are complaints on the part of Baltimore of discrimination in favor of some other points, and I see the same complaints periodically of other points regarding discriminations in favor of Baltimore. Sometimes the complaints come out in Philadelphia and sometimes in Baltimore.

Q. That is due more to temporary conditions rather than to permanent conditions?—A. I think so.

Q. (By Mr. RIPLEY.) What would be the effect if the New York Central and the Pennsylvania railroads should bring their rates down on east and west bound freight to the level of the Southern ports—Chicago rates?—A. I think the effect would be to injure Baltimore business very considerably.

Q. And correspondingly injure to the advantage of those other cities?—A. Yes.

Q. Would there be any remedy open to Baltimore?—A. I do not know of any excepting—I do not know of any remedy. I was going to say except that of bringing Baltimore up to the same financial basis and giving her the same facilities for doing business on a large scale and all those conditions that New York enjoys.

Q. Any attempt of that kind would be met by cutting rates on the Baltimore and Ohio and the other roads, would it not?—A. Yes.

Q. Suppose the Baltimore and Ohio is controlled entirely by the Pennsylvania Railroad, would it not be possible for the Pennsylvania Railroad to reduce its rates and to add the same to the present Chicago-Baltimore revenue and still not allow its rates to be cut under that figure, thereby injuring the city of Baltimore?—A. If all lines were under one control that would be possible, but if the Baltimore and Ohio and the Pennsylvania were under one control that would not necessarily follow, because there are other lines.

Q. No control of the Baltimore and Ohio by the Pennsylvania is feared by the city of Baltimore?—A. I have not heard of any expression of fear.

Q. (By Mr. KENNEDY.) Is there any fear that the practical control by one management or the consolidation of all the trunk lines will bring about an equality between New York, Philadelphia, and Baltimore?—A. I have not heard of any.

Q. Did you see a dispatch asserting this to be practicable?—A. A general consolidation?

Q. Yes.—A. No.

Q. Would there be any object whatever in bringing about a general consolidation with the center of influence in New York City?—A. I do not see that there would be. It would be similar to obtaining control or ownership of all the roads in the country and running those roads in the interest of one point, which would be against the interests of the railroads themselves.

Q. (By Mr. LITCHMAN.) Would not there grow up out of that consolidation what would virtually be a pooling of traffic?—A. There might by community of interest or by the consolidation of lines be brought about a condition that would result in absolute maintenance of rates, but I do not think it would bring about a uniformity of rates between all Eastern ports and Western points.

Q. Would it not bring about an adjustment of rates so that there would be no unfair discrimination as against one port compared with another?—A. That question of what are fair rates as between the different ports is one that has been gone over and studied and worked out by the various railroad lines in past years, resulting in the present system of rates. The discriminations, in my judgment, have not so much been due to tariff rates in the past as they have been to disregard of tariff rates at different points.

Q. Such a combination would eliminate substantially all competition, so far as the United States is concerned, would it not?—A. I do not see how it would.

Q. If all the lines running east were substantially under the control of one management in a community of interests, would not that consolidation eliminate competition?—A. I think the competition between railroads is merely a percentage of competition. There was a time when competition between two railroads or between two sections was due to the fact that there were two railroads. But in my experience, in our local territory where we have no other railroads, we feel competition, the influence of markets, inducements in the way of facilities and prices at various points, and we have to meet the competition of markets, if we are going to do business on the line, as much as we do the competition of other railroads.

Q. The cost of transportation enters very largely into the cost to the consumer?—A. It does.

Q. Is it not true that the so-called Vanderbilt system, the Pennsylvania system, and the Baltimore and Ohio system are substantially all of the lines concentrating at New York?—A. They control to a very great extent the situation, although there are other lines that are not controlled by them and that do affect the rate situation.

Q. It is asserted that the Baltimore and Ohio and the Pennsylvania are under one control and that that control is being managed in a community of interest with the Vanderbilt system. That being the case, is not the result the elimination of competition between those three systems?—A. Between those three systems to a certain extent, if the premise is correct; but it does not eliminate the competition of markets or of different sections of the country with one another.

Q. We are discussing now the question of transportation purely; other conditions, of course, affect all alike. Now, if that combination or agreement should eliminate competition so far as three systems are concerned, does it not carry with it the power to raise rates arbitrarily on those three systems against the shipper?—A. Theoretically it does, but I am speaking from a practical standpoint. I do not see how a railroad is to engage in traffic even if it is controlled by some other road unless it meets market and other conditions outside of railroad rates. Perhaps I can make clearer what I mean. If all the roads in our section were under one ownership and that ownership should say "Put your rates up 20 per cent in all this section," the result would be to shut out some of the roads belonging to this ownership from business—not only the one road, but all the roads in that ownership. Certainly that would be very short-sighted policy, and it seems to me it would be impracticable to attempt to ignore conditions outside of the removal of railroad competition.

Q. Would that answer apply to a general raise of 20 per cent on each of the three systems at the same time?—A. It would, supposing that those three systems are running to a given point and that there are other sections of the country that are not under this control.

Q. Those three systems control substantially the entire transportation, and that, it seems to me, would have a very marked effect upon the control of the business itself, would it not?—A. It would have its effect.

Q. It would have a controlling effect?—A. Yes, it would have a controlling effect; but unless the roads are going out of business and desire to shut off certain classes of business they can not put rates beyond a reasonable figure. I do not know whether I have expressed myself very clearly. Suppose the Baltimore and Ohio and the Pennsylvania Railroad were absolutely under one control as to the

territory through which they run. There are other lines running to other markets. If the Baltimore and Ohio and the Pennsylvania Railroad by agreement or control should put rates to an unreasonable figure to the markets to which they transport freight and which are open to their territory, they would certainly be turning a very large amount of profitable business over to lines running to other markets, unless you can go so far as to put all the railroads in the country under one control and an unreasonable advance made to one market is made also to all the markets in the country.

Q. Would that not be the logical sequence?—A. It might be theoretically, but I am speaking of the practical results.

Q. Has not this consolidation among the railroads been brought about under the plea that ruinous competition among the systems has reduced the rates below the proper compensating point?—A. I think it is more on the ground that rates have not been maintained, and with the view to securing a maintenance of existing rates and economy of management. In the case of the Baltimore and Ohio and the Pennsylvania, I do not see where the economy of management would come in, because they are operated entirely separately.

Q. Yet, even in the territory covered by those systems, there has been a competition of rates at times?—A. Yes.

Q. That would cease, necessarily, if they were under one control or community of ownership?—A. It would for the particular business and for the particular territory to their particular market.

Q. (By Mr. A. L. HARRIS.) Is the territory of the United States divided for classification purposes by the railroads?—A. There is no uniform division. In actual practice one classification will apply to one territory and another to another; but there is no rule as regards dividing territory.

Q. There is a Southern territory?—A. There is a Southern territory that takes the Southern classification; there is a Western and Middle States, and New England territory that takes the official classification; there is a different classification in the trans-Mississippi territory.

Q. I understood you to say that it is important that the classification be as permanent as possible.—A. No; I did not say "permanent;" I said "uniform," and I referred more especially to the character or the similarity of the different classifications. I do not think you could have a permanent classification because of the changes in conditions, although it would be very desirable, if it were practicable, to continue a classification.

Q. Is the country also mapped for freight rates?—A. There is a system, or a basis, rather, of rates in what is known as the trunk-line territory. As I said before, Chicago and New York are taken as a basis and the rate between them as 100 per cent. Rates to trunk-line points are based on New York and Chicago rates, if within or beyond trunk-line territory. For instance, the rate to Cincinnati is 87 per cent and to St. Louis 116 per cent, etc.

Q. Is it desirable to have steady rates, as far as possible?—A. It is.

Q. The rates are fixed, as a rule, by experts in freight rates, are they?—A. Yes.

Q. Are they subject to frequent changes?—A. No; the class rates are very steady. There has not been a variation in the class rates for a good many years.

Q. Do you believe it would be important, both for the producer and consumer as well as to the shipper, that rates should be steady?—A. Yes.

Q. Is that the case, as a rule, now with the railroads?—A. The present conditions are very steady, and rates have been maintained.

Q. Do railroads complain of each other in regard to cutting of rates?—A. Yes; at times.

Q. After railroads, large systems at least, have fixed rates, would it or would it not be possible for some body like the Interstate Commerce Commission to approve these rates and see that they are maintained?—A. As I said before, the rates are made by experts, and for the Interstate Commerce Commission to attempt to regulate them would be to submit them to an examination and approval by those who are not experts in that particular line of business.

Q. If the Interstate Commerce Commission were competent, then what?—A. It would be a most gigantic undertaking to supervise and examine the rates made by the railroads in this country. It would be a question not of millions, but of billions.

Q. (By Mr. KENNEDY.) Our attention was called the other day to a condition of affairs which I will illustrate to you in this way. A gentleman told us about rates being such on certain lines of merchandise that they could be sent to Chicago from New York and then reshipped from Chicago back to Connersville, Ind., for instance, 150 miles back into the territory through which they had gone and a little south, for considerable less than the merchants of the town of Connersville could have the goods shipped to them direct from Cincinnati, say. I will ask you

if you have knowledge that such a condition prevails to a considerable extent, and why it is, and whether you look upon it as a fault that should be corrected or not?—A. I would look upon a condition permitting such a practice as a fault, but whether it exists or not I do not know. I suspect it does in some cases, and I am trying to find out for myself. But let me see if I understand your question. The shipment brought from New York to Chicago and then back again to some interior point, is carried by the sum of these two rates at a less cost than the cost direct from New York to that point?

Q. Yes.—A. You mentioned Cincinnati and that threw me off. I suspect that condition does exist in some cases from some things I have seen, and I am trying to follow it up, but I do not think it is intentional. We all discover in the making of rates from time to time that in meeting certain conditions, we have overlooked cases that should have been met at the same time; and from what I have heard in that connection as regards that method of making the rate, I think it is a case of that kind. There may be more like it, but I do not know.

(Testimony closed.)

WASHINGTON, D. C., April 6, 1901.

TESTIMONY OF MR. T. M. R. TALCOTT,

Assistant to the president of the Seaboard Air Line.

The commission met at 2.07 p. m., pursuant to recess, Mr. Farquhar presiding. At that time Mr. T. M. R. Talcott, of Richmond, Va., assistant to the president of the Seaboard Air Line Railway, was introduced as a witness and, being duly sworn, testified as follows:

Q. (By Mr. FARQUHAR.) Please give your full name, present position, and address.—A. T. M. R. Talcott; assistant to the president, Seaboard Air Line Railway; Richmond, Va.

Q. Will you please give to the commission your first experience in railroading and the offices you have held, so far as your recollection goes?—A. I commenced 47 years ago this month as an engineer on railroad construction, and I served in that capacity and also in connection with the transportation department up to 1861. From that time until April, 1865, I was in service in the Confederate army. After 1865 until 1890 I was connected, either as civil engineer or as superintendent or general manager or vice-president, with railroads in operation. The roads with which I was connected were the Richmond and Danville and the Mobile and Ohio during that period—those two systems. Since 1890 until the last 2 years I have not been connected with railroads, except when employed as a consulting engineer. For the last 2 years I have been with the Seaboard Air Line in my present position. I was for 1 year the commissioner of the Southern Railway and Steamship Association, which position I resigned to take the position of first vice-president of the Richmond and Danville Railway. I think that covers my experience.

Q. (By Mr. RIPLEY.) In the first place I wish you would make some statement respecting the effect of the enactment of the interstate-commerce act in 1887 upon the Southern Railway and Steamship Association. What was that association, what was it intended to do, and what was the effect of the enactment of the act upon it?—A. The Southern Railway and Steamship Association was composed of the Southern rail lines and the steamship lines between the North and South Atlantic ports. It did not take in the Gulf ports at all, but the Eastern cities—Boston, New York, Philadelphia, Baltimore, and Fall River—and it was for the purpose of preventing fluctuation in rates and rate cutting; that was the object of it. It was organized by Mr. Albert Fink, who had just left the Louisville and Nashville road, and at first the plan was to give the commissioner, Mr. Fink, full authority over the rates. He issued the rates and all were bound to observe them. Later it was found that it was important to have some better guaranty, and that was effected by means of pooling the business. The commissioner was authorized to make allotments to each line, and, if not satisfactory, there was appeal to a regular board of arbitration appointed by the association. Parties dissatisfied had a right to appeal to that and present arguments for a change. When allotments were established that way, either accepted as given by the commissioner or as determined by arbitration, the division was made on a tonnage basis, lines carrying an excess being given a very small compensation, made small so as not to give them any inducement to get an excess, and the balances were settled in cash. That was the basis of that pool which was in operation at the time the interstate-commerce law was passed which forbade pooling.

Q. (By Mr. FARQUHAR.) Was this in existence up to 1887?—A. And longer. But of course it had to be modified. Then a new agreement was made, and it was under the new agreement that I was for 1 year commissioner of the association. Of course the powers of the commissioner were largely reduced then, and the method of operation was for the commissioner to maintain close watch by means of having all the manifests of the competitive business sent to him. Copies of all manifests were sent to him as issued, and they were condensed in his office, so that he always had a record of the business done by each line, and his reports showed to the executive committee precisely how the business was being divided under the agreement at that time, which was merely to maintain rates.

Q. (By Mr. RIPLEY.) How many companies were in that agreement at that time—how many companies, approximately?—A. The Louisville and Nashville; the Nashville, Chattanooga and St. Louis; the Western Atlantic; the East Tennessee; Virginia and Georgia; the Norfolk and Western; the Richmond and Danville; the Atlantic Coast Line; the Seaboard and Roanoke; the Plant System; the Georgia Central; the Georgia Railroad; and 1 or 2 other rail lines. Then there were steamship lines, the Merchants and Miners', of Boston; the Old Dominion; the Clyde Line; and some subordinate Baltimore lines the names of which I do not recollect now, because they were frequently changing them. It took in practically all the steamship lines and rail lines that competed in the Southern territory as distinguished from the extreme Southwestern territory. The Mobile and Ohio and the Illinois Central were not in the association.

Q. Was the association successful in attaining its object prior to the enactment of the interstate-commerce act?—A. Very successful; and it was very satisfactory.

Q. What was the immediate effect of the passage of that act?—A. It relaxed the maintenance of rates from the very first, more or less. Perhaps I should say not from the very first. For a little while they went along very well as they had gone, but within a very short period of time to the time I came in as commissioner there was more or less disturbance of rates, which required frequent called meetings of the executive committee to consider them.

Q. So far as you know has an unsettled condition prevailed since that time?—A. Of my own knowledge I can not say, except for a year or two after that, or less than 2 years after I was commissioner, when I was representing the Richmond and Danville road in the association. That road I represented in the association at that time. The conditions continued about the same for 2 years. Subsequently, I know, from observation and reading the papers, that there were decisions of the courts which tended to weaken the strength of associations of that sort, but the exact effect upon them I do not know, because I have had no connection with them since.

Q. Can you make any statement respecting the present tendencies, the attempt to prevent rate cutting, and competition by other means? Is there any extensive rate cutting, so far as you know, in the territory served by your railroad?—A. No. So far as I know the rates are very well maintained at this time. There is business enough for all, and there is very little temptation to disturb rates. How it would be if it were otherwise I do not know.

Q. There would, then, be, so far as the maintenance of rates is concerned, no further advantage to follow the absorption of the few remaining independent lines in the South by the Southern Railway?—A. No, I can not see that there would be any advantage. Looking at it from my standpoint, I do not see any necessity for further absorption in the interest of the public.

Q. Has the competition at times been sharp between the Atlantic Coast Line and the Seaboard Air Line in the past?—A. No; I think not. I think the competition between the old Seaboard Air Line, before the enlargement of the system by taking in two other systems, and the Southern was quite bitter at one time, according to the reports in the papers and from what I heard from railroad acquaintances; but I never heard of any bitter contest or any rate wars between the Atlantic Coast Line and the Seaboard Air Line. They may have occurred, however, without my knowledge.

Q. Have rate wars been as frequent in the Southern territory as in the North, so far as your observation has extended?—A. I think not. During the time that I have had the opportunity to know they certainly have not been so frequent.

Q. Is there at the present time apparently any effective competition between the steamship lines and the railroads in the Southern territory?—A. To speak of the situation in that respect as of the present time would be difficult, because I have no immediate knowledge of the conditions of traffic. Up to within 10 years ago when I did have connection with traffic, there was more or less competition, some even from the West, or by means of the trunk lines and the coastwise steamships which controlled not only the rates at the South Atlantic ports for Western business, but also to some extent the inland rates.

Q. That is, those companies were interested in land companies in the south?—A. Oh, no. The trunk lines simply brought the western products to the ports, and they were then taken by the Atlantic coastwise steamships down to the south Atlantic ports. That fixed the through rate from Chicago, for instance, or other western points to Savannah and Charleston, by way of rail and water combination. Then Augusta was affected because there was a regular line of boats running up the Savannah River to that city.

Q. Do those lines still operate, so far as you know?—A. I do not know, because I have had no occasion to notice. They did up to the time that I severed my connection with the Richmond and Danville Railroad.

Q. Some years ago, then, there was effective competition up the rivers from the coast into the heart of this southern territory?—A. Yes; in the case particularly of the Savannah River.

Q. Steamers running frequently?—A. Yes.

Q. And transporting a considerable volume of business?—A. Yes; it was a competition that could not be ignored by the railroads; they had to make arrangements in order to protect rates, and they at one time subsidized the steamboats. The railroads in the Southern Railway and Steamship Association subsidized the boats on the Savannah River.

Q. What are the conditions of ownership of some of the steamship companies in the South now? For instance, the Old Dominion?—A. I can not say that the Old Dominion is now entirely owned by the railroads, because I do not know that fact; but I know that three principal lines or systems of railroads connect with it. They are the Southern, the Seaboard Air Line, and the Atlantic Coast Line, and all three of them are interested in the Old Dominion Steamship Company.

Q. So that the policy of the steamship lines is distinctly in harmony now with that of the railroads?—A. Of that particular steamship line that is true, and the lines from Baltimore are also controlled by the railways. There are two lines from Baltimore, Norfolk and Chesapeake Bay lines, of which one is controlled by the Southern and the other by the Seaboard Air Line, part and parcel of those lines, or of the two systems. I do not know of any other interest of the rail lines in steamship lines running to the Virginia ports or to Charleston. The Clyde lines are entirely independent. The Ocean Steamship Company, which runs to Savannah, has always been controlled by the Georgia Central—the old Georgia Central and Banking Company—and is, so far as I know, so controlled to-day.

Q. Can you make any statement relative to the position of some of the Southern ports—Mobile, for example? Has it physical advantages of location or of harbor, etc., which would be injured by the absorption of the Mobile and Ohio road by the Southern Railroad?—A. I was for 3 years on the Mobile and Ohio Railroad as general manager, from 1884, during which time, of course, I became very familiar with Mobile and studied the possibilities of the development of Mobile. We endeavored to build up there an export cotton business, but were not very successful. I thought that the tropical fruit business could be handled there probably better than at New Orleans, after the Mobile and Ohio was extended, during the time I was connected with it, to East St. Louis. Before that we could not do anything. We commenced making preparations for that business, and it has since been developed, but to what extent I do not know. I see by the annual reports that quite a large business has been built up there in tropical fruits which, I suppose, will stay there. I do not see any reason why that should be diverted. I do not think the Mobile and Ohio had any export cotton that amounts to much.

Q. Is there any particular reason why it should not be a cotton-exporting port?—A. Because of the difficulties of the port at that time. The water in Mobile Bay has been deepened only in a little, narrow, or a comparatively narrow channel. The Government is gradually extending the width, I believe. But there was difficulty in getting large vessels up. Only a certain class of large vessels could be brought there, and those were vessels that were arranged to use water ballast. They pumped the water out to lighten them for going down to the sea and took them outside of Fort Morgan, and then they pumped the water in and got them down to their bearings for seagoing. I did not think there was much prospect of building up Mobile for cotton export. Another class of business that I endeavored to develop whilst there was the coal business—export business in coal. And in order to see what could be done with that the company authorized the expenditure of some money and we sent coal down to be burned by the steamships plying in connection with the Panama Railroad—the Pacific Mail steamships—and got them to use it; but we found they got their Cardiff coal—English coal—very cheaply, and that they liked it; and whilst they said the Alabama coal was fair coal, they did not like it quite as much as they did the Cardiff. The price of the Cardiff coal was so low, owing to the fact that more or less of it was brought over in ballast, not paying freight, that we were not successful, and we lost money.

The venture did not pay, and it was dropped before I left there. Whether they ever tried it again or not I do not know; but I have understood that there has been some coal shipped to Cuba through Mobile. I do not see any reason why, if there is any demand for coal there, they should not ship the Alabama coal to Cuba over the Mobile and Ohio, because the Mobile and Ohio is a very low-grade road and ought to be able to haul coal cheaply if the volume of it is sufficient.

Q. (By Mr. CLARKE.) How long hauls do they have to make?—A. The haul through Alabama was something like 230 miles.

Q. (By Mr. FARQUHAR.) Was Pensacola a competing point with Mobile while you were trying to build up the coal business?—A. No; not in coal at that time, only in lumber.

Q. And has the lumber business developed in Mobile? Is it still the largest market on the Gulf?—A. I have not noticed it recently, but a few years ago, when I had access to information, it had continued to develop. I should have mentioned that one of the efforts we made in order to make freight was to develop the lumber trade, and in doing so we utilized the timber lands belonging to the Mobile and Ohio Company, acquired by land grant.

Q. Something has been said before the commission here about the competition of the Southern rivers. While you were connected with the Mobile and Ohio did you notice how much there was of competition in Arkansas or Alabama in these small independent boats and the effect they have on the rates?—A. One of the river boats could run as far up as Columbus, which was on a branch line (it is now on the Montgomery extension of the Mobile and Ohio), and also occasionally, I think, it used to come up as far as Aberdeen, which was the terminus of the Illinois Central line running into that territory; but it was only for a short time during the cotton season. Some seasons there was hardly water enough for them to come there at all. And I can not recollect that I ever paid much attention to that competition. Maybe the competition with the Illinois Central kept me so busy that I did not notice the boats. Now, as regards the Alabama River, at the time that I was on the Mobile and Ohio there was a regular line established, a line which the Mobile and Ohio recognized as a connection to Montgomery. It was established some months, perhaps a year, before I severed my connection with the Mobile and Ohio, and, so far as I can remember now, it was still in operation at that time, but what became of it afterwards I do not know.

Q. (By Professor RIPLEY.) Was the basing-point system of rate making in the Southern States in force at the time that you were directly connected with affairs there?—A. Not in the sense in which that word is used now. When the Green Line was opened from the West into the South in competition with the lines I have spoken of, through the south Atlantic ports in connection with the coastwise steamships and trunk lines, the basis adopted was to make all rates from the Ohio and Mississippi rivers to interior points the same; and that was on an understanding with the roads north of the river that they would make their rates the same to all river points, no matter by what lines. That was the principle that prevailed all through the life of the Southern Railway and Steamship Association up to the time that I severed my connection with it.

Q. Will you specify by way of illustration what you mean?—A. I mean this, that the rate from Chicago to Cairo, to Henderson, to Evansville, to Cincinnati, and to any other point on the Ohio or to Memphis would be the same; through those points, I should have said, the rate to Atlanta would be made by the combination of rates to those points from Chicago and from those points to Atlanta, and that the proportions were the same north of the river and south of the river, no matter what river point freight came through. Do I make myself clear?

Q. What was the basis of that division then?—A. It was not a pro rata division at all; it was an arbitrary division. In other words, the lines north of the river named the rates to the river, and the lines south of the river named the rates to each point south, and the combination of these two made the through rate. That was the basis of rates at that time.

Q. But there was not the element which you find in the present basing-point system whereby certain towns, by reason of their size or the existence of so called water competition, got peculiarly low rates and the rates to all the suburban places were made by adding a high local to that rate?—A. That was not exactly the basis of rates. Certain important distributing points, such as Atlanta and Augusta and Macon were afforded rates which had certain relations, either the same or a certain differential. As far as practicable the most important distributing points were given the same rate, so as to enable them to develop equally.

Q. The number of subordinate rates below those which have through rates was not great?—A. The rates were generally made from those distributing points by adding the local tariff of the road over which the freight went.

Q. It was the same principle which you have in the present basing-point system, but not developed to so extreme a degree?—A. The same general principle, yes. Subsequently, during my administration as commissioner, it became desirable to have uniform rates to what are known as the Georgia and Carolina points. I was coming to that as a modification of what I have stated before. And the commissioner made up and issued a tariff of rates from all points West to what are known as Georgia and Carolina points, taking in all the principal stations, which were to be the same, and agreed upon as the same, whether via the Western lines coming across the Ohio, by the Chesapeake and Ohio, coming through Richmond, or by any other route that could be made available, such as the Norfolk and Western, running down into Virginia, and then shipping south in connection with other lines. That was the basis that was adopted a few months before I dissolved my connection with the association, and it remains in effect: or at least so I have understood. I heard from our traffic manager the other day that these rates are practically in effect now, with some modifications.

Q. Are you aware that the long and short haul clause of the interstate-commerce act is inoperative in a large part of the Southern territory?—A. Yes; it always has been to some extent. For instance, the rates from Chicago to Atlanta are higher than the rates from Chicago to Savannah or Charleston, although the freight goes through Atlanta to reach those points.

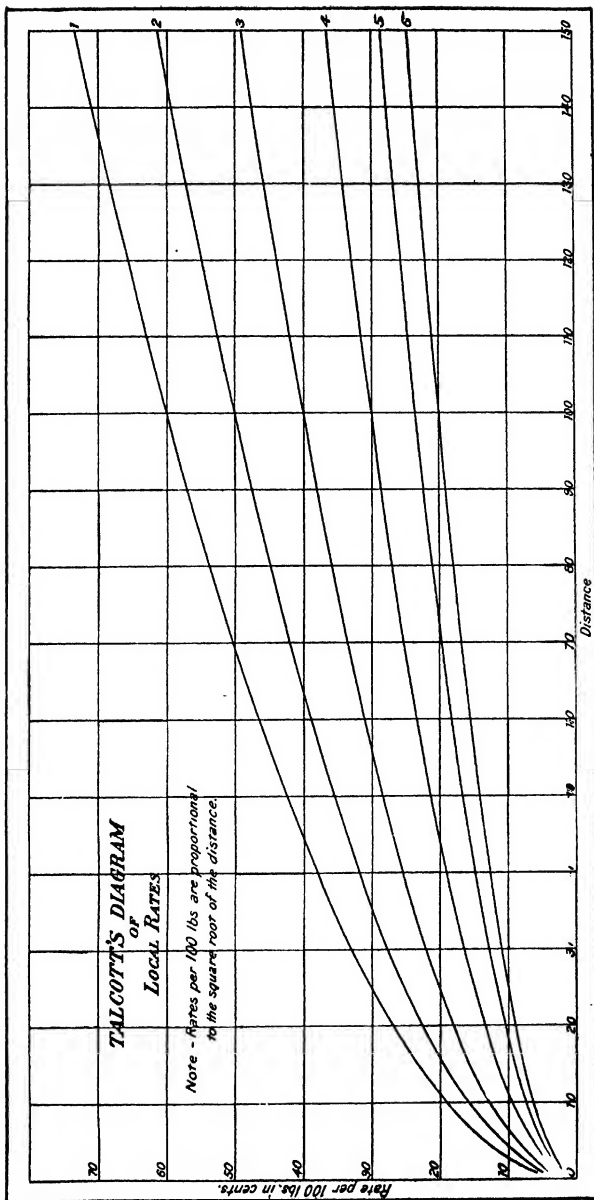
Q. Is that condition caused by actual water competition down the river to the ocean?—A. By actual competition. The whole question of discrimination was raised by the merchants of Atlanta, who demanded lower rates, and was argued before the Interstate Commerce Commission when I was commissioner of the association; and I suppose, if I had known it was a matter of any interest, I could have brought the record up here. It is easily accessible.

Q. Does it seem to you that the conditions, competitive and others, in the Southern States justify the setting aside of this long and short haul clause as it is at present?—A. I do not know to what extent it is set aside at present. I will say, however, what my own judgment in that matter has been. Long before the interstate commerce law was passed my own practice was in every way possible to do away with such discrimination.

Q. Would you describe it as a discrimination?—A. I do not say that it is necessarily an unjust discrimination, but it is a discrimination; and I did away with it at that time on the ground that the losses in revenue were not large enough to justify my company in putting itself in a position to be attacked all the time for discriminating, believing that it was better to forego some little extra earnings than to be put in the position of having to defend such rates as just and reasonable.

Q. You would acknowledge, then, that distance is an element in making rates?—A. Yes; I do.

Q. Will you specify in what way it becomes a factor or to what degree?—A. In my early experience in making rates I was called upon to make local tariffs very largely, and the question of what the relative charge should be in proportion to distance necessarily had to be considered. I informed myself. Fortunately I was helped by some publication in a magazine where somebody had done a great deal of work which I would have had to do myself; that there was a general consensus of opinion apparently among railroads that the charges per ton per mile for short hauls should be higher than for long hauls; and I endeavored to find out some scale which would be convenient for use. As an engineer and mathematician I wanted some mathematical scale, and I discovered that the nearest scale to it—that is the nearest scale to fit the actual conditions of tariffs—was not in proportion to the distance, but in proportion to the square root of the distance; that is to say, double the charge for four times the haul. The rate for 25 miles would be just one-half of that for 100 miles. That, you can see, was a very easily remembered rule, and I have used it a great deal. Mr. Markham alluded to the Mobile and Ohio tariffs, which were made on that basis, this morning in conversation with me; he remembered them. I had occasion to examine the official tariff of the present commissioners of the State of North Carolina, and I discovered that it was based on the same scale, taken from one of my own old tariffs. It was in connection with my report that I made to the court on the Cape Fear and Yadkin Valley road for the receiver of the road. It became necessary under an order of the court to divide the earnings between different sections of the road that were covered by different mortgages, and give each section of road proper credit for gross earnings and to make this division for 5 years. I was called on as an expert to divide between the long and short hauls—where it was 10 miles on one section of the road and 50 miles on another to say how the earnings should be divided between them. I thought the proper way to do would be to make the divisions on the scale of the approved tariff of the North Carolina commission, which was done, and subsequently, in the examination before the master, the



chairman of the commission was put on the witness stand and stated that the division was, in his opinion, just and fair, for he had found by comparing that it fitted exactly the scale on which their tariffs were made. So that it is in evidence that my scale is in use to-day.

Q. Is it in use in any other States, so far as you know?—A. I do not know; I have had no occasion to investigate. It is used on the Southern Railway, I know. In other words, the scale that I established as the general manager of the old part of the Southern is still maintained there and probably on the Mobile and Ohio. Whether anybody else has adopted it or not I can not say. I have frequently had requests for a little diagram that I made to show it so that you could see by the lines what the relative rates would be.

Q. Will you submit one of those diagrams for us?—A. I will do it with pleasure. It simply shows the rate line as a curve. Others have also used the scale I introduced a good many years ago. The first was Mr. Henry Fink, now president of the Norfolk and Western road, when he was first on that road; but it was not then the Norfolk and Western—it was the Atlantic, Mississippi and Ohio before it was reorganized. Under the law it was required that the cities of Richmond and Petersburg should have the same rates to points on our two roads, which crossed at Burkeville, 53 or 54 miles from the two cities of Richmond and Petersburg. In making tariffs for local stations beyond the question came up of the proper division for the relative hauls, and my scale was adopted as fair by Mr. Fink for the Atlantic, Mississippi and Ohio. Of course I thought that if it was a proper scale at all it would be fair for the division of rates, and subsequently I got out a table of percentages known as "Talcott's Table of Percentages for Division of Rates." I have been called on by Mr. Culp, of the Southern road, and others time and again for copies of it. Mr. Fink adopted it also for the division of rates between the Shenandoah Valley and the Norfolk and Western, which I think is another indorsement of the scale as a fair one.

Q. What other basis of making the local tariffs by State commissions would be adopted usually—the proportion of mileage directly?—A. No; never directly; but the allowance for long and short hauls does not agree with my scale. Sometimes it does not differ very much from it on one class, while on another class it would be entirely different.

Q. Is the long and short haul clause enforced, or was it enforced by the State commissions within the several Southern States?—A. Generally, yes; I think. It was not enforced in Virginia. I ought to amend that. I happened to be on a road the charter of which exempted it for a long time during my management from any State interference with the rates. There was only one condition upon which the State could interfere, and that was that we should not pay more than 15 per cent in dividends; but as they had kindly increased the capital stock we had no show of paying 15 per cent dividends, and we did not come under that law at all. Although I did not study very closely the requirement of the law, I do not recollect any enforcement in Virginia whatever of the long and short haul provision. We adopted it in Virginia, and all our tariffs on the Richmond and Danville road were made on that basis—no more for a shorter than a longer haul. For instance, starting out I would make rates in classes on my scale from Richmond to Burkeville—about 50 miles south of Richmond, where we were crossed by the Norfolk and Western—with lower rates from Petersburg, and as the law required they should be the same to that station my rates would drop there, and with the lower rate I would just simply go back to a station nearer Richmond and carry that on. After passing this competitive point we could gradually work up to the scale again. In other words, in one class I recollect there used to be two intermediate stations that would have the same rate as Burkeville.

Q. It would not seem to you justifiable that there should be a direct drop?—A. No; not on the Richmond and Danville. There was one direct drop there; but I preferred to do away with it and reduced the rate to the stations between the competitive point and the terminal point so as to do away with it—so as to make rates equal but not have a higher rate for the shorter haul.

Q. In your judgment, then, the long and short haul clause is a proper and reasonable regulation in the making of rates?—A. Provided it does not exclude competition by forcing a reduction of rates at the intermediate points that the railroad can not submit to. For instance, I do not think it makes so much difference whether it is a water competition or a competition from any other source, if it is legitimate and proper and revenue can be made by meeting competition. On account of the highly competitive conditions at some points I do not think it is always just to forbid the meeting of that competition, even if it does make a discrimination at intermediate points.

Q. An elastic prohibition allowing for modification in intermediate cases would seem to you to be justifiable?—A. Yes; I have always thought so, and I think so now.

Q. And does it seem to you that the evasion of this provision of the interstate commerce law through the Southern States that exists is detrimental to the interests of that section?—A. I can not say without knowing more in detail where those discriminations exist and the causes for them. Of those facts I am absolutely ignorant at this time.

Q. (By Mr. FARQUHAR.) Does the practical carrying out of the long and short haul raise the long haul rate?—A. At some points, yes; at many, no.

Q. Is not what you lose in handling short haul freight—and all roads must, I presume, lose—put on to the long haul?—A. It ought not to be and never was in my knowledge on my own road.

Q. Do you say that the principle contained in the interstate commerce bill of the long and short haul is a practical principle of railroading, or is it a theoretical principle of the politicians?—A. I think it is a theoretical principle in part, but I think that there is a measure of justice at any rate in it. I took it as a measure of policy that, unless I could positively demonstrate to the satisfaction of people who are not capable of taking a demonstration always—the public—that we were not unjustly discriminating, we would better make some sacrifice of revenue than to be constantly at war with our patrons upon whom we depended, and therefore that this discrimination should be wiped out as far as possible. I mean, of course, the discrimination of the higher charge for the short haul than the longer one. I do not think it is just and reasonable to require it to be an absolutely fixed cast-iron rule.

Q. Is it not practically true that within the last ten years the rates on the long and the short haul, if they have been divergent from the principle announced in the bill, have really come nearer equalization than they ever did, and are all the time coming nearer equalization?—A. I must qualify my answer to that, as I do everything that relates to the time within the last ten years. I believe such to be the case, but I have not the means of demonstrating the fact at my command now. If I had known that question would come up I would have made some comparisons to show you that it is the case. I think I could have done so.

Q. Do you know a single road in the country that strictly observes the rating of the long and short haul provision? Do you know of a single railroad in the United States since the passage of that act that has observed it?—A. I did not up to the time that I ceased to have the means of knowing what they were doing. We were, of course, called upon to defend our course. I acted for the association to defend it before the Interstate Commerce Commission in one case. I think we were always prepared to defend it. I should say that I was called upon myself to defend the roads against the charge that it was an unjust discrimination.

Q. (By Mr. A. L. HARRIS.) Was not the provision put into the law to correct the abuse of charging so much more arbitrarily for the short hauls than for the long hauls?—A. Yes; I think it grew out of the fact that the disproportion in charge for short hauls and long was in many cases extreme.

Q. Then, was it not really a question of business and not of politics?—A. Perhaps I answered that question a little hastily. I do not know much about politics. I would like to amend that answer.

Q. (By Mr. KENNEDY.) You did not use the word politics.—A. No; it was in the question, and I answered the question generally; but I did not think about the word politics in it.

Q. (By Mr. FARQUHAR.) You would answer that it was a remedial measure so far as the disproportions had existed before the passage of the act in 1887?—A. Yes.

Q. And has been beneficial?—A. It has been beneficial; yes.

Q. If not carried out to the letter?—A. Yes.

Q. We only want to get at the facts. The other statement is so broad it might be taken up. I know some railroad men have said that no railroad can carry out the law.

THE WITNESS. I think they have all tried to carry out the law. Those that were under my jurisdiction as commissioner of the Southern Railway and Steamship Association did, but they claimed they could not carry it out in every respect, and would defend themselves against the charge of failure to comply literally with the law.

Q. (By Mr. FARQUHAR.) What experience did you have in making your freight tariffs on commodity rates?—A. Originally the Southern classification was a compromise measure between all the roads in that territory, where they all had different classifications; and it was brought about by competition with the Western lines, the Green Line, as it was known, coming into that territory. In the very outset, in making that new classification, they were met with conditions in the Western business that had to be provided for. There were certain Western products that could not be put in the classes at all, that must be treated as commodities.

From time to time in our meetings to discuss the question of classification there were constantly propositions made and good reasons shown why certain things would not stand class rates. You may change this class rate as is proposed, it was argued, but there is no occasion to change the rate on this commodity. Then, as a matter of compromise, we would take it out and make a commodity rate for it. So, from having only a half dozen or so commodity rates the number increased until the alphabet was not long enough to cover them all. I see by looking at the classification sheets that others have been introduced since 10 years ago, 1890, when I was familiar with the question.

Q. Have you not about nine classes in the Southern classification now?—A. Originally there were six classes, but it takes in a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, and so on. So there is a great deal of it.

Then, when the classification was adopted, there was another thing to consider. In the limits of a State they had State classifications which were entirely different from the general classifications agreed upon, and we had to issue exception sheets. I think many of these are still in existence. Whether it is because the State commissioners have not modified their classifications to suit the general classification, or whether it is because there is some benefit to the railroads in them that they keep them, I do not know; but some of them are kept.

Q. (By Mr. RIPLEY.) Knowing, as you must, from experience, the complicated character of freight classification, does it seem to you that the power to make or to approve of such a classification might wisely be vested in the Interstate Commerce Commission?—A. Certainly not, if we were to have one uniform classification for the whole country. The conditions do not admit of that in my opinion.

Q. Will you state the objections that occur to you against the promulgation of such a uniform classification for the whole country?—A. I only state it as the result of my own experience. When we adopted the original Southern classification there were some of us who were exceedingly anxious to have it based on what is known as the official classification. We preferred to use that classification, in which there were four classes. When we came to make the new classification we found it would not do; it did not fit our Southern conditions. In other words, it would put some things in the fourth class that would not stand fourth-class rates, and we had to have some lower classes. We were not thinking of making so many commodity rates at first, and it was supposed that by having a few commodity rates we could make the adjustments on them and the four classes might be enough, but I think a good many things would have to be made commodities and come out of the classes in the South if you attempted to enforce the official classification in that part of the country.

Q. (By Mr. CLARKE.) Is it not a fact that goods may be properly put into the fourth class in the region of their origin and should be advanced to first class when they reach or approach their destination?—A. I think that is proper and actually the case in some respects. Where, as in the South, they are endeavoring to encourage manufactures commodity rates are made for manufactures which would put them in a very low class; but when they strike the official classification they go right up to first class. I think that is a practical illustration of what I understand you to mean, and I think there is not any impropriety in it.

Q. Take the case of California fruits as an illustration. Fruit is abundant in California. It is at certain times the principal article of freight. It may belong in a low classification properly, but when it gets farther east it becomes a rarer commodity, and there are certain reasons incident to its perishable nature which also have a bearing, and the price of it becomes higher when it gets nearer the places of distribution because there is smaller competition, etc. Would it not seem, therefore, that unless there can be some uniform system of transfer from one classification to another, that it is absolutely impossible to have a uniform classification and do justice to the different sections?—A. I think so. I think also that would be illustrated by a comparison of the classifications of the different States. The Florida railroad commission, naturally looking after their product down there, would put Florida oranges in a lower classification than they do in Virginia, where they do not raise them. Though I have never made the comparison, I am sure you would find that fully illustrated in the State classifications.

Q. (By Mr. A. L. HARRIS.) Is the country now divided into divisions for classification?—A. No; except so far as between the Official covering the Northern lines and the trunk lines and those roads that take the trunk-line classification, as, for instance, the Norfolk and Western and the Chesapeake and Ohio coming into the South. They are essentially Western lines; they take the trunk-line classification, and the others take for their business what is known as the Southern classification.

Q. You have a division known as the Southern division?—A. The Southern division; yes.

Q. And one known as the Western?—A. I do not know anything about that;

that must be west of the Mississippi. Our Southern classification does not go to the Mississippi; it does not take in the Mobile and Ohio and the Illinois Central. They have always been out, on the ground that their competitors were largely on the other side of the river, and they had to work with them and not with the roads farther east.

Q. (By Mr. RIPLEY.) Do you make that statement in the light of present conditions? Do you understand the present Southern division does not extend to the Mississippi?—A. Originally it did not, and never did, as far as I know; and I presume it does not now, from the remarks made here this morning with reference to the Western classification.

Q. (By Mr. CLARKE.) Would it be feasible in railroading to establish a zone system of classifications, so that an article should go in one classification until it reaches the border of that zone, and then pass into another if it is carried for a long haul?—A. I should have to study the conditions before I could answer that question intelligently; I am not prepared to say it would be possible or practicable.

Q. (By Mr. RIPLEY.) Do you recognize that by a change of classification rates may be advanced or decreased?—A. Certainly; you can put things in a higher or a lower class.

Q. Have you any knowledge of the recent changes in the Southern classification?—A. None whatever.

Q. Were distinctions made in the original Southern Railway and Steamship Association classification between carloads and less than carload lots?—A. Yes; some.

Q. Have you any opinion as to whether that distinction was as great as it is at the present time?—A. No. That fact could only be arrived at by detailed comparisons, which I have not made.

Q. Have you any knowledge respecting the causes which led to the low rates at Richmond, Lynchburg, and Norfolk on through business from the West?—A. The rates from the West to Richmond were naturally reduced when the Chesapeake and Ohio opened in 1874, because they made trunk-line rates to those cities the same as to Baltimore. At that time the trunk-line rates to Baltimore, whatever they were, were adopted by the Chesapeake and Ohio. The Western business had been coming through Baltimore prior to that time and then down to Richmond, being distributed South on the rates from Baltimore to the South added to the trunk-line rates to Baltimore. But when the Chesapeake and Ohio adopted the Baltimore rates at Richmond, naturally there was an entire change. They could not charge any more than the locals from Richmond south instead of the locals from Baltimore. That made a readjustment. The present basis of making rates, as I understand it, is one of comparatively recent adoption—that is, they make Richmond, Lynchburg, Norfolk, and Portsmouth, and perhaps Petersburg, gate cities from the West; and the Western lines agree to make the rates the same to all these points, notwithstanding the length of the haul varies. Then the Southern lines make their rates to interior points by adding either locals or agreed rates to interior points. That is something entirely new. That method of making rates has come in since I had any connection with the traffic, and I am not familiar with the details of it.

Q. Does it seem to you to be an improvement over the conditions which prevailed 10 or 12 years ago?—A. I do not know the reasons why the change was adopted. There may have been good and sufficient reasons for it, but what they are, I am not informed.

Q. Have you any information respecting the recent cases before the Interstate Commerce Commission, involving the cities of Danville and Lynchburg?—A. I have not. There was a complaint at Danville, but I have not read about it. I remember receiving the papers from the Interstate Commerce Commission's office, but I did not read them.

Q. Are there any fast-freight lines operating over the Seaboard Air Line at the present time?—A. No.

Q. No fast-freight lines or express lines which transport freight in the South?—A. No; the freight lines are run entirely by the railroads themselves, who do the freight business now, except so far as it is carried on passenger trains by the express companies.

Q. Have you any information as to the relations between the railroads and the express companies in that business?—A. No; I have not any recent information. Never since I became connected with the Seaboard Air Line have I had occasion to examine that company's contracts, and I do not know what the arrangement with the express company is. I am not informed as to the contracts of that company with the express company.

Q. What were the former relations between the express companies and the fast-freight lines which did business over those railroads?—A. There were no fast-freight

lines in the South that I know of; nothing like the Northern fast-freight lines. They were all made up by a combination of the railroad companies, each putting in its quota of cars and making a line organization, which was the railroad companies acting jointly; and the railroad companies severally had no intermediary, such as the fast-freight lines on some roads North. Now the express company's contracts, so far as I have knowledge or am at present informed (and my information dates back to the time when I had means of knowing absolutely), call for transportation on passenger trains, and the railroad companies agree to give them the available space, not to interfere with the transportation of the mails or passengers and their baggage. In other words, the railroad is, or was, the sole arbiter as to how much space they had that could be used for express, and how little. But the rates were made by the express company, and the divisions were made between the railroad company and the express company on a percentage basis—a certain percentage for local and another percentage for through business, the express company getting a larger proportion of the through competitive business than it did of the local business. I do not recall those percentages now. I could give them nearly, but I do not like to state figures that are not absolutely correct.

Q. Can you make any statement respecting the general physical condition of the railroads in the Southern States? Have they improved of recent years?—A. Yes: they have improved very much in every respect, both as to track, weight of rails, capacity of engines and of cars, and their equipment generally. They are improving every year, too.

Q. What is the practice in that part of the country as to making charges for new equipment and improvements? Is it to make these out of earnings or usually by the issue of new stock?—A. Generally out of the earnings, because the usual way is to purchase additional equipment on the car-trust plan, where the payments are made monthly or quarterly.

Q. Are these car trusts common in the Southern States at the present time?—A. They are quite common; very general, I think.

Q. Now as to the improvements that are made in the way of additional facilities for handling business?—A. They are required every year. There is a difference of practice, some roads charging the cost to operating expenses, and generally when they do that they note it as a betterment included in operating expenses; others charge to the property account as a construction expense if it is of any magnitude. I do not think there is any fixed rule; each company determines for itself how it shall charge it.

Q. Have you formed any judgment as to what is the proper basis for capitalization of a railroad? Should it be the original cost, or should it be based on earning capacity?—A. I have had that question before me more than once, and I am free to say it is the hardest problem that ever was propounded to me. I do not see how you can properly disregard the physical value of property and place the capitalization solely on a road's earning capacity, and yet it is a fact that the public and financiers appreciate a property only for what it will earn. I have seen that test made too often to doubt it. I was called upon in the Cape Fear and Yadkin Valley case. The question there was that of separating a property which had been worked as an entirety, no separate accounts having been kept of its earnings, and of determining the relative value of the different parts that happened to be covered by different series of bonds. Not only had the earnings to be divided in order to show the relative earning capacity of each section of the road, but each section had to be appraised physically. In that case I presented several plans on which the value of the bonds could be ascertained. The one that I recommended to the court was based on my conviction of what was proper; that it should be treated as a partnership concern, four partners putting in their property at a valuation and doing business and each one getting credit, not for the business performed, but for the amount contributed by each. That is the nearest illustration I can give you in the way of a case that involves that principle. Practically, the court made the award, I think, on that basis, with some slight modifications in my percentages. In other words, I consider the value of a property and the value of the franchise as two different things. I have had that same question presented in propositions to consolidate, where there were different properties in a big system, with different stockholders, and the majority or control held by one party, the question being how a fair consolidation could be made and stock issued to the stockholders in the consolidated road. I have had to make recommendations in such cases, but I can not recall now precisely what they were. I arrived at some conclusion in that particular case.

Q. In your judgment, the actual investment in a property should bear a definite relation to the capitalization, should it not, rather than that the capitalization should be based solely upon earning capacity?—A. I think so. A road is certainly worth something; the very property, if taken to pieces and carted away, has some

physical value. There is where the question comes in, and it is argued both ways, one contention being that you should take only what the old rails would sell for and what the buildings would be worth for farm purposes, and what the equipment would sell for.

Q. You are assuming that the physical plant is worth more than the earning capacity of the road?—A. Not necessarily. It is not likely that a road would be torn up if there was any value to the franchise whatever; but in the event the franchise was worthless, the physical value of the road would be the only element of value in the road.

Q. What was the principal cause of the various receiverships of prominent railroads, such as the Norfolk and Western or the Richmond Terminal, etc., 4 or 5 years ago? Were they due to defect of management or to financial mismanagement?—A. Financial mismanagement, or, I would rather say, I do not know that that expresses it exactly. I might say that in their anxiety to build up a big system they bought properties and paid higher prices for them than should have been paid—more than they were worth. In other words, in the case of the Terminal company, they diluted an exceedingly valuable stock by hanging on to it weak properties until they broke its back. I speak of the Richmond and Danville road. A more solvent institution never existed until they loaded it down; and it was not really bankrupt when they put it in the hands of the receiver. It was not in default even on a note—a very strange case.

Q. (By Mr. KENNEDY.) Was not rate wars one of the great factors?—A. No; not in that case nor in the case of the Norfolk and Western—the Atlantic, Mississippi and Ohio, which is now the Norfolk and Western.

Q. Ruinous competition or rate cutting has nothing to do with bringing about the receiverships?—A. I am referring to these two particular companies. In many of them failure was due to reckless competition.

Q. (By Mr. RIPLEY.) There is danger, then, in the growth of great consolidations, that they may be formed on a basis which will not stand the pressure of adverse years?—A. Yes; if left to the judgment of individuals they are apt to make mistakes and issue too much stock.

Q. The criticism has been made of the Southern Railway that it has acquired many of its constituent properties at a very high figure, and that its capitalization at the present time is excessive. Have you any statement to make respecting the capitalization of roads in general through the South?—A. No. I think you referred to the Southern. If my memory does not fail me, the Southern has actually asked permission of the legislature to reduce its capitalization.

Q. It has at the present time?—A. I think so; at the last legislature; but what disposition was made of the request I do not know. I heard at the time that there was a move of that sort; that they had erred in putting their capital too high.

Q. (By Mr. KENNEDY.) The legislature of what State?—A. Virginia. The Southern is chartered in the State of Virginia. The State gave the road a very liberal charter, without any name, and the opportunity to fix the name afterwards. (Testimony closed.)

WASHINGTON, D. C., April 19, 1901.

TESTIMONY OF MR. GEORGE H. ANDERSON,

Secretary Chamber of Commerce, Pittsburg, Pa.

The commission met at 10.55 a. m., Chairman Kyle presiding. At 2.37 p. m. Mr. George H. Anderson, secretary of the Chamber of Commerce, Pittsburg, Pa., was introduced as a witness, and, being duly sworn, testified as follows:

Q. (By Senator KYLE.) Please state your full name, address, and occupation.—A. George H. Anderson; secretary of the Chamber of Commerce; Pittsburg. I have prepared a brief statement in writing which I wish to submit, and as it has been done with a great deal of haste I would be very glad to explain my written paper with any information that your questions may draw out.

(The witness announced his subject to be "Transportation as affecting industrial affairs in the United States," and read as follows:)

"In accepting your courteous invitation to appear before you and contribute any observations of my own regarding the matters under consideration, I fully appreciate the fact that the questions of labor and industrial activities in their economic, social, and political aspects are second to no others affecting the welfare and prosperity of our country.

"I have taken the liberty of following my own line of thought, rather than undertaking to discuss in minute detail the propositions so intelligently considered and submitted by your committee, and trust that details may be brought out by a supplemental talk before your body.

"You will understand that most of my practical observations in the matter of industries and transportation have been made in the Pittsburg district, where I have resided all my life, and these can not fail to throw some light on the matters under discussion, when it is understood that Pittsburg is the largest producing center in the world, and has contributed a full share in that export traffic which now exceeds \$2,000,000 daily in excess of imports, and is a leading factor in the unexampled prosperity of our nation.

"The Old World, in its supremacy as a producing center for a thousand years, achieved the height of its success mainly because the cheapness of labor, which brought its working people to the verge of a pauper class, who were only glad to earn enough for daily bread of the coarsest kind, and utterly without any hope for a betterment of condition for themselves or their children.

"In this country, richly endowed as it is by the Creator, no such model for industrial conditions can be accepted, but we may consider the experiences of older countries as so many studies to perfect the system of the new.

"In our land the conditions of success and prospect for continued prosperity are, in my view, to be found in a system of transportation, the cheapest and best to be attained, that will bring our products to tide water and thence to the markets of the world; or, in other words, cheap transportation rather than cheap labor will enable the United States to hold its vantage ground in the world's traffic.

"The increase in population and wealth in this country is largely due to its industrial development, and this increase would have been simply impossible but for an expansion in railway facilities, which, to the credit of American enterprise, has always kept in advance of the requirement.

"Take for illustration the city of Pittsburg. In 1830 it had a population of about 12,000, and up to 1850 the increase was very moderate until the entry of the Pennsylvania Railroad in 1852.

"This was the real beginning of a career of prosperity in industrial lines unexampled probably in the world's history. The advent of the Pennsylvania Railroad was followed by the Pittsburg, Fort Wayne and Chicago system, west and north. These were followed by the Baltimore and Ohio, Pittsburg and Lake Erie, and a number of others of more or less importance, and last of all the Bessemer, or Carnegie road, connecting the traffic of the Great Lakes with Pittsburg. The especial business of this line is to bring ores from the Lake Superior region to the furnaces in this district, and having vessels, docks, and mines of its own, is enabled to carry its great burden of traffic at the cheapest possible cost, and marks Pittsburg as the greatest producing and distributing center in tonnage in the world.

"During the last year 2,290,000 car loads were handled in Pittsburg (not including freight in transit); in tons, 57,050,465; river traffic, 8,813,166; total, 65,863,631 tons.

"The population within corporate limits is 330,000; in the county, which is the real Pittsburg, are over 800,000 people, and of this number 150,000 men are employed in the various productive plants.

"The total capital employed is estimated at \$2,000,000,000. The Pittsburg district, taking Pittsburg as a center, within a radius of 60 miles, contains a larger population than any corresponding area in the United States west of the Atlantic coast, and is really an empire of industrial enterprises.

"With these brief facts, it will be easy to see that a complete interdependence exists between industrial interests and transportation; neither could prosper without the other.

"*Wages.*—The wages of the railroad men are probably the most stable of any. The tendency is toward piece or contract work—the river men being paid by the trip and mechanics by the piece. In times of depression it is the rule to give the trainmen approximately full time, and to let the extra men go. In shops there is a reduction in hours, but not in rates. Blacklisting discharged employees is not done on any of the large railway systems.

"*Provisions for sick and disabled employees.*—On some of the large systems there are established volunteer relief departments, to which the railroad companies contribute enough to pay all expenses, and they also guarantee to make up any deficiency in the event that the contributions of the members are not sufficient to pay all obligations. Membership in the relief department is entirely voluntary.

"Pennsylvania lines west of Pittsburg have about 30,000 employees, with 18,500 members of the relief department, or a little over 61 per cent.

"From the date of organization, July 1, 1889, to February 28, 1901, nearly 11 years, the payments to members have been—

	Number cases.	Amount paid.
Death benefit:		
Accident.....	498	\$296,257.19
Natural.....	1,401	882,524.45
Disablement benefit:		
Accident.....	54,433	819,587.65
Sickness.....	80,870	1,024,096.67
Total cases.....	137,212	3,002,465.96

"The members of these departments are strongly in favor of them, and vigorously oppose action and efforts on the part of representatives of life and accident companies and officers of labor organizations having benefit orders to have legislative action taken to break up relief departments of railroads.

"*Safety appliances.*—The introduction of safety appliances, such as automatic couplers, air brakes, and hand holds, while costing the railroads of the country a good many millions of dollars, has reduced the number of casualties to railway employees from 28 per cent of the total number of cases reported to 10 per cent of total cases reported.

"*Extract from Book of Rules.*—The use of intoxicants by employees while on duty is prohibited. Their habitual use, or the frequenting of places where they are sold, is sufficient cause for dismissal.

"This rule is strictly enforced on all larger railroads, and has a most excellent effect on the men, and drunkenness is very rare among railroad men where it was very common 20 years ago.

"*Unjust discrimination and undue preference by railroads.*—This is not practiced to the extent that public opinion would lead one to believe. If one city or district is specially favored in any respect, it is but a short time until the railroads in other districts are compelled to grant same concessions in order to protect industries dependent upon them, as by protecting your patrons you sustain the life of the railroad.

"Stability of rates is more desirable than extremely low ones. Discriminations against any special locality can not exist for any very great length of time.

"The favoring of special shippers and special commodities of the Canadian roads has forced railroads in the United States to give equal concessions; and if these rates are not remunerative the loss must be made by excess charges in other commodities and on other shippers.

"If one city or district is specially favored, it is but a short time until railroads in other districts will be compelled, in order to maintain themselves, to offer shippers same or better rates than the specially favored district temporarily enjoys.

"While recognizing the importance of railway service as the greatest factor in industrial interests, I wish to call especial attention to waterways transportation, without which, in spite of railway facilities, the commercial traffic and general prosperity of our country would be dwarfed and crippled.

"The waterways of the Great Lakes furnish transportation for over 25,000,000 tons annually at a rate simply impossible in railway service. The greater part of this vast traffic is in the ores of the Superior region, and, at a cost of half a mill per ton per mile, has made possible the supremacy of the United States in iron and steel production.

"The navigable streams in the great Mississippi and Ohio valleys carry a burden of over 30,000,000 tons, which is distributed from the head waters of the Ohio to the Gulf of Mexico, thence to the world's markets.

"The nation is to be congratulated that our Government, appreciating the inestimable value of these great arteries of traffic, through which pass our commerce which is the lifeblood of the nation, is doing all that is necessary to preserve and improve these so that the best results may be attained.

"The scarcity and high price of fuel in the older countries is rapidly taking from them their supremacy in productive forces. With the cheapest, best, and most abundant supply of fuel, the center of industrial production will be changed to the United States. Not only so, but with our unlimited coal deposits and favorable transportation rates by rail to the Atlantic coast, and water to the Gulf, the world will pay tribute to the United States for its fuel supply in the future. The construction and ownership of an Isthmian canal will still further advance our facilities for export, and would prove the greatest boon to our commerce.

"I am compelled just here to digress slightly, in calling your attention to the imperative demand for reinstatement of the United States merchant-ship service, to carry our own productions into market. Unless the Government makes provision for this lack in transportation, pray let me inquire what use there would be for such canal without ships to traverse it? It would simply be a convenience to the ships of other countries, without any corresponding advantage to ours.

"There should be no rivalry between rail and water transportation. One is simply a powerful auxiliary to the other. In Europe, where improvement of waterways for transportation is carried on to an extent not dreamed of in this country, it has been found that where navigable waterways have been established new railroads have been found necessary and older and unprofitable ones paralleling these streams have been made prosperous.

"The London Chamber of Commerce, the best authority on industrial ethics, says in its Journal of March, editorially, that the enormous sums expended in France, Germany, Austria, and other countries on the Continent in construction of canals and other waterway improvements is from an enlightened commercial policy, giving the easiest and most economical transportation of products to markets, and unless Great Britain adopts similar measures she will lose her pre-eminence as a producing nation.

"Words coming from such a source are of the deepest importance, and this country should not be slow in giving them the most profound consideration.

"The great Kiel Ship Canal, connecting the waters of the North Sea with the Baltic, originally constructed by the German Empire solely for military requirements, has furnished a genuine surprise to its makers.

"Reports from Kiel for the first year of its operations, ending March, 1900, show that 26,951 vessels used the canal, all of which are merchant vessels, many being large, ocean-going ships, except 652 belonging to the German navy.

"In our own country, the first of a proposed line of steamships from the Great Lakes to Europe direct will leave Chicago for Hamburg via the Welland Canal and St. Lawrence River. Other steamers are scheduled to follow.

"The effect of carrying American products from the heart of our country to central Europe by continuous water transportation can only be surmised. It may result in a revolution in the carrying trade to markets in the Old World.

"The magnitude of interests involved in the transportation and industrial situation are worthy of careful investigation and the enactment of proper laws for their government and control.

"The Interstate Commerce Commission has been created with a view to restraining railways from any undue exercise of power or discrimination unfair to the general public. In my judgment this body should be sustained in its work by adequate legislation consistent with equity and proper railway management.

"Pooling agreements should be legalized as between trunk and competing lines; such agreements made public, and under control of the Interstate Commerce Commission. To refuse legal authority for such pooling is to continue the system without restraint or publicity, which is against public policy, and leaves a wide-open door to unfair discriminations.

"One of the most serious questions in the whole range of the subjects under investigation is the proper method of dealing with the great army of men employed by railway and industrial interests. In my judgment, most of the strikes could be avoided and differences settled by a friendly plan of arbitration and a recognition of labor associations. Our system of education is such that American workmen have sufficient intelligence to understand their rights and courage to maintain them.

"After all, it is a matter of punctillio to agree to meet individual workmen but reject their representatives. Wise laws of recent enactment in England and France providing for arbitration of labor difficulties have caused strikes to be almost a thing of the past, and might be adopted with good results in this country.

"Your commission has before it an exhaustive investigation of the conditions of transportation and industrial interests of our country, and if possible present plans by which equitable and harmonious relations shall be maintained between these great factors in the country's progress.

"Should these be successfully carried out your work would be of incalculable value, and, in my judgment, the great factors necessary to these ends will be found in conciliation, arbitration, and mutual forbearance."

Q. (By Mr. KENNEDY.) I want to ask you, Mr. Anderson, if there are any discriminations practiced by the transportation companies against Pittsburgh at the present time that you have to complain of?—A. The question is a very pungent one. I have given the matter a great deal of consideration, and I find that discriminations against Pittsburgh have largely disappeared. The time has gone by

when Pittsburg suffered greatly from railroad discrimination, and with the best information I can get from people who are most largely interested in the transportation interests of Pittsburg I can find no special causes of complaint. I imagined there were such causes until I made an investigation.

Q. You think that all the shippers are treated alike by the railroad companies as far as the roads are concerned?—A. If there is any discrimination against certain people or certain interests I have no knowledge of it, nor could I obtain any information indicating that state of affairs.

Q. As secretary of the Pittsburg Chamber of Commerce would you be likely to know of such practices if they existed?—A. Yes. I would like to state, in further answer to your question, that some three years ago the chamber of commerce, with the theory that there were discriminations against Pittsburg interests, attached a transportation board to the chamber of commerce and employed one of the most competent men they could get in connection with it. We maintained that bureau for 2 years, and at the end of the time divorced the bureau from the general business of the chamber of commerce for the simple reason that we could find nobody who had any complaints to make against the transportation interests. As far as I am concerned, as head of the chamber of commerce I took every pains to make that department of use to the people, and, if possible, find out if there was any discrimination. I found no system of discrimination against our people at all. Whether things go on that I could not discover is another matter. Our doors are wide open to all people transporting, and with the exception of 2 or 3 trivial complaints there was no discrimination, and they were corrected as soon as the railroad's attention was brought to them. I could not find any. Yet I told you here my own personal opinion had been that there was; but I had no authority for that belief except general impression.

Q. You do not know, then, that these discriminations did exist in the past?—A. Yes; I knew of my own knowledge they did exist in years gone by.

Q. You think now that there is a marked improvement?—A. A very marked improvement, and I have gone as far as a man can go in finding out from the other side their purposes and their actions in regard to this matter; and most reliable railway men I have talked to about the matter say that they are glad to be relieved of any apparent necessity of making discriminations. In the early days of railroading a railroad officer would have a brother, a cousin, or other relative in, say, the coal business, and would give him a special rate on coal to Philadelphia, and the man across the road would send his coal to Philadelphia and pay double the price for transportation. There seemed to be no way to remedy the evil; but under the present condition of affairs, and on account of the supervising power of the Interstate Commerce Commission, I am sure that discriminations have been almost entirely abandoned.

Q. Do you think the change is due more to the action on the part of the Interstate Commerce Commission than to the community of interest or a better working understanding between railroad managers?—A. I think it has come about largely by both these influences that you speak of. Public opinion, which clamors for recognition and correction of wrongs, has been a potent factor in mending matters, and now that the Interstate Commerce Commission has access to compel men to develop the condition of their business, I think it has had a great deal to do with lessening the discriminations practiced in this country.

Q. Has the great prosperity of the country, which gives the railroads all they want to do without discriminating and cutting, had anything to do with bringing about a better state of affairs in this respect?—A. I had not thought of that especially, but I would think it reasonable that it would have such a tendency. During the last 2 or 3 years, as you all know (and I speak more especially of Pennsylvania interests and of the Pittsburg part of it, knowing more about it), the railroads have had all they could do, and more. They have been overtaxed. Traffic has gone north and south of the Pennsylvania lines simply because they had not cars for transportation. All their roadbeds were lined with trains carrying the products of the State from one end to the other; and it would be entirely reasonable, it seems to me, that there would be no occasion for railways to practice any such discrimination as has been indulged in heretofore. The thing is to only get the railroad to carry your stuff. The question of discrimination does not cut any figure of late.

Q. You think, then, that good times have had a good deal to do with this change?—A. I certainly do. The railroads have been participants in the general prosperity of the country, and their reports show their income has been largely increased, their profits being correspondingly great, without any special increase in the rates of transportation.

Q. Would you fear, in the event of another era of business depression, that they might get back to this practice of discriminating to get trade, or do you believe

that by that time there will be such a consolidation of railroad interests that they will practically pool their business without any permission of the Interstate Commerce Commission or the laws of the country?—A. My general answer to that question would be that I believe most sincerely and heartily that legalized pooling, under proper restrictions and under the control of the Interstate Commerce Commission, will cause the discriminations, as a rule, to disappear throughout the United States. That is my judgment; I am very strongly of that opinion.

Q. Have you thought about the little need that there will be for legalized pooling and the lessened demand for it by railroad magnates at the present time as a result of railroad consolidations and community of interests?—A. The refusal of the General Government to legalize pooling will force the railroads into consolidation, in my judgment. Then you will have the condition of affairs that you hint at. If this system of pooling is recognized and under proper control, it will release the railroad companies from the necessity of such a consolidation, which I think will be a very bad thing for the general interests of this country.

Q. Don't you see it taking place?—A. But to still further answer your questions, I would call your attention to the fact that the railroad interest, as I said in my report, is the great industrial interest of this country. The money of capitalists is invested in railroads; the money of estates, widows, and orphans, and almost any man or woman who has a little surplus money or a great surplus of money is interested in railroad securities; and if it was thought advisable to refuse to allow railroads to make equitable rates, and to allow them such means of preventing the cut-throat rates as have prevailed at times, and railroads destroyed each other, as they ultimately would, it would bring a disaster on this country not comparable with anything that has ever taken place before. I look toward and dread the time that railroads might become bankrupt by restrictions of that kind, and disturb the interests of the country commercially, industrially, and financially, and it is the duty of this commission, as well as that of every thoughtful citizen, to see that the railways are properly protected. Great as they are, and rich as they are, public sentiment has a great deal to do with maintaining the railway system profitably or of letting it go to the dogs. You all are old enough to see the effects of railroad cutting. I am getting a carload of produce at half price; I rejoice that I only pay \$50 for this car of freight when I used to pay \$150. The managers of other railroads hear of it, and they bring a carload through their road for half of that again, and in addition come to my place and give me a chrono, or a free pass, or something of that sort. I don't know anything about it, excepting that those rates are ruinous, and that no railroad could maintain itself long under such a condition of affairs, and no thinking man or community of men wants the railways to be prostrated or lose money and become bankrupt. If they should we would all be in the same condition; but I look, as far as is possible from my point of view, to the fact that this nation of ours is so richly dowered with natural resources, mineral, agricultural, climatic, with everything that is conducive to wealth and prosperity, and to the fact that we have acquired just now such a position of vantage over the Old World producers, and I believe that we will all conclude that it becomes us all as much as possible to preserve this condition of affairs rather than to injure the railroads by putting a restriction that would act injuriously on every industrial or agricultural interest of the country. They must be preserved and cared for as an integral part of the prosperity of the country.

Q. You say if legalized pooling is not allowed, that these consolidations or community of interests which I have alluded to would be apt to be forced because of refusal. Do you believe that there is now such a consolidation of the railroads of the country, uniting three or four great systems, and that the community of interest and management between those great systems is so compact that the roads are virtually relieved of the necessity of asking for legalized pooling?—A. Perhaps that is measurably true, and I believe the great lines of transportation railways of the country have been driven to that resort as the only alternative between throat-cutting rates and saving themselves from loss. I think if Congress had legalized pooling 3 or 4 years ago, that such a thing as the great Pennsylvania system trying to control the Baltimore and Ohio, or of any great system controlling the other by acquiring a majority of its stock there would be no necessity for these things; and after that I never could see how anything but a destructive and wasteful competition between railroads will ensue unless they have themselves the privilege of pooling, or unless other courses necessary to their safety shall be provided. I think you have struck the hingering question to-day affecting the transportation interests of the country.

Q. In what way would you enlarge the powers of the Interstate Commerce Commission to have it more effective?—A. I would suggest, without a great deal of thought on the subject, that their powers could be properly enlarged by placing them in charge of pools to be carefully provided for by law, and that the decisions

of the Interstate Commerce Commission should bind the railways unless they are decided afterwards illegal by the courts. A man or a company must have his or its day in court. There is no infallibility among men that I know of, but I think it stands to reason that if there were, if laws were provided for pooling under the care, oversight, and direction of the Interstate Commerce Commission, that their decisions should stand, and they would prevent unjust discrimination. Such laws would make all railways more or less prosperous and relieve the railway companies from this dire necessity of controlling the stock of other roads in order to cut loose from dangerous competition. The waste of competition has been a great factor at times in the affairs of our country, and these vast combinations that have been formed within the last 2 or 3 years are the result of wasteful competition between institutions of the same kind, one on one side of the street and the other on the other. One city has a great industrial plant, and an adjoining city has another of the same kind: the competition is great, and the result is loss of property, loss of money, bankruptcy. This country for a hundred years has been subject to these vicissitudes in trade until we come to look for a general panic about once in 10 or 15 years, after which everybody will start up again. That seems to be the American idea. I think as years go by we gain wisdom by observation. We do not want to break up every 10 years to be disgraced before the world, but we want to preserve what we have. These combinations have been driven into the position they occupy, because I think the claim is an unreasonable one that the one general expense of 10 manufacturing plants is no greater than would be the expense for a single plant. In other words, they can reduce the cost of production and give the people of the world the benefit of the reduced cost and avoid this competition which I spoke of as being so dangerous to the interests of all.

Q. (By Mr. KENNEDY.) You make suggestions of legalized pooling, and yet you make admissions the other way, which suggests to me to ask you if you do not concede that this combination, or this consolidation and community of interest movement has gone so far forward as almost to make the question of legalized pooling an obsolete one?—A. It is drifting in that direction; just another view of the same question.

Q. (By Mr. PHILLIPS.) In the event of general consolidation, how would you suggest that unreasonable freight rates could be prevented by the public? What course would you advise, or legislation would you suggest, to prevent the roads from charging unreasonable rates?—A. If they effect such consolidations as have been hinted at I know of no way to correct; it might be such an imposition upon the people of the country that the Government would be compelled to take possession of the railroads; the public would be driven to that last extremity.

Q. You spoke of the difference between water transportation and land transportation: could you give the commission the cost of transportation, say, to New Orleans by the river, and the cost by rail to New York, and the difference in distance?—A. The question opens up a very interesting branch of this investigation, and in my report I referred tentatively to it, so that you might think it over later on. Coal is carried from Pittsburg to New Orleans by water, 2,000 miles, in round numbers, at an operating cost of less than half a mill a ton a mile, if I am right in my calculations—a dollar a ton from Pittsburg to New Orleans. That is probably the cheapest transportation in the world—a half a mill a ton a mile. Coal has been carried by contract in late years at 50 or 60 cents a ton, and the empties brought back by the boats carrying these fleets of coal, so that if you count a mill a ton a mile you are giving the transportation interests a large and reasonable profit.

I think that no railway transportation can be profitably carried on at much less than half a cent a ton a mile. I think that is about the minimum the railroads can carry freight at a profit, judging from all the information I have. That rate would make the cost at the minimum rate to New York, which is 450 miles, \$2.25 a ton. Hence it requires no argument to prove that if the United States Government keeps these waterways open, by such improvements as are common to navigable waterways of the whole world, that this country can maintain its supremacy over all other peoples of the world in the matter of supplying cheap transportation, and particularly of coal. Coal is becoming the great staple of the world. You can't manufacture anything without coal. Fuel is of more importance than ore or anything else. If there is no fuel you can not make anything out of the other elements. Until within the last few years there was a good supply of fuel in Europe, but thoughtful people say that the supply is diminishing yearly in the ratio of the increased productions of Europe. The natural result has been a coal famine in Europe, and they have not seen the end of it. Coal within a year has sold at the mines in England, and the supply is short of the demand, at as high as \$8 a ton.

A firm in the coal business that I know very well has sent several cargoes of coal to London within the last year, and the price of transportation by the ocean is comparatively high at this time for the lack of bottoms. This firm sent two cargoes of coal to London. They sent special agents with the cargoes to look after the handling of the coal and see that nothing went amiss with the cargoes, port rates and all these things being new to our people. The firm gave away many, many tons of their coal—delivered it to people in London who were anxious to see what American coal was like—to see whether it was good for fuel at all. The two cargoes were therefore sold under these conditions, and with expenses of extraordinary character, and when the money came back from the sale the firm found they had netted 25 cents a ton more for that coal than the highest price received in this country during the year would have brought. Since that time a good many cargoes have gone to London, and cargoes are going to continental Europe. In southern Europe, in Italy and Spain, but particularly in Italy and on the Mediterranean coast, hundreds of manufacturing concerns have closed their doors to go out of business for want of fuel. The United States minister to Italy within a few months has written home his impressions to the United States Government, and they were sent out to the public generally. He states that 112 manufacturing concerns, to his knowledge, had gone out of business with abundance of orders on hand; that what little coal that could be bought in the neighborhood was \$9 a ton, while coke was \$12 a ton.

The serious part of this whole question is right here, not that the man who has coal and coke to sell can make so much money by sending to Europe, but it looks very much as though the producing centers of the world were going to be shifted to the United States. Then, if the question of transportation, which is a most important one, is wisely handled, if we are given laws that will improve our waterways so that we may have equal chances with railroads without discrimination, without excessive charges, our producing interests will be brought to a point that is hardly dreamed of by any of us. No man can tell where the destiny of this country will lead us. History tells us there was a fight in this country for about one hundred years to make our expenses, our expenditures, in Europe pretty nearly equal to our exports; in other words, have as small a deficiency as possible, and we fought against that difficulty for about a hundred years. We were, as a nation, like a man spending more than his income every year, and after having maintained an existence all this length of time, with the balance of trade against us constantly, until overwhelmingly in debt to Europe, with the usual panics, repudiation, etc.; now we find that under the present condition of affairs we are gainers about \$600,000,000 in gold a year. Foreign nations are paying tribute of \$600,000,000 to this country annually, and the amount can be increased to double that amount by wise policy in the producing interests and the same in the transportation interests of this country. It is a question of transportation, in my judgment, even more than of production.

Q. (By Mr. PHILLIPS.) Can you give the commission the cost of shipping from Pittsburg by way of New Orleans to Europe, and the cost of shipping from Pittsburg by way of New York to Europe?—A. Rates of freight from Pittsburg to Europe, via New York and New Orleans, are subject to great fluctuations. Ocean rates are governed entirely by the amount of freight offering. The smaller the volume of tonnage the lower the rate; and as the grain business is so large in volume the ocean rates are always higher during the season of the year when grain is moving in large quantities, and vice versa.

Shipments of grain at present are very light, and, consequently, rates very low on everything. For instance, the present rate on grain from New York to Liverpool is about 14d. per bushel, or about \$1 per ton; while last fall the rate was as high as 6d. per bushel, equal to about \$4 per ton; and rates on iron and steel in proportion.

The rate, Pittsburg to New York, on steel rails, which has been one of the largest items of export, is \$2.80 per gross ton, so that at present rails could be shipped from here to Liverpool at about \$1.25 per gross ton.

Shipments from Pittsburg to Europe, via New Orleans, are not of usual occurrence. If river navigation were more certain, so that contracts for cargoes could be made in advance, doubtless these could be made advantageously, especially during the period of heavy shipments of cotton, when dead-weight cargo is desirable at ballast rates.

I only know this, that when you get goods to tide water the transportation then is infinitesimally small as compared with transportation by land. I think it is estimated that the operating cost of ocean carrying vessels is a tenth of a mill a ton per mile; not the price that a man will build a ship and carry goods for, but it costs the shipowner that amount in wages and general expense of working the vessel.

Q. (By Senator KYLE.) Do you think the ocean carrying conditions will be improved by the reestablishment of the American merchant marine?—A. This follows as a corollary. I am strongly in favor of the Government acquiring ownership and assuming operation of the Isthmian canal. I think it is necessary for the future of this country, but it does smack a little of absurdity that we should spend \$300,000,000 to construct a canal and not have any ships to go through it. Every year, on account of the increased cost of transportation and the lack of increase in means of transportation, the shipmasters have raised the rates, and we are paying an enormous tribute to foreign ships. It is not, therefore, a great thing to ask the United States Government for a few millions of dollars to do as other nations do and have been doing, and by which means they have established their merchant marine by subsidies.

Q. You justify subsidies, do you?—A. I do. If anybody can show how the reestablishment of the merchant marine can be accomplished by subsidies I would adopt them.

Q. (By Mr. FARQUHAR.) Would the subsidizing of the American merchant marine induce the carrying of freight any cheaper than the lines do at present?—A. I could not tell you, but I could go a little further and anticipate part of your question by saying that we can't find bottoms to carry the stuff we have now even at the present prices.

Q. Isn't it the general rule that all commerce will take the line of the least obstacles and the cheapest?—A. Yes.

Q. Have you any plan to propose to this commission to reestablish the American merchant marine, maintain seamen's wages, and secure interest on money to Americans who want to make investments, even if the ships are subsidized?—A. Subsidies meet all deficits of increased wages and increased cost of American transportation. That is what the subsidy is for: paying it right out of the Treasury. Then we control our own transportation in a measure, and we must do that. Other countries have done it, and it seems to me it is inevitably true that we must do it if we want to reestablish our merchant marine. In this great, rich country of ours it seems to me a shame that we have not got it. And let me state another thing right in this connection. A vast market for American products is on this American continent, right at our very doors—Mexico. The Latin-American countries are all anxious to buy goods from the United States and transfer their business from the older countries of Europe to the United States. They sent their commissioners to this country, and they impressed that fact upon us by every possible means. Their mercantile agents come here and tell us: "We want to transfer our markets to the United States, but, gentlemen, you must deliver the goods. The Germans deliver them, the English deliver them, the French, the Spanish, the Italians deliver to us all our goods. We have no merchant marine that we can buy your goods and deliver them in." They are clamoring for trade with the United States, and we can not supply them because we can not deliver the goods.

Q. (By Senator KYLE.) How long should the subsidy continue, in your judgment?—A. I have not thought of that. We might take observation from the older countries and see how long they have had to pay it, also whether the lines could at last become self-supporting. It eventually leads to free trade. I am a believer in protection a priori, but when we can sell nails, structural iron, and everything made of iron and steel abroad, the necessity for the tariff disappears.

Q. The infant has grown?—A. It can take care of itself. Now, when this baby marine launches out it has got to be taught to transport itself. Somebody has got to provide the means for holding this infant industry up. But in the course of time, when it is found our ships can sail as fast as those of Europe and we can manage as cheaply as others, then let the subsidy cease. But I do not know when that will be or how long it will be.

Q. (By Mr. PHILLIPS.) Is it not a fact that our shipyards are all busy and overworked to-day, and that such men as Hill are entering upon the business? Have we not now men exploiting the land? Are we not turning to exploit the ocean without the subsidy, and are not our shipyards turning out work as rapidly as possible?—A. I think not.

Q. Then how do you account for Norway and Sweden making more rapid progress in shipping without subsidy than other countries with it?—A. Because they were maritime nations from the beginning; they were such 2,000 years ago. They sailed ships when no other country could sail them. They sent their armies down and overran other countries. Their people are sailors. We are thinkers in this country. Even our men that work with their hands are being educated, and they are thinkers. These fellows were simply sailors and buffeted the storms. They had powerful physiques and overcame everything that came in their way. We have men who must receive more attention than those savages did. We can

not ask men to work for 10 cents a day and expose themselves to the storms of the ocean, as these Scandinavians of the North did. They were born sailors; their country was poor, and they did not know that iron in Norway and Sweden was worth anything. They did not know it was under the ground; if they did, they did not know how to use it. But in our country we look at things without the lapse of a thousand or two years. We have to pay more for labor, and when we put ships on the ocean we have to pay men more wages.

Q. Do you think it would be proper and right to grant a very large subsidy without regulating the cost of transportation or the Government having anything to do with fixing freight rates? Or would you have the Interstate Commerce Commission consulted in regard to the rates, if the Government gives a large sum?—A. I would suggest as a solution of that query that the Congress of the United States create a new department, called the "department of commerce and industry," and that the business of subsidies should be entirely in the hands of that department. I think that is a necessity of the Government that can't be in any way overlooked. They send seeds around the country from the Department of Agriculture, and the Secretary of the Department of Agriculture and the Secretary of the Interior Department give attention to many matters, but these questions you have under advisement here overshadow them all a thousand times, and they have no representative in the Cabinet of the United States. It is high time they woke up to that fact. Wide-awake people that we are, we must wake up to the fact that there are still some things that we do not have in this country, and one special lack is that of a department to be known as the "department of commerce and industries."

Q. (By Mr. PHILLIPS.) Still you would not make that more important than the Agricultural Department?—A. Of course, the Agricultural Department is established already.

Q. (By Mr. KENNEDY.) You said in your prepared paper that there should be no rivalry between rail and water transportation. Would not that eliminate competition between the two methods of transportation and remove the influence of the waterways upon lower rates of transportation?—A. There is such a thing as legitimate competition that we must take cognizance of. The rivers are placed here by the Creator, and no doubt intended for transportation and the development of civilization. They are the great balance wheel compelling equity from railroad companies against extravagant charges. I might go further and say that the railways have no right to complain of the cheapness of water transportation. The heavier and the cheaper products are transported at a rate that justifies their being carried from one part of the country to the other, just as the ore from Lake Superior is carried a thousand miles—into Pittsburg—and turned into steel, because of the cheapness of transportation. The railroads at the lowest paying rate that can be imagined can not bring ore to Pittsburg and enable us to compete with any other country in the world; and therefore the iron ores of Lake Superior would be worthless to us, and the railroads should not complain. But the very moment that there are a thousand vessels carrying ore from Duluth and the ports of Lake Superior to the ports on Lake Michigan and Lake Erie, that moment the demand for railroads for the class of goods that can not be carried by the slow way of water transportation arises, and railways will spring up and they will find a profitable business in the transportation of those articles, to say nothing of the transportation of passengers who will not go by the slow boats. I want to say that from absolute knowledge. You take France and Germany especially, and they have improved every little creek and natural stream of water that could be improved by any possibility, and made it into a canal or a navigable stream. They have pushed the improvements by dams and dredges and locks, and all that, hundreds of miles into their mountains, and men working in the forests a long way up from their distributing centers, where they have the means of working in wood, iron, and other things, sending the products of their farms down. They find that they get cheap transportation, and they develop their country to a very great extent. In a short time those streams have been paralleled on both sides by profitable railways all through France and Germany. Anyone of you who have traveled in those countries can see it for himself. There never were any railways there before. There is an improvement there which anybody would not—

Q. (By Senator KYLE.) (Interrupting.) Has there been a decrease in the tonnage since?—A. I do not know. I thought it incredible when I read an article I find in the Chamber of Commerce Journal. A leading editorial in that paper gives notice to Great Britain that she must improve her waterways; that the British must construct new canals; that they must give their people cheap waterway transportation, or their prestige is gone as a manufacturing country. We all know that the

London Chamber of Commerce is the central authority in all commercial and transportation matters for the British Empire, and so much importance is attached to the expression of the London Chamber of Commerce that the president of that body is by courtesy, I think—I do not think it is by law—by courtesy, is entitled to a seat in the cabinet, because he is supposed to represent the sentiment of the commercial world through the London Chamber of Commerce. No act that is passed by Parliament affecting the commerce or the industries of Great Britain is enacted without being submitted to the London Chamber of Commerce first of all. They are of all nations of the world a commercial nation, and we must not be the last to learn from the experience of a people who have led for a thousand years, as has Great Britain. This is a most humiliating statement for them to make.

Q. (By Mr. KENNEDY.) Have the water rates had an influence on the rail rates?—A. Most unquestionably; and a wholesome one.

Q. Then you will qualify your statement that there should be no rivalry between them?—A. I do not see why, from the fact that railways are jealous of water transportation. They would interfere with the improvement of the Ohio and Mississippi rivers if they could, and yet they know as well as, or better than, anybody else that the improvement of these waterways and the development of traffic on the lines of the waterways has made the railways pay.

Q. There is competition between them, is there not—naturally, rivalry?—A. There is, but I said there should not be.

Q. (By Senator KYLE.) You mean hostility? Healthy rivalry is a different thing.—A. Healthy rivalry is a different thing. Let me illustrate. When I was a lad there was no commerce on the Monongahela River at the country river towns. A few boats, little rafts, and logs would go up and down once in a great while, and that was all. Pittsburg was a little town of no account outside of its own local interest. General Moorhead got a concession from the General Government and the State of Pennsylvania to put a system of locks and dams in the Monongahela River as far as Brownsville. People all thought he was crazy, and that the enterprise would break him up before he got through with it. But he got a considerable improvement on the Monongahela, and soon after the river was made navigable this wonderful Youghiogheny coal was discovered. That coal came out in small quantities and gradually increased the traffic on the river until it amounted to millions of dollars. Now the Pennsylvania Railroad Company has that river paralleled with railroads on both sides and they are paying routes. On the Ohio River, where the General Government has been making improvements by the movable dam system, the different railroads, the Baltimore and Ohio, the Wheeling and Kentucky, the Pennsylvania system, and the Vanderbilt system are paralleling the Ohio River. They have paralleled the river up to Mr. Phillips' town. And that is supposed to be one of the favorite water routes for bringing the lakes and the Ohio River into connection by waterway transportation.

Q. (By Senator KYLE.) And yet the water tonnage on all those rivers has increased year by year, I believe?—A. It has increased year by year. The increase is not a regular increase, for the reason that the vicissitudes of low and high water sometimes interfere with the year's traffic, but in the general average you will find that the increase of traffic on the western rivers is in an enormous ratio. As I said in my paper, the traffic handled in the Mississippi Valley on the rivers is 30,000,000 tons—an amount which we can scarcely grasp—and that could be increased to double the amount if the Ohio River, which furnishes most of the freight, were improved. The Ohio River furnishes more than the Mississippi and all its other tributaries. We give the Mississippi Valley 17,000,000 tons a year against 13,000,000 or 14,000,000 tons originating on the Mississippi system itself outside of the Ohio; and if you will come to Pittsburg, I will show you there 6 months or 5 months or 4 months of the year a million tons of coal in the pool waiting shipment on the rise of the river below, a million tons of freight. The one initial dam, movable dam, made by Colonel Merrill, of the United States Army, known as the Davis Island dam, is a thing well worth a visit by anyone who has not seen it. That has given Pittsburg a harbor from 10 to 12 miles long and as deep as you want it all the year round, and when the rivers are in a natural condition of activity and fit for boating, as they are now, there is no dam in the river at all—free open navigation, and the boats come and go. But when the rivers begin to fall it is necessary to store the water. Then the movable dam appears in the river, and in 24 hours there is a lake storing water 10 or 12 miles around Pittsburg up the Monongahela to Dam No. 1, and the same up the Allegheny, and in that harbor you will find a million tons of stuff awaiting shipment to New Orleans. The Government is pushing that plan of river improvement, and there are perhaps 10 or 12 or 14 of those dams now under way.

Q. (By Mr. PHILLIPS.) How do the boats pass through that dam? Does it not

obstruct navigation?—A. They avoid that by means of a lock. The lock is the largest lock in the world, not excepting the Suez Canal lock, and will take four Ohio River steamboats through at one time and a whole fleet of coal. It is 612 feet long and 115 feet wide. One of the wonders of the world is that Davis Island dam and lock, and that system is being pushed as rapidly as possible until there will be continuous navigation on the Ohio River from one year's end to another. There are some 12 dams under contract now, and some nearly completed, and when these dams are completed, as they will be in some years, you will find that the navigable period of time will be increased on the Ohio River about 2 to 3 months and there will be a corresponding increase in tonnage.

Q. (By Mr. KENNEDY.) Are the people of Pittsburg making any contention with the railroad people about the discrimination that is practiced against Pittsburg in favor of Buffalo?—A. Yes, there is complaint. There is discrimination in theory, and it is the only act of discrimination that I have any knowledge of whatever.

Q. Will you please describe it?—A. As well as I can. It is due to the Trans-continental Traffic Association—I do not know what you call it, but it is the association that controls the traffic of the East and West. They fix their terminals. Pittsburg is an eastern terminal, and so is Buffalo. Those are the termini of the system. Pittsburg is 70 miles nearer Chicago than Buffalo, and we are charged the same rate to Pittsburg that is charged from Chicago or Milwaukee or Buffalo, and they have 70 miles in their favor. Now, the thing does not stop there; it would not hurt to pay as much as Buffalo if it did. Buffalo is near the center of a large market, and she then is enabled to deliver her goods in the centers adjacent to Buffalo at a much lower rate than we can get to those centers, because we have 70 miles additional to traverse to reach her territory; to reach her limit as it were. We are 70 miles behind her in eastern shipments, in that we have to pay for the extra 70 miles going east, and Buffalo pays nothing for it going west, and that is a general source of complaint. Our merchants have time and again called attention to it, and the Chamber of Commerce took the matter up and visited the railroad companies and labored with them and said, "Why do you not give Pittsburg credit for this 70 miles?" They make a plausible answer and say, "Why, this thing affects a dozen different railways. The Pennsylvania Railroad can not correct it, because it is the only one which comes here. They have this 15 per cent. You will have to regulate the whole system. In the course of time you will perhaps get the redress that you want, but you can not get it now because you are one of the terminals." Then, again, you see a man can ship to the Buffalo terminus at a certain rate and then get down to New York much more cheaply than we can from Pittsburg to New York, and we do not like that. Then, they say New York is a competing point. And so is Buffalo a competing point. The river is there, and the Welland Canal comes in there, and laymen like myself can not answer those things. I can not, I am sure. If we were all in business and we were shipping to a competing point, we would have to compete with everything that was at that point to obtain the trade. If we had the trade in a point that was not competing we would charge what rate we pleased, and we would charge a good round rate. And that is the point of contention with the Pittsburg men, that we do not get shipments from the west on the same equitable terms that Buffalo does.

Q. (By Mr. KENNEDY.) That makes more competition between Buffalo and those points west of Buffalo?—A. Yes; they throw that in; that they can move stuff from Buffalo to Europe without breaking bulk.

Since writing the above, I learn that the differential in favor of Buffalo as against Pittsburg has been removed, and the two cities in question pay the same ratable charges on through freight.

Q. (By Mr. PHILLIPS.) Do you know how large the ships are that can get through the canal?—A. I think a vessel drawing more than 14 feet of water can not get through the Welland Canal. The Canadian government has asked the United States again and again to join in deepening the Welland Canal, giving us all the concessions we want, or to unite with us in constructing an entirely new water route. Or they say they will come over on the United States side and pay half the cost of constructing a United States waterway altogether on United States ground. The British people appreciate the value of getting to tide water without breaking bulk on the lake tributaries.

Q. (By Mr. KENNEDY.) Have the merchants of Pittsburg made any complaint about recent increases of rates by changing goods from one classification to another?—A. No. I could em- race in the answer to this something I said a little while ago—that the substitution I am connected with tried the experiment for 2 or 3 years of proving to our own people that there were wrongs in the way of discrimination which should be righted, and we made a complete failure of it. So

if there are instances of discrimination they are kept carefully from the public to the extent of furnishing any reliable information on the subject. I was, I confess, very much disappointed. I believed that there was a large amount of discrimination against Pittsburg, from public opinion and general clamor, and I thought that the chamber of commerce was the intermediary by which those wrongs could be righted.

Q. I am not speaking particularly about discriminations. I am speaking about raising the freight rates indirectly by changing goods from a lower to a higher classification.—A. I do not know of any general complaint.

Q. Has that come up in a recent period?—A. I think not. I only know, as I think I should have told you, that I am not an expert in railway transportation. I only deal with such facts as I can compass; but from the best knowledge that I am able to get the railroad companies themselves—the great trunk lines—have been engaged for years in an endeavor to simplify the classifications—to make them more uniform throughout the whole country—that they are at work at it and have been for years, and they have reduced the number of classes very largely already. I believe this is their claim, that if they are left alone they will, in the course of time—say within a year—secure as nearly as possible an acceptable and suitable classification of freights for the whole country. They think that is a matter which they alone are able to handle successfully.

Q. I should like to ask you whether, in your opinion, labor organizations on the whole have been beneficial to the industries at Pittsburg. Of course, that includes all those engaged in those industries.—A. I would not say they have. Up to within the period of a few years I think that most of the labor organizations in Pennsylvania worked mischievously to the men who were members of the organizations; but now, within the last half dozen years, I am undergoing a change of mind on that subject. I meet the officers and representatives of such bodies, and they are men as intelligent as the general run of men sitting around this table. I was going to say—which is saying a great deal. They are not unreasonable. I have myself been nearly all my life employing men and opposed to labor organizations, as I say; but now I am less opposed than I was.

Q. (By Mr. PHILLIPS.) Opposed to organized labor?—A. That is what I mean; and I have never yet seen it fail in a single case where organized labor has asserted itself, that, with a meeting of both parties, it has not been settled; and now I believe that the men who are controlling are entitled to more consideration than they ever were before, and if properly handled under proper regulations. I think they can be made more useful in preventing strikes and labor troubles which are constantly threatening this country. From my own standpoint, generally, I do not see the difference between meeting three or four intelligent mechanics who are representatives and conferring with them about the difficulties in the trade with the employer and consulting with the men who are in workshops; and that has been mainly the point of difference. The employers will say, "If a man is overworked and underpaid let him come into this office and we are here to hear him; but if he and his colleagues think that they are not getting justice, and they send the secretary of their union and the representatives of the union, we will not hear those 3 men." Now, from the standpoint of simple justice and equity, why are they not justly entitled—if there are 5,000 men working in a big works, they can not all come in in a body—to send their representatives to this manufacturing concern, who represent themselves by delegations and not by the stockholders in a body? And I assure you that the character of the men is such that you can very well afford to confer with them. I see pictures in the paper there [indicating] of two or three gentlemen who are officers of the trades unions about Pittsburg in this sheet-steel trouble, showing how the employers had to receive them. They made an amicable adjustment of the whole difficulty. The labor leaders showed themselves just as intelligent as the men who control the Carnegie works in their own line of business: and by and by, I think, when they come to have the right of representation, if you choose to call it so, and a right to organize for all lawful and proper purposes, you will get a better understanding of those men, and there will be fewer strikes and less difficulty in the labor situation than there was under the old condition of affairs.

Q. In view of the great growth of corporations, which are said to be soulless, and of the elimination of many individual employers, do you see the necessity, as a measure of self-defense, for the men to organize for self-preservation?—A. I think it is a good thing for them. I do not know how they could have their difficulties or their questions of right or wrong settled in any other way than by organization. In the old times a man would have a blacksmith shop and he would work himself and have two or three helpers. Then they did not need any organization; they did not need any representatives. He was among the men and he knew what was wrong and so did they. Now, the men who control the great industries of

the country do not know their men; would not know them if they should see them. If a man should go into the office of the employer and say "I have been abused and cheated out of my wages," the employer could not settle the trouble. He does not know anything about the man or his work, or his rights or his wrongs. But if the men are represented by intelligent men and the managers and foremen that know the conditions of affairs are, they stand a better chance of settling those things than by going in singly and making a plea themselves.

Q. (By Mr. KENNEDY.) Do you believe if a representative, who is not subject to discharge, is sent to the concern there is less danger of wreaking vengeance?—A. Yes, that is one element in this question; it is a very important one.

Q. (By Mr. PHILLIPS.) Do you think that this great consolidation of corporate wealth has or has not a tendency to make both a labor class and a capitalistic class? Is there going to be hereafter the same chance for a laboring man to advance, become a capitalist, that there has been heretofore?—A. That question is a little deep. I do not know any good reason why an intelligent mechanic could not be promoted to be a manager and finally a stockholder and maybe president of a great industrial association. I do not see any reason why he should not if he has the brains and the intellect to raise himself above the army of his fellow-men.

Q. (By Senator KYLE.) How about some of the managers of the Carnegie works and the president of the Pennsylvania Railroad and some of those men?—A. The managers of the Carnegie works are all men that have been taken from the ranks, and the consolidation has chosen those men to conduct those vast business interests.

Q. Is that true of Mr. Schwab?—A. Yes: Mr. Schwab was a working man in the yards of Mr. Carnegie's works when he began, and he is the president of the billion-dollar association. And Mr. Corry was taken from the ranks.

Q. (By Mr. KENNEDY.) And Mr. Carnegie was?—A. Mr. Carnegie delivered messages from the telegraph company to my father's tanyard down there—a little bullet-headed boy—and I can scarcely imagine that he should control the industrial world, nearly, but he does.

Q. (By Mr. PHILLIPS.) Did not these men all start when the industry was small? And is it not true that they could not have done so if the industry had been quite large?—A. The Carnegie institution—the Edgar Thomson Works—was a big institution when Mr. Carnegie took hold of it. They could not make good steel, nor good steel rails. By and by they got an intelligent workman there. His name was Jones. Mr. Jones showed the Carnegie people how to make good steel and good steel rails. He was a workingman, taken out of the Cambria Iron Works, and he met a very shocking death in one of those great retorts. One of them burst, and he ran in to help the men, and they were all burned together. But he was a workingman, as I told you, taken from the furnaces at the Cambria Iron Company. Other men came along. There were men in there who were capitalists who were all turned out of their jobs—all capitalists. Mr. Carnegie turned them all out, and put these workmen in one at a time, until there is scarcely a man who is at the head of the Carnegie concern, unless in some clerical department, that did not start in the yards of the Carnegie Company. Mr. Schwab is a conspicuous example, as is his brother, and Mr. Corry is another. They are all young men, and have worked at the furnaces and at the rolling. And I can see no good reason why, in view of all these great consolidations, that men having the skill and brains should not be promoted just as they were. The question of these consolidations is attracting the attention of thoughtful men all over the world. We do not know what the future of this thing is to be. I do not know how we can forecast it successfully, and it is of such magnitude that we are trying the best we can to look out for the future. In the first instance, many people say we are all going to destruction in this country because individual effort will be crushed out and nothing but the monopoly will be left. But, in point of fact, since these consolidations began (some half a dozen years ago the first of them was undertaken in the great industrials of this country) we have begun to control the markets of the world. We can make things more cheaply, and it seems we are making better things than we did before. The query, then, is, if we abolish these consolidations and put the concerns all back into their original condition, whether we would not be working a serious injury to the general welfare of this country. These are questions that are too great for me, but they ought to be considered. The rapid progress we are making in supplying the world is of such a character that we must be careful and conservative when we disturb the elements of trade that have done so much for us.

Q. The champions of industrial combinations are now saying that one of the very fruitful causes of financial panics or crises in the past has been overproduction, and if that could be done away with there would be less danger of the financial troubles; and they say that these great consolidations that are taking place enable those in control of a certain line of industry to keep the production

equal to the current demand, and in that way prevent overproduction; and that when all lines are so controlled that will be the means of preventing panics and crises. Do you take that view of it?—A. Scarcely. It has this bearing: The world is getting larger. It needs and uses more material. The world is richer and it has more money to pay for what it wants. Our own country has grown from a handful of people in 1776 to nearly 80,000,000 people now, and we are ourselves consuming enormously. The world is expanding rapidly, and the wants of the people are expanding in proportion. So I do not see really any very great danger from overproduction at the present time. But if there were, and these combinations have the power to curtail production, to that extent they have the power to avoid panics.

Q. (By Mr. PHILLIPS.) Would they also keep up prices in doing so?—A. I suppose they would. But there is a feature of these combinations that has never been broached here. As yet I have not said anything about it. But I want to say that I can see nothing illegal and nothing especially harmful in combinations per se. I can see nothing but good that will come out of a condition of affairs where we get out of the excessive competition and cutthroat prices to a condition of healthy business. But when we consolidate interests worth a million dollars and capitalize them at \$10,000,000 or \$20,000,000 and people buy those securities and all that kind of thing, that bodes ill for the future of this country. You can not pay interest on water. You may temporarily; but the world is wide, and even the great consolidations of this country may find themselves hustled by smaller and more active industries before they are through with it. The serious question before us is the watering of stocks to an unlimited extent, and the fact that people are foolish enough to invest in them. The very people who denounce these combinations are the people who invest their money in these stocks.

Q. Do they not also extort money from the people to pay dividends on these stocks?—A. Oh, that is all right if you hold them and I hold them. But it is on the widows and orphans that it is all unloaded by these fellows. They do not care whether there are any dividends on the water; and those are the men who are unloading the stock of those concerns. I may be talking to some of my friends here who are in it. [Laughter.] I am afraid of that feature of consolidation; and yet if people want the securities and like them, who is there to deny their right to go ahead and buy anything they choose, whether it is water or solidly based stock?

Q. (By Senator KYLE.) You can not furnish people with common sense?—A. I do not think you can. But I believe, on the whole, the influence of these consolidations has been so far for the increase and the betterment of the traffic of this country.

Q. (By Professor JENKS.) Can you tell us anything with reference to the freight rates out of Pittsburg on tin plate?—A. No; I do not know a thing about the rate on tin plate.

Q. Do you know whether it has been customary for any of the steel manufacturers or the plate manufacturers there in Pittsburg to pay freight themselves in advance and enter their goods "freight paid"?—A. Oh, yes; that is a common occurrence.

Q. You think that is the usual custom then?—A. I know it is very largely the custom; I do not know whether it is altogether the case, but I know of my own knowledge that it is quite customary, and that it is considered good business for people to pay the freight and deliver their goods.

Q. Do you know whether under those circumstances the charges that they make that are called freight charges are the actual charges they pay to the railroads, or whether they make that a nominal charge?—A. Presumably the actual charge.

Q. Have you heard of freight rates being charged to customers in Pittsburg itself?—A. For Pittsburg productions?

Q. Yes. For example, if a person were to buy, we will say, a ton of tin plate in Pittsburg, as to whether, in addition to the regular price, there would be a freight charge added, although it was to be delivered in Pittsburg?—A. I never heard of such a thing. I do not think anybody has had the "gall" to try and charge a freight rate in addition to the price fixed on tin plate unless he was buying tin plate for foreign delivery.

Q. The statement has been made at different times in the case of goods shipped out of Pittsburg with freight prepaid that the freight charges were fixed at the will of the manufacturers, and were not strictly the same as those that were paid to the railroads; and it has even been asserted that a freight charge was made at times for goods made and delivered at Pittsburg itself?—A. Can you think of any particular concern that has done that? I would like to investigate it. Can you think of any?

Q. You might look up the matter as fully as you can with reference to tin plate.

I want to ask one question more, if you please: You said something with reference to this consolidation of railroads through the buying of stocks by one railroad of another, and of the large monopolies. You stated somewhat further that you could see no remedy for the evil except the ownership and management of railroads by the Government.—A. It seems to me that is the last resort.

Q. Do you understand at the present time that the Government would have the right to fix rates of freight on a railroad if it wished to?—A. Only under the general necessity—you might call it the war necessity, if you like—that would compel the Government to take radical action in assuming the control of the railroad.

Q. That is a different matter. The question is as to whether you understand there would be anything unconstitutional in a law, for example, that should empower the Interstate Commerce Commission to decide whether a rate was reasonable or not, and in that way practically to fix a reasonable rate?—A. That is, whether the Government has a right to prescribe the rate?

Q. Yes. Instead of buying or owning the roads itself, and managing them, might it not reach the same result by simply empowering a certain body to fix reasonable rates?—A. I believe it has a constitutional right.

Q. Yes. Do you think that would answer the purpose as well as buying the road?—A. I do not know but it would. They have the right to own the capitalization. The organization of the railroad company by the General Government gives it what is called the right of eminent domain, whatever that may mean. It is a public incorporation, and it is incorporated for the benefit of the public; and the General Government and the government of the States, if I understand this thing—whenever these institutions cease to be a public benefit, or whenever they are inflicting a wrong on the public, the power of the Government will pull those things up by the roots. I do not care whether it is a railroad or steamboat or Carnegie's works or what it is. If the Government can destroy a corporation, it can make necessary laws to regulate it. But the Government has the right, and it is preserved in all the constitutions of the States, that whenever a corporation ceases to perform its acts and functions for the good of the country and the purpose for which it was organized, the Government reserves the right to wind that corporation up, disband its organization, and pay the stockholders their money. So, if they have the right to do that, the smaller is embraced in the larger. To adjust that matter the Interstate Commerce Commission might be the proper medium, as between the people and the General Government, for bettering just such conditions of rates.

Q. (By Mr. PHILLIPS.) How would you regulate these great combines? What legislation would you suggest to meet these new conditions in the interest, not only of the industries, but of the people?—A. The only thing that presents itself to my mind, after a great deal of consideration, is this: That the States should amend their general laws or their constitutions, as the case may be, so as to refuse to incorporate any institution on any other than an actual cash basis. I think that is the main thing. I do not see why a lot of men should come together and put up a thousand dollars in cash and capitalize a corporation for a million dollars or anything over that—and of course that allows for good will. If they are running or selling a business that has a good will worth \$10,000, and it is ascertainable, put it down at so much money; put down every property interest; put down every interest at its own full value. Whenever you get beyond that, the Government of the United States should absolutely refuse to incorporate any industrial or transportation company. That, perhaps, would check this condition of affairs.

Q. Ought the combines to be prohibited, when they have control of the home market, from selling, when there is opposition, at ruinous rates and recouping off people abroad? If an independent concern sells goods in one of those markets the other great concern simply sells at cost and below, yet maintaining its price every place else. Is that fair? Should not the people be protected against that?—A. You are picturing an ideal state of affairs. The millennium is not here yet. I am not sure but that it would be good policy if you and I had a flour mill and we had a market for all the flour we could make except a thousand barrels every year and were getting a good price for all the balance—I am not sure, I say, that it would not be good policy for us to ship at the end of the year this thousand barrels that is bearing on the market over to Liverpool and sell it for a dollar a barrel less and keep the price up here. That is good business, and there is no human law or device that I know of by which you can prevent that condition of affairs.

Q. But you are speaking of foreign shipments. How about it at home?—A. You are getting a paternal government of the most pronounced character. I do not know how you could do that.

Q. This Government seeks to protect our industries from foreign competition by a tariff and to give our infant industries a chance to grow. Now, has a big

concern a right to follow up a small industry and club it out of its market?—A. I think not. Anything that would interfere with legitimate enterprise ought to be a fair subject for governmental interference. But as far as outside markets are concerned, it were better to let them alone. You may recall that 30 years ago steel rails were worth \$100 a ton, and that \$100 a ton was paid in gold to foreign countries. The purchases drained this country of gold. They were only manufactured in Europe, and they were paid for in gold. Our money was only worth 50 cents on the dollar. But Mr. Carnegie, with his enormous monopoly from the day he began to make rails, brought them down from \$100 a ton to about \$20, and scores and thousands of men were employed who never would have known what it was to be inside of an industrial plant.

(Testimony closed.)

WASHINGTON, D. C., May 7, 1901.

TESTIMONY OF MR. P. J. MCGOVERN,

Chairman Southern Classification Committee.

The commission met at 11 a. m., Vice-Chairman Phillips presiding. At that time Mr. P. J. McGovern, of Atlanta, Ga., chairman of the Southern Classification Committee, was introduced as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. RIPLEY.) Will you state your occupation and address?—A. Chairman of the Southern Classification Committee, Atlanta, Ga.

Q. Will you make any statement respecting the organization of this committee, its relations to the railroads, and its functions?—A. Possibly I could best answer that question by quoting from a letter which I wrote on September 15 last to the Hon. John D. McInnis, president of the Mississippi railroad commission: (Reading:)

"File 710.]

"SOUTHERN CLASSIFICATION COMMITTEE,

"Atlanta, Ga., September 15, 1900.

"Hon. JOHN D. MCINNIS,

"President Mississippi Railroad Commission, Jackson, Miss.

"MY DEAR SIR: Some little time ago we received a letter from Mr. T. C. Powell, assistant freight traffic manager Southern Railway Company, stating that you had probably communicated, or would communicate, with us respecting recent changes in the southern classification, and he asked that we prepare and send you a list of the changes that had been made in the southern classification, together with the reasons for those changes. We have received no communication from you on the subject, but that fact has not been the cause of our failure to write you. Press of other matters, including preparations for a meeting of our committee next week, at which quite a lengthy docket is to be considered, has operated to prevent an earlier compliance with Mr. Powell's request.

"The country may be said to be divided into three classification districts or territories:

"1. The territory covered by the official classification, and which may be roughly defined as the territory lying north of the Ohio and Potomac rivers, and east of the Mississippi River and Chicago.

"2. The territory covered by the western classification, which may be defined as the territory lying west of Chicago and the Mississippi River.

"3. The territory covered by the southern classification, lying south of the Ohio and Potomac rivers and east of the Mississippi River.

"Of course you understand that in all three of the territories referred to various exceptions to the classification are in force, in the shape either of commodity tariffs or what we term classification exception sheets.

"In dealing with classification matters we usually divide the classification into three parts:

"1. The general rules which govern in the application of the rates and which are published in the first part of the classification.

"2. The descriptions of the articles, setting forth the name of the article, manner in which it is to be packed, etc., and

"3. The ratings themselves, showing what class each particular article is to take.

"Now, in the recent revision of the southern classification, changes have been made in all three of the parts above referred to. Some of the rules have been changed or modified; many of the descriptions have been changed and, we believe, greatly improved and simplified, and a good many of the ratings themselves have been changed.

"No statement has been prepared, or could be very satisfactorily prepared, which would show the actual and exact changes in the rules, descriptions, and ratings. Indeed, the only satisfactory way by which to ascertain the changes would be a comparison of the present and former classifications, item by item. For instance, the furniture list has been entirely revised and greatly reduced as to the number of items in it, and it would be impracticable to show in tabulated form the exact differences between the old classification and the present one. Necessarily, therefore, what follows must be stated in a general way, and without attempting to give you exact details as to each of the many articles or items in the classification.

"*Organization and objects of the Southern Classification Committee.*—The Southern Classification Committee was organized April 15, 1899, and its articles of association provide that the object of the committee is 'for the purpose of establishing uniform freight classification, and the publicity of same, and to aid in fulfilling the purposes of the laws of the States, and of the United States, affecting commerce.' Its membership is composed of 'Transportation companies members of the Southeastern Freight Association, and members of the Southeastern Mississippi Valley Association, and other companies operating in the territory south of the Ohio and Potomac rivers and east of the Mississippi River (including coastwise steamship companies parties to tariffs of through rates governed by the southern freight classification).'"

So that the commission will understand that the territory embraced in the membership of the classification committee is that lying east of the Mississippi and south of the Ohio and Potomac rivers, and we include also the Atlantic coastwise steamship companies that handle business into and out of that territory.

"The need of such a committee has long been recognized by the carriers in this territory, and negotiations looking to its formation had been in progress for several years prior to its final organization. Similar committees have been in existence in the official classification territory and in the western classification territory for many years previous, and have demonstrated their value and usefulness.

"Prior to the organization of this committee classification matters were handled by the freight traffic associations, along with other rate questions; but it was believed that the time had come when this important branch of the rate-making problem ought to be given separate and special consideration by a committee representing the whole territory; that an official ought to be employed to gather necessary and proper information and data bearing on classification matters, and in short that the growth of transportation interests and traffic in southern territory justified this further step in specialization."

The membership is the same now; it fluctuates a little, but it is 42 members now.

Q. (By Mr. PHILLIPS.) Only one member representing each line?—A. Each line has 1 vote—each system, you might say, because some of the systems have 4 or 5 or more separate corporate lines, corporate interests, and our articles provide that where there are 2 or more members with 1 traffic official only 1 vote is allowed, so that we have 42 separate interests. I can not say that they are independent; a good many of them are affiliated interests like the Baltimore Steam Packet Company, which is a member of the Seaboard Air Line system or interest, and the Chesapeake Steamship Company, which is a part of the Southern Railway interest, but they are separately managed.

Q. (By Mr. RIPLEY.) You have a copy of the by-laws and constitution of this committee?—A. I think so.

Q. Will you insert that in your testimony?—A. I will file it as an exhibit.

(Continues reading letter to John D. McInnis.)

"The articles of association provide for a subcommittee of 15 members, which is composed of representative lines, and includes both rail carriers and water carriers. It is the duty of that subcommittee to carefully consider all facts and information submitted by the chairman, or by shippers, to hear complaints, statements or arguments from shippers or their representatives, whether oral or written, and thereupon to submit recommendation for the individual concurrence of all the members of the entire committee, which at present is composed of 42 railway and steamship lines. If thus concurred in, the recommendations are published by the chairman of the committee, for the use of all lines."

I think that far will answer as to the organization of the committee and its relations to the railroads.

Q. Are any functions given to this committee other than those of making up the classification? Do you have any powers other than that of recommending? Can you enforce the classification?—A. The subcommittee recommends to the general committee, and if concurred in by the general committee, the chairman then publishes it and it becomes the official issue of the members.

Q. Does it become thereby binding upon those members? That is, are all the members of the association compelled to accept that rating?—A. They are not compelled. They accept it and they file it as their own issue—rather they have a general notice on file with the Interstate Commission to the effect that our issues shall be considered their official issue unless the commission is advised to the contrary. If we

do something that a line does not care to accept, it would give us notice and also file that notice with the Interstate Commission. We have had very little of that.

Q. But might a line act independently thereupon if it chose?—A. Oh, yes; oh, yes. We have had very little of that. We have had some differences with one of the large lines in our territory. We have about settled that, or hope to shortly.

Q. Do all or a considerable number of these representatives actually meet at one time together, or is it arranged by correspondence?—A. It is done in meetings, and the subcommittee of 15 practically does all the work of the committee. As you will understand, it is like certain Congressional committees; this subcommittee does the work, and it is nearly all done in meetings. At those meetings—the total membership being 15—two-thirds is necessary for a quorum and we usually have 12 or 13 present.

Q. (By Mr. CLARKE.) Are the representatives usually the traffic managers of the several roads?—A. The traffic officials; that is, traffic managers, general freight agents, assistant general freight agents. The same officials who make the classifications make the rates in the rate-making organizations.

Q. (By Mr. RIPLEY.) But in making the rates they to some degree act independently, do they, or do they all concur in making the rates in the same way they do in the classifications?—A. They all concur. The principal difference between our articles and the articles of association of what we call the traffic organization, as distinguished from ours, is that they require a unanimous vote on any subject. One negative defeats it. Now, you will find that in our articles of association we have a five-sixths rule.

Q. Will you explain before you go further the different associations to which you have referred, and can you point out from the map the territory covered by the rate-adjustment associations and the others?—A. Yes. The Southeastern Mississippi Valley Association takes in the territory which is bounded by a line drawn from Cincinnati down the Ohio and Mississippi rivers to New Orleans and a line drawn from Cincinnati down through Middlesboro, Chattanooga, Birmingham, and Montgomery to Pensacola, Fla. The Southeastern Freight Association takes in the territory east of that just defined and going as far east as Gainesville, Athens, Augusta, and Charleston. The territory east of that last described is known as the territory of the Associated Railways of Virginia and the Carolinas.

Q. These three associations now which you have defined have what functions, and what is their relation to the Southern Classification Committee?—A. They make the rates on all the competitive traffic in their respective territories—not local, but competitive.

Q. And what is their organization?—A. Their organization is somewhat similar to ours, composed of all lines that want to join.

Q. Do I understand you, then, that there are two classes of associations operating for the railroads in the Southern States—one class of associations which makes the rates and one other association, entirely distinct, which makes the classification?—A. That is correct.

Q. And there is no relation between those two kinds of associations—the rate making and the classification?—A. It is all really a part of the rate making. The making of freight classifications is the making of rates. It is a part of the rate making and, as I stated, formerly the rate-making associations handled the classification as one of many rate questions, but they do not give it enough attention. They had too much else to do. In the other two sections of the country they had classification committees, and they thought the time had come when they ought to have one down South. You might say this committee is auxiliary to the traffic associations. It is an offshoot from them.

Q. The point I wanted to make was this. You said, I believe, that two factors enter into the final determination of a rate: First, the rate itself; and, secondly, the classification of freight to which that rate applies?—A. Correct.

Q. Is there, then, action by the same individuals looking to harmony between those two factors which go to make the final rate?—A. The two things are determined by practically the same people acting through different bodies. To illustrate, the general freight agent of the Central of Georgia Railway, Mr. Winburn, is a member of the conference committee of the Southeastern Freight Association, and he is a member also of our classification committee. Now, the fixing of what the first-class rate shall be from Atlanta to Richmond is dealt with by him in the Southeastern Freight Association. But when it comes to be determined what articles shall take that first-class rate he acts through the classification committee.

Q. In the one case, however, in the classification committee, you state that five-sixths may fix the classification?—A. That governs. That does not prevent a line from acting independently afterwards, if it wants to. It may refuse to accept the classification. Naturally we understand, or we ought to understand, that no articles of association can deprive a line of its inherent right to make its own rates, since the Trans-Missouri decision. We understand that.

Q. These are not, then, in any sense pools?—A. Not at all.

Q. And they have no financial functions?—A. None whatever. The articles explain that the expenses of the committee are divided on the mileage basis. That is the only money we handle. Our committee does not even undertake to enforce or to scrutinize the application of the classification after it is once published.

Q. Any railroad, then, which chooses to dissent from the rates or the classifications fixed by these several associations is at liberty to do so?—A. Oh, yes, it has that right; you can not take it away. It would be illegal for it to sign its right away to do that.

Q. How many classifications have you actually issued?—A. We have issued three since the organization of the committee. I will file a copy of each with the commission, and I will file a copy of the old classification, No. 25, which was superseded by our first issue.

Q. What do you mean by No. 25? Do we understand that there have been 25 previous issues of these classifications?—A. Yes; we used to show that [showing inside title page of No. 25]. That is where we got the number.

Q. (By Mr. CLARKE.) Was that number 25 prepared by your committee?—A. No; that was the last one published prior to the organization of our committee. It was superseded by our first publication, No. 26.

Q. What body prepared that?—A. The Southeastern Freight Association. Now, as I stated a while ago, prior to the organization of our committee, the classification feature of the rate-making matter was handled by the traffic associations. That was published by the Southeastern Freight Association and shows that it was concurred in by the S. E. M. V. A., which means the Southeastern Mississippi Valley Association.

Q. (By Mr. RIPLEY.) Was it also concurred in by the Southwestern and the Virginia and Carolina associations?—A. It does not show; but it was concurred in.

Q. That is to say, there was still a single classification for the Southern territory, although it was not made in just the same way as at the present time?—A. Exactly. It was really made in the same way, except that it was not made through a separate committee, as is now the case.

Q. We have had at various times complaints before this commission from merchants' associations that the recent classifications, Nos. 26, 27, and 28, have introduced many changes in the classes, and especially in the distinction between carload and less than carload lots. Will you make a statement respecting these several classifications?—A. I was going to answer that by reading these other sections of my letter to Colonel McInnis. [Reading:]

"In the preliminary meetings leading up to the organization of the committee it was urged by many, and was generally conceded, that one of the first duties of the new committee would be a thorough and systematic revision of the entire classification. Such a work had not before been attempted. Under the old plan, classification matters were handled piecemeal; additions and changes were made from time to time without proper regard for the effect which such action might or ought to have upon other analogous articles; and the result was, as every one familiar with the situation well knows, that the classification abounded in conflicting ratings, inconsistencies, and incongruities.

"The new committee undertook the revision. It began with the iron and steel list. A special subcommittee of 6 members was appointed to deal with the question. That special subcommittee held a 2 days' session in October and another 2 days' session in November, 1899. It reported to the standing subcommittee an entire revised list of iron and steel articles, both as to descriptions and ratings, which report was approved by the subcommittee without substantial changes, and was concurred in by the various individual lines; and the changes thus adopted were published in Southern classification No. 26, effective February 1, 1900. It is a fact that this revision of the iron and steel list contained advances in a good many ratings.

"In continuation of the work of revision the standing subcommittee held an 8 days' session in Washington, D. C., December, 1899, at which time the entire classification (with the exception of the iron and steel list) was carefully gone over and a revised classification submitted. That revised classification was considered at meetings of the entire committee held in Atlanta, Ga., January 4-5, 1900, and January 21, 1900, which were the largest gatherings of transportation lines ever held in the South for the sole consideration of classification matters. The recommendations of the subcommittee were carefully gone over, item by item; substantial modifications were made in those recommendations; further correspondence ensued between important lines as to those modifications, and the result was finally promulgated in classification No. 27, taking effect June 1, 1900.

"The foregoing statement of facts as to the method of procedure is submitted to show that these important matters have been given the fullest consideration and that the advances recently made in the classification have not been the result of a preconceived attempt on the part of a few of the principal lines to put up the rates

¹ See especially charges regarding changes and advances in Southern Classification, carload rates, etc., in testimony of Mr. J. M. Langley, *post*, p. 859.

on the shipping public. At no previous time in the history of Southern transportation has the matter of freight classification, in all of its bearings and features, been given such close, thoughtful, and thorough consideration.

"Now, it happened that the revision referred to came at a time of extraordinary trade conditions, which, in the opinion of the committee, justified substantial advance in many of the ratings. There had been marked increases in the prices of many important commodities, and this seemed to be especially true of those articles whose use and cost enter most largely into the operation of transportation lines. As bearing on this point, we submit herewith a statement prepared by one of the principal lines in this territory, showing a comparison of the cost of railway material and supplies during the years 1897 and 1900, together with the percentage of increase in the said cost. It is a fact, of which you are no doubt aware, that some of the lines in this territory have actually shown a reduced net revenue during certain periods as against an increased gross revenue during the same periods, and this is attributed entirely to the increased cost of materials used in operation and not to any other or special cause.

"But we insist that the revision of the classification would have occurred regardless of trade conditions, and that the object of the revision was not entirely and solely for the purpose of increasing the ratings, as has been stated in some quarters. The need for the revision has been previously above explained, and in going over the classification it was believed and found that many of the existing ratings were unreasonably low in and of themselves; that, based on values, risk, density, method of packing, etc., some advances would be entirely proper, and by comparison with the ratings in effect on the same articles in the other two classification territories it was also believed and found, and could be easily demonstrated, that the ratings on many articles were unreasonably low. It was observed in some instances that the rating on an ordinary article of shipment not subject to any special conditions of supply or demand was three or four classes lower than in the official and Western classifications, and where there seemed to be no justification for this difference the rating was advanced.

"We do submit, with the utmost deference, that the honorable commission, of which you are the head, clothed with the authority to establish reasonable rates and classification in the State of Mississippi, ought not to finally disapprove and set aside an entire classification, planned and formulated in the manner and under the circumstances above described, without substantial and excellent reasons. It does seem to us that the work of the Southern Classification Committee, organized as above explained and dealing with these matters in the thorough and systematic way above set forth, ought to have the most careful and detailed consideration by your honorable body before undertaking to decide broadly that everything done by the classification committee has been wrong, unwise, or improper.

"*Classification No. 26 as compared with No. 27.*—As already stated, classification No. 26 went into effect on February 1, 1900. Upon comparing it with No. 25 the first important change that will naturally occur to you is the fact that the old double-column plan was abandoned for the single-column plan. In other words, classification No. 26 shows only one rating opposite each item, while the previous classification showed two ratings opposite many of the articles, one in the 'carrier's risk' and the other in the so-called 'released' column."

Q. (By Mr. HIRLEY.) Will you explain what that means?—A. In classification No. 25, and in all previous classifications for many years, we showed two columns of ratings. The commission will understand it in a moment at a glance. In the first column we showed what is known as the carrier's risk or common law liability rating; in the second column we showed the owner's risk or limited liability rating, the first column rating being naturally higher than the second. Now, in going through the old classification No. 25, we found that there was no sort of consistency or uniformity or anything approaching uniformity between the two columns.

Q. Can you illustrate that by an example?—A. I believe I can do it better this way: We found that about 1,700 items or articles were shown only in the carrier's risk column, the first column; two hundred odd articles were shown only in the second column; 590 or 600 items, the remaining items, were shown in both columns. Now, we found that where two ratings were shown they varied all the way from 14 per cent to 280 per cent—that is to say, the carrier's risk rate was 14 per cent higher than the owner's risk rate in some instances and 280 per cent higher in some other instances. We found further that, probably owing to a clerical error, misunderstanding, or what not, many articles were shown only in the first column that were subject to great risk in handling. For instance, you will find acids N. O. S.—that is, acids not otherwise specified—only in the first column. Everybody understands that acids are a risky thing to handle, and yet in this old classification they were shown only in the carrier's risk column, an anomaly or absurdity that may have had its birth in some clerical error somewhere. There [pointing to classification No. 25] are two columns, and a list of acids. Some are only in the first column and some

only in the second column and some in both, all under the head of acids, and no uniformity about it. Well, we did not see any reason why we ought not to abandon that old system and put every rating on the limited liability or bill of lading basis. Limited liability simply means that you accept the bill of lading of the carrier. Then we said, "If a man refuses to accept that, as he has a perfect right to do, we will make the common law or carrier's risk rating a uniform percentage higher," and we did. We made it 20 per cent higher, in line with the rule of the trunk lines.

Q. That is the rule in this official classification, that when carried at carrier's risk it is 20 per cent higher?—A. Twenty, and ours is now 20. For a while ours was 30.

Q. What changes took place between Nos. 25 and 26 in addition to the ones that you have mentioned respecting carrier's and owner's liability?—A. That was the first change. I will read on here [reading further from letter to John D. McInnis]:

"Without presuming to criticise the makers of the first classification, 25 or 30 years ago, we have never been able to discover any necessity, or good reason, for the double column plan. If a similar plan has ever been in force in the other two classification territories, we are not aware of it. We were not present at its birth, but we shall always congratulate ourselves that we participated in its obsequies. It abounded in inconsistencies, it being found upon investigation that the difference between the released ratings and the carriers' risk ratings varied all the way from 14 to 280 per cent. Articles were shown in the carriers' risk column only, which were of extraordinary risk in handling, an absurdity which does not admit of any sort of explanation. Furthermore, under the old method of handling classification questions, ratings were changed without stating whether the new ratings were to be shown in the released column or in the carriers' risk column; and the matter was therefore left to the discretion of the rate clerk handling the publication of the changes.

"We do not believe that any one will contend that the change to the single column plan was not in the direction of simplicity and uniformity, and it only remains for us to consider what effect, if any, the single column plan actually had upon the rates charged the public; and this is especially proper, because this change has been made the basis for erroneous or misleading statements to the effect that Classification No. 26 advanced the ratings on some 1,600 articles "by indirection"—in other words, we tried to slip up on the public, by putting up the rates on them without changing the actual figures in the rating column.

"Now in Classification No. 25 some 1,700 articles were shown in the first or carriers' risk column only; and in publishing Classification No. 26, all of those items were transferred to the limited liability column, which is the only column now used. The very first item in Classification No. 25 will serve as an illustration: Accoutrements, military, are shown in the carriers' risk column at the first class rating. This rating still governs, but it is the limited liability rating, because all of the present ratings are subject to rule one of the classification, which provides that the ratings shown in the classification apply only on property shipped subject to the conditions of the standard bill of lading. What has been the actual effect? If a man had a shipment of military accoutrements to forward from Jackson, Miss., to Atlanta, Ga., under the old classification, he simply accepted the bill of lading of the initial carrier at Jackson and paid the first-class rate. If he had the same shipment to forward next Monday, he would simply accept the bill of lading of the initial carrier at Jackson and pay the first-class rate; and assuming that the first-class rate from Jackson to Atlanta was the same on January 31 as it will be on September 17, the rate actually charged is exactly the same in both instances, and the conditions of shipments are practically the same. The technical argument has been made that by putting these various articles on the limited liability basis, we have actually advanced the rates, because the shipper would have had the right formerly to demand a common law liability bill of lading, whereas he would now have to comply with the terms and conditions of the standard bill of lading. As we all know that 99 per cent of the business of the country is handled on the bills of lading of the various carriers, and, therefore, on the limited liability basis, we simply ask you, in all sincerity, whether this feature of the matter justifies the statement that the ratings were advanced on the 1,600 or 1,700 articles referred to.

"Now, with the exception of this change to the single column plan, and with the exception of the iron and steel list, which we have previously referred to, Classification No. 26 was not an advance over Classification No. 25, but as a matter of fact contained more reductions than advances."

Now, if we may summarize that: In classification No. 26 we abandoned the single column plan and we put all articles on the limited liability basis, which means in everyday business practice that we said, You must accept the bill of lading of the initial carrier. By some sort of a strained, technical, or literal argument you might say that we advanced those 1,700 items, but the charge was not any more on the goods moved than it had been. Now, that has been made the basis for a statement by the New York Merchants' Association, repeated at different times, and accepted

by other organizations, that No. 26 advanced the rating on some 1,600 articles. As a matter of fact, there were about 1,700 changed in that way. No. 26 advanced the iron and steel list, as already stated and admitted without any sort of hesitation. It advanced them considerably. With that exception it was a reduction as compared with No. 25.

Q. (By Mr. CLARKE.) The limited liability column showed lower rates than the other column, did it not, before this change was made?—A. Yes.

Q. Then, if the other column was abandoned, and the limited liability column retained, how could that be an increase? Would it not seem to be a decrease?—A. Where an article had previously taken a limited liability rating, we let that stay. This change, which was possibly a technical advance, was with respect to the 1,700 articles which were shown in the carrier's risk column only. We transferred those bodily to the other column. What had been previously, say, military accoutrements, first-class, carrier's risk, we made first-class, owner's risk. Now, I admit that technically that may be an advance, but if a man had a shipment of that kind to move, either before or after the publication of No. 26, he simply took his shipment to the station, and took the carrier's bill of lading and had it moved, and he had the same thing to do after it went into effect. He would take it to the depot and the shipment would move for the same rate per hundred pounds to the same destination.

Q. Then you transferred those 1,700 articles from one column to the other without changing the rate?—A. Without changing the rating. I want to bring out that point clearly to this commission. I have never had an opportunity to deny it before under oath, or under anything like these circumstances. I want to emphasize here that we admit a technical advance on those items, but no practical or actual advance.

Q. (By Mr. RIPLEY.) I find in notes upon hearings before the Interstate Commerce Commission on changes in freight classification in December, 1899, a statement on page 53 that the Interstate Commerce Commission found there were 754 changes in the southern classification then put in force. Have you any knowledge about that hearing? Could that have been a hearing upon this classification No. 26?—A. When was the hearing?

Q. December 18, 1899. Or was that upon the official classification?—A. December 18, 1899?

Q. Yes.—A. We had not issued any then.

Q. The statement has been made further, before this commission, that No. 26 introduced a much wider difference between carload and less than carload lots. Will you explain the bearing of such differences upon the jobbing trade and upon the interests of New York as a jobbing center and on the cities of the South?—A. I think reference is made to No. 27 as compared with No. 26. I will answer as to No. 26. We have already stated that the iron list was substantially changed and that it was considerably advanced. It may be that in doing that we had a few more carload ratings than we had previously had. But I want to say that it was not for the purpose of helping any jobbing point or hurting any other jobbing point or with any such purpose. We did not think of that at all. I think reference is made to No. 27, and I will read on from here and we will come to that [reading further from letter to John D. McInnis]:

"Classification No. 27 as compared with classification No. 26.—The first change to be noted is in rule 1, and this merits some explanation."

I will read rule 1. Rule 1 in No. 26 reads this way: (Reading.) "The reduced rates specified in this classification are 'released' rates and will apply only when the shipper or owner executes a release on the form prescribed by the several carriers. If the shipper or owner fails or refuses to execute a release, the shipment will be accepted and transported at carrier's risk, and the rate will be 30 per cent higher than the rates specified in this classification. Where the property is charged for at the carrier's risk or higher rate it will be transported at the carrier's liability, limited only as provided by common law, by the laws of the United States, and of the several States, in so far as they apply."

No. 27, rule 1, which is in substantial conformity to the rule in the official classification—if there is any difference, it is simply a little bit more favorable to the shipper, not much, but a little—reads this way: "The reduced rates specified in this classification will apply only on property shipped subject to the conditions of the standard bill of lading."

"If the shipper elects not to accept the said reduced rates and conditions, he should notify the agent of the receiving carrier in writing at the time his property is offered for shipment, and if he does not give such notice it will be understood that he desires the property carried subject to the standard bill of lading conditions, in order to secure the reduced rate thereon. Property carried not subject to the conditions of the standard bill of lading will be at the carrier's liability, limited only as provided by common law and by the laws of the United States and of the several States, in so far as they apply. Property thus carried will be charged 20 per cent higher (subject to a minimum increase of 1 cent per hundred pounds) than if shipped subject to the conditions of the standard bill of lading."

(Resumes reading of letter to John D. McInnis.)

"For years past there has been a desire in this territory to bring about uniformity in the bill of lading used by the various carriers for domestic shipments. At various times in the past special committees have been appointed to deal with the subject, but without definite result. For some 13 years past the lines in the official classification territory, embracing the largest traffic section of the country, have used what is known as the 'Uniform bill of lading,' and it has been published as a part of the official classification.

"Shortly after the organization of the Southern classification committee it was believed that the committee furnished the proper machinery to carry this matter through to some definite conclusion, especially because the committee covered the entire Southern territory, and the members were therefore understood to be familiar with the laws and legal requirements in the various States. Early in 1899 a special bill of lading committee of 6 lines was, therefore, appointed. That special committee held a 2 days' session at Asheville, N. C., in July, 1899, and submitted a standard form of bill of lading and shipping order to the various lines in the Southern territory. We are glad to submit herewith (marked 'Exhibit A') copies of the forms then proposed for initial rail carriers and initial water carriers, respectively. Negotiations and correspondence proceeded; various slight modifications were proposed; objections to some of the provisions were advanced, and finally another meeting of the special bill of lading committee was held at New York in February last. At that meeting the various suggestions and amendments were taken up and considered; a standard form of bill of lading was finally adopted; it was approved by the standing subcommittee, and afterwards by the various individual lines, and was finally put into effect on June 1, 1900. We take pleasure in handing you herewith (marked 'Exhibit B') copies of the forms thus adopted for initial rail carriers and initial water carriers, respectively."

I will send to the commission the exhibits referred to here and also the statement referred to in a previous part of this communication showing the increases in the prices, as between years 1897 and 1900, of many of the principal articles used in the operation of railways—materials, iron and steel, etc. [Resumes reading.]

"This bill of lading conforms essentially to the uniform bill of lading in use in the territory north of the Ohio and Potomac rivers. It is believed to embody the best features of that bill, with some additional provisions designed to fit transportation by water lines. We respectfully ask your honorable commission to give it careful consideration so as to determine for yourselves whether or not there be anything in its provisions illegal, unfair, or onerous to the shipper. If so, the classification committee will welcome and carefully consider any criticism or comments which may be submitted looking to its modification.

"We now beg you to note the difference between rule 1 of classification No. 26 and rule 1 of classification No. 27. The former provided that the ratings shown in the classification were released ratings, and that if the shipper declined to execute release he would be required to pay 30 per cent higher than the rating specified in the classification. The present rule provides that if the shipper elects to not accept the conditions of the standard bill of lading he shall give notice in writing, in which case he will be charged 20 per cent higher than the limited liability rating as shown in the classification. We believe you will agree with us that the present rule, as compared with the former rule, ought not to meet with serious objections on the part of the shipping public. If a shipper demands that his property be carried subject to common-law liability, he has the right to do so, but we charge him 20 per cent higher than the regular rate in order to compensate the carrier for the increased risk."

Q. (By Mr. LITCHMAN.) Is not that susceptible at least of two constructions—first, that you make use of that fact to force an increase of rates to the amount of 20 per cent, or else the other construction that in lieu of that the shipper has got to take his own risk, which has not been the custom heretofore?—A. Oh, it has been the custom heretofore, because even in respect to these 1,700 articles upon which the ratings show a carrier's risk only, as a matter of fact, there was not one instance in a hundred where the shipper did not accept the regular bill of lading on his property or had his own bills printed, which was the same thing.

Q. Has it ever been tested in court whether the railroad has power to force the shipper to ship at his own risk?—A. We do not force him to ship at his own risk. We give him very clearly a published optional rate. He can take the bill of lading rate, which is 100 per cent, or he can demand a common-law liability bill of lading—a plain receipt, with instructions to transport and deliver—and he pays 120 per cent of the rate.

Q. I understood you to say that it had been the custom of the shipper to ship at his own risk until you presented these two options.—A. I said it was the custom even on those 1,700 articles where the rate was all carrier's risk, and he did not demand the common-law liability. In the old classification there were 1,700 articles upon which we showed only one rating, and that a carrier's risk rating, so that if you had one of those 1,700 articles to ship (and many of them were very important

articles such as dry goods and other things) you would have had a right to go to the agent of the carrier and say, "I want a common-law liability bill of lading. I want a receipt, without any sort of limitation, with no conditions at all, except such as the common law and the statutory law of the various States may have prescribed or fixed."

Q. Was there any extra charge for it?—A. None at all. That was the only rating we published, but notwithstanding the right of the shipper to call on us for a common-law bill of lading probably 995 out of a thousand shipments were handled right along in the usual course of business on the regular bill of lading of the company or on the printed bill of lading that many of the large houses got up for themselves in book form.

Q. Was there any change of rate when they took what you called the carrier's risk rating?—A. No; it was all one.

Q. Now, when you made the change to the new classification was there an addition of 20 per cent on account of that carrier's risk bill of lading?—A. There is the point. Take accouterments. In the old classification we showed accouterments in the carrier's risk column at first class. We now show them in the single and only column, which is the limited liability column at first class. So that even under the old classification if you had a shipment of accouterments and demanded a common law liability bill of lading you could have got it at first class, whereas to-day if you demand it the rate would be 20 per cent higher.

Q. Than it was before?—A. Higher than it was before. Now, I have said that was technically an increase on the 1,600 or 1,700 items, but in fact it was not, because in everyday business fully 99 per cent—I believe I am safe in saying that 99.5 per cent—of the business has been all along and is now and will continue to be handled on the regular bill of lading.

Q. Now, then, that being the case, would your association have adopted a schedule of that kind if they had not had an idea themselves that your liability, whether there was a carrier's liability bill of lading demanded or not, came under the common law?—A. It did not cut any figure at all in the matter.

Q. Then why was it adopted?—A. We wanted the single-column plan and we wanted that to be a limited-liability plan. We wanted this so that the other rating should be a fixed percentage higher to cover all, rather than that we should fix the carrier's risk rating and then say that the rate on which 99 per cent of the business would be moved would be a percentage less. We could make all these ratings higher than they are and then say that if a shipper accepted the bill of lading of the carrier we would make it a percentage less.

Q. You think virtually it is the same thing? A man wants to be sure that his goods are protected, and you would compel him to pay 20 per cent for it?—A. Oh, no; we do not attempt that. We do not say that his goods are not protected if he accepts our bill of lading. We claim that the bill of lading is a legal document, that there is nothing unfair or illegal or burdensome in it.

Q. You have two bills of lading, have you not, one of which is a carrier's risk bill and the other is a shipper's risk bill?—A. We are supposed to have, but in fact we have but one, because there is not one time in 100 when the other is demanded.

Q. If I am a shipper and desire to have my goods thoroughly protected, I have to take the carrier's bill of lading, haven't I?—A. Yes; to have all the protection of the common law.

Q. And in order to get that I have to pay 20 per cent more?—A. Yes.

Q. You force me to the alternative of taking the risk myself or paying 20 per cent more?—A. Theoretically we do and technically we do, but in everyday business practice, whether by the double-column plan or whether we make it 20 per cent or 30 per cent higher than the other, it does not cut any figure whatever.

Q. (By Mr. PHILLIPS.) In case goods carried on a carrier's risk bill of lading were lost or destroyed, the owner could not recover?—A. He could recover unless it happened from one of the exemptions that I understand the common law gives us. There are four, I believe—the act of God, fraud on the part of the shipper, inherent defect in the article, or inherent vices in an animal. These are the limitations, I believe, though I am not a lawyer.

Q. If shipped at the carrier's risk, they could collect for any other damage?—A. Yes.

Q. What is the difference between the owner's risk and the carrier's risk?—A. As to conditions of bill of lading?

Q. Yes.—A. I would have to read the bill of lading to state all the differences in conditions.

Q. Just in a general way?—A. In addition to these limitations, stating it briefly, the bill of lading limits us from further risk by reason of fire, chafing, leakage, and all those damages incident to ordinary transportation which are not the fault of the carrier. The carrier pays any number of claims where the bill of lading would protect the carrier if contested; but if the claim is made by a shipper doing business

with him the carrier pays it. If you inquire among business people, you will find, I venture to say, that whenever they have something broken or damaged and put in a claim the claim is paid, although the bill of lading might let the carrier but if taken to the courts.

Q. (By Mr. RIPLEY.) In making this change that you have mentioned, are you getting into line with the policy of the official classification committee?—A. The only consideration that we gave the official classification in this revision of ours was simply to compare it as we went along, article for article. There was no disposition and no suggestion to model ours after the official or after the Western, either as to the difference between carload and less than carload ratings, or the number of carload ratings, or as to any other feature. As we went through the classification, item by item, some one would watch the official and another the Western, and we would compare. But to say we started out with the idea of harmonizing the classifications would be simply incorrect.

Q. Does your action in thus limiting your liability bring you into line with the official?—A. As to this liability question?

Q. Yes.—A. It does. I thought you meant the ratings.

Q. What would you have done in this change of liability is to simply bring your Southern classification into line with the classification adopted by the roads north of the Ohio River?—A. Substantially. There are some little differences, but I do not want to worry the commission with them all. It is substantially the same.

Q. (By Mr. LITCHMAN.) You have never had any cases in court to test the validity of your two forms of contract, have you?—A. There has been no test in our territory. If there is anything illegal in our bill of lading, we want to find it out, because it would weaken the whole document.

Q. (By Mr. FARQUHAR.) I would like to ask whether, while the word "force" has been used, it is not entirely optional with the shipper which bill of lading is to be used?—A. Entirely so. If the additional risk to the carrier in the shape of this carrier's risk rating is worth anything at all it is worth 20 per cent, because 20 per cent of the rate may be a very insignificant percentage of the value of the goods. The rate from here to Atlanta, first class, is something like \$1.07. A first-class article of high value insured for the additional 20 per cent or 21.4 cents per 100 pounds might be very cheap insurance. We do not admit that 20 per cent is an excessive difference. We used to have 30 per cent and in some cases under the old plan it ran up to 280 per cent.

Q. What proportion does this carrier's risk property bear to the whole amount carried?—A. I am sure it is not 1 per cent. I doubt if it is one-half of 1 per cent. I doubt if it has varied one one-hundredth of 1 per cent as between the time when the old classification was in effect and the present.

Q. (By Mr. LITCHMAN.) Substantially the only difference between the two bills of lading is that under the carrier's risk all sorts of risks are assumed by the carrier, whereas under the shipper's risk bill of lading you simply assume the risk of injury caused by your own agents?—A. Under the carrier's risk we assume all risk except that which the common law and statutory law exempts us from.

Q. Under the shipper's risk you assume only the results of your own negligence?—A. We do not assume certain specified risks unless they are the result of the carrier's negligence. We do not admit that we put everything on the shipper except the results of our own negligence.

Mr. PHILLIPS. You may proceed in your own way now to present the facts.

The WITNESS. We come now to the real question of complaint on the part of the shipping public, and the representatives of the shipping public, respecting the general advance we made in our classification nearly a year ago—June, 1900. (Reading:)

"We now come to the changes in the descriptions and rating as shown in classification No. 27. For reasons already stated, it would be impracticable to show in tabulated form the exact advances made, but we do not hesitate to say that the number does not exceed 400 or 500, as compared with classification No. 26."

I think the commission will find that the last annual report of the Interstate Commerce Commission touches upon this matter; that a statement showing the number of changes was prepared by the auditor of the Interstate Commerce Commission and that it showed 500-odd advances and 100-odd reductions. I merely estimate it here as 400 or 500. It was nothing like 1,600 or 2,600 as has been stated by some parties earnestly, and perhaps honestly, but without proper information. (Reading further from letter to John D. McInnis:)

"And many of these advances have been made on unimportant articles of shipment. In revising the classification the committee endeavored to be as consistent as possible, and it will be found, for example, that all druggists' articles, in boxes, have been made first class; that small grocery articles, in boxes, have, as a rule, been made second class, and that ordinary hardware and iron and steel articles, in boxes, have likewise been made second class. One reason for this was to prevent underbilling of drugs, groceries, and hardware; and it may be in order to state at this point, and we say it with regret, that the underbilling or false classification of freight in the Southern territory seems to be continually on the increase.

"But in the statements which have been submitted at different times in behalf of the shipping public, through the press and otherwise, mention seems not to have been made of the fact that no advances have been made in ratings on such articles as agricultural implements; fertilizers, L. C. L.; cotton bagging and ties, green fruit, machinery, soap, stoves and hollow ware, vegetables, vehicles, vinegar, wooden ware, and other important articles of shipment. Nor was any advance made in the ratings on iron and steel articles, as compared with classification No. 26.

"Of course the Classification Committee does not pretend to be infallible. As the venerable and honorable J. H. Regan well and tersely said at the recent Lookout Mountain meeting, the making of a freight tariff or a freight classification is not one of the exact sciences. Commercial conditions are constantly changing; an article of luxury to-day may become an article of common use or necessity one year hence; local industries are multiplying in the South; new discoveries in science are constantly working changes in the whole character of the cost and use of some articles; competition between carriers and markets and products is ever increasing and becoming more complex, and he would be strangely out of touch with the times who would argue or contend that the freight classification of 10 years ago would fit the traffic conditions of to-day, or that the freight classification 10 years hence will not necessarily differ greatly from that now in use.

"The Classification Committee, however, invites and welcomes all information or data from shippers or their representatives which will aid the committee in arriving at a fair and just conclusion. At previous meetings of the committee various representatives appeared and made oral statements and arguments to sustain applications for changes in the ratings; and for our next meeting 147 subjects have been docketed, and in the great majority of cases this has been done upon direct request from shippers who have urged readjustment of the ratings. Some modifications have already been made, as witness supplements Nos. 1 and 2 to classification No. 27, copies of which we beg to inclose herewith. Undoubtedly some other modifications will be made at our approaching meeting. Our contention is, and we make it respectfully, that all these questions are given intelligent and conscientious consideration by the committee; and that while we sometimes err, we are always ready and willing to make correction upon the proper showing. It is self-evident that it is not to the interest of the carriers to make their rates exorbitant, or so high as to unduly limit or restrict the free movement of traffic over their various lines.

"Respectfully submitted.

"P. J. MCGOVERN, *Chairman.*"

Q. (By Mr. RIPLEY.) You have not spoken of the matter of carload lots. Will you speak of that topic now?—A. I want to say something on that. The Classification Committee has not, and I do not believe any classification committee ever has, proceeded under any fixed rule with reference to whether an article ought or ought not to take a carload rating or whether it ought to be 20 per cent or any other per cent less than the less than carload rating. There has been no thought on the part of our committee to increase the number of carload ratings or to widen the difference between the carload and less than carload rating. The only rule, if it can be called a rule, is that our committee has endeavored, as far as practicable, to limit the number of carload ratings to those articles which are naturally or ordinarily moved in carload lots. In fact, we have actually a comparatively smaller number of carload ratings than either the official or western classification. I want to deny most positively and emphatically that the Southern Classification Committee has gone to work to prevent New York City or Chicago or any other long-haul seaport or market from doing business in the South, by increasing the number of carload ratings, so as to build up the interior southern jobber, or for any other purpose whatsoever.

At more than one of our meetings we have had with us a gentleman from Atlanta, Mr. W. E. Newell. He is not only a jobber of hardware in Atlanta, but he is chairman of the Transportation Committee of the Southern Hardware Jobbers' Association. Mr. Newell is naturally looking after the interests of his own company and of other jobbers in that section, and naturally he would like to have a carload rating on everything. The commission will understand that the jobber at Atlanta wants as low a carload rating or rate as he can get. He wants to bring his goods in there in large lots and distribute in small lots at a total charge to the ultimate destination which will at least approximate the through rate. I will illustrate that. Suppose New York is the natural or controlling source of supply for a given commodity, and a jobber in Atlanta deals in that commodity. He wants to get as low a carload rate as possible from New York to Atlanta, and then he wants to distribute it at a less than carload rate from Atlanta to, say, Tallapoosa, Ga., or Anniston, Ala., at a combined total charge which will approximate what the New York jobber could send the less than carload shipment through for. That is the whole situation of the interior jobber in our or any other territory. He wants to be able to bring and reship at a total charge approximating the through rate on the same quantity as he reships to the same point of destination.

P. J. M'GOVERN:—SOUTHERN FREIGHT RAILROADS.

Q. (By Mr. PHILLIPS.) Then you claim the railroad can not ship the short distance in less than carload lots at a proportionately less rate than for the longer distance?—A. I say that, although that is not the carload question. All rates for short distances are higher per mile than for longer distances.

Q. They want it at the same rate per mile?—A. No; they do not ask that. They ask that the carload rate from New York to Atlanta, plus the less than carload rate from Atlanta to Heflin, Ala., we will say, will at least approximate the through less than carload rate from New York to Heflin direct. That is what every interior jobber wants, and the far-off jobber, as a rule, wants no carload ratings at all. That may be stated as the case of the New York Merchants' Association v. The Southern Hardware Jobbers' Association.

Q. (By Mr. KENNEDY.) Does he not strive to get a lower rate? For instance, we had testimony here showing that goods can be shipped to Chicago from New York and then reshipped back into New York territory for less than they could be sent from New York to the intermediate point between New York and Chicago.—A. They want as low as they can possibly get.

Q. Is that practiced in your Southern territory; that you may ship goods from New York to Atlanta and reship backward 200 miles toward New York at a cheaper rate than they could be sent from New York direct to that destination?—A. It might be possible on some articles; but I do deny that there has been any deliberate intention or thought on the part of the committee to bring about such a condition as that. There may be cases where there is a special carload rate from New York to Atlanta which will enable them to go back 100 or 150 miles. It may be true, but I doubt it. It would simply show a wide difference between the carload and less than carload rate.

Q. Do instances of that kind come to your notice?—A. I do not recall any. Take agricultural implements. In carloads they are sixth class, subject to a minimum of 20,000 pounds. Some implements in small lots are first class and second class, along there. So you can see if you ship a car to Atlanta and then distribute it on the first or second class rate out, you can go a good distance before you reach the through first or second class rate to that final destination from New York.

Q. Do you aim to arrange your classifications so that will be impossible?—A. No; that is not really considered. We simply take up each case on its own merits. That is all I can say. I do state positively that it is not the policy on the part of our committee, and has not been the custom or thought of the committee, to keep the through shipper from doing business in the small places in the South, or to build up the interior jobber, or vice versa.

Our committee is composed of 42 lines. That includes every coastwise steamship company operating from Boston, New York, Philadelphia, or Baltimore to the South Atlantic ports. Those are the lines that will carry the business for the New York or other Eastern jobbers to our section. Those lines are members of our committee. Now, evidently, if the Classification Committee is doing anything to prevent their markets from shipping down into our country those water lines either do not know their business or else are not attending to it. Take the Old Dominion Line from New York to Norfolk. A large part of its entire business is the south-bound business from New York via Norfolk to our territory. If you were to wipe out that business you would probably wipe out the Old Dominion Steamship Company. Now, that line is not only a member of our general committee, but its traffic manager, Mr. Walker, is a member of our working subcommittee of 15, and attends nearly everyone of the meetings. It will certainly not be argued by any trades body at New York or anywhere else that the Old Dominion Company has deliberately set out to bring about its own destruction. If the committee is deliberately trying to build up the interior jobber and ruin the New York jobber's business in that territory, then it is deliberately going about reducing the business of the Old Dominion Steamship Company; and Mr. Walker does not know it and therefore does not know his business. Now, I do not think that is the state of the case.

Q. You were speaking of the steamship companies. I want to ask you a question about that. Do they ship at very much lower rates from New York to points in the South reached by railroad from New York than the railroads ship for?—A. There is a fixed differential. Take New York to Savannah, the rates by water are very much lower than all-rail rates.

Q. Mr. Langley, of New York, said if there was any cheaper water rates they did not know it, which would leave the inference that the railroads control the steamship lines and prevent them carrying cheaper than the railroads to points reached by boat.—A. I think he must have meant interior points. Mr. Langley must know that the rates of the Ocean Steamship Co., for example, from New York to Savannah, are made by the Ocean Steamship Co. They do not consult anybody. Those rates are not even subject to the jurisdiction of the Traffic Associations. You can pick up any tariff and it will show the all-rail rates New York to Savannah considerably higher. I do not remember how much. The all-rail lines put in rates as low as they care to go, but they know they are a good deal higher than the ocean rates. The ocean companies reduce the rates without consulting anybody.

Q. How is it with the Old Dominion Company shipping to Norfolk?—A. It is the same way.

Q. They ship much cheaper than could be shipped by rail from New York?—A. I should judge so. I do not know how much cheaper. I take it for granted the rail lines can not meet the Old Dominion rates from New York to Norfolk.

Q. (By Mr. RIPLEY.) Is it not a fact that a large amount of the stock of the Old Dominion Company is owned by the railroads?—A. I understand that to be the case. The Old Dominion Steamship Company is a trunk line between New York and Norfolk. It handles business for every rail line leading from Norfolk, and I can understand that it would be the most natural thing in the world that each rail line should want to have an interest in the boat line.

Q. (By Mr. FARQUHAR.) Who makes the differential?—A. If you mean to interior ports, it has been fixed by agreement from time to time.

Q. Are the coastwise lines a part of your commission to make this differential?—A. They are a part of the Traffic Association that makes these differentials. That differential question is really older than the association itself. The present differential begins at 12 cents on first-class. It at one time was only 6 or 8 cents. It has been brought about just as anything else of that kind would be brought about—by arbitration. Sometimes they go to war, and when they get through the matter settles itself just about as the arbitrators would have settled it. If the Pennsylvania Railroad, for instance, and the other rail lines to those ports had their say there would be no differential. The Ocean Steamship Company may say, "We ought to have 20 cents differential; we ought to have all the business; it is all the business we can expect to get much of." The other fellow says, "You are not entitled to any differential; you make about as good time as we do; you ought not to have any differential." But they compromise, say, on 12 cents.

Q. Have you any idea whether the trunk lines of the South do not control the coastwise commerce by controlling the stock of the coastwise lines?—A. I understand that the rail lines, operating from Norfolk and those other ports, do own a large portion of the stock of some of those coastwise steamship lines. Take the Ocean Steamship Company. It is controlled by practically the same interests as the Central of Georgia Railroad; and the Chesapeake Steamship Line from Baltimore is practically the same as the Southern Railway. The Baltimore Steam Packet Company is controlled by practically the same interests as the Seaboard Air Line. There are two or three of these ocean lines which, however, are trunk lines. Take the Clyde Philadelphia Line, the Old Dominion Line, and the Merchants and Miners' from Boston, all operating to the Virginia ports, Norfolk, etc. They are all trunk lines. I can understand why the rail lines leading from Norfolk might want to have a voice in the management of these trunk steamship lines, so as to see that they get a fair share of the business brought to Norfolk, aside from the fact as to whether they are profitable or unprofitable in their operation. From good traffic reasons it seems to me they would want to have an interest, and I believe they do largely control through stock ownership.

Q. Since you have gone into both the transportation and traffic arrangements, have you found any friction at all with the coastwise lines and the rest?—A. There is just the same competition and friction between them as between the different rail lines.

Q. Is it the policy of the large trunk lines of the East reaching into Southern territory—Mobile, New Orleans, Atlanta—where it is part rail and part water, to take shipments by all rail if they possibly can?—A. They try to be neutral. Take a line leading to Norfolk, like the Atlantic Coast Line. The Old Dominion and the Pennsylvania are both connections at Norfolk, as is also the Merchants and Miners'. There is a friendly interchange of business.

Q. Substantially the same as on the lakes, where the trunk lines own their own boats?—A. Yes.

Q. (By Mr. RIPLEY.) While on that subject, you might make a statement regarding the extent of this differential. Some ports have a differential between all-rail and water. Is that true between Norfolk and Richmond, for instance?—A. You mean that New York to Richmond is higher than New York to Norfolk?

Q. No; I mean the rate from New York to Norfolk is the same whether by water or by rail, whereas Richmond has a differential, and Richmond complains that she is not on the same basis.—A. I did not know that; but I should judge it is this way, that the Old Dominion Company has such good service from New York to Norfolk that it can get its share of the business at equal rates; or possibly the Pennsylvania Railroad, with its own line, says, "We do not propose to give any differential, and we do not propose to arbitrate, and if you want to go to war go to war." You say the all-rail rate is not higher than the rail-and-water? I do not know why that is.

Q. I was so informed, and that Richmond complains that she is not put on a competitive basis with Norfolk for that reason.—A. I do not think she is entitled to the same rates from the East as Norfolk. It is farther inland, you know.

Q. (By Mr. PHILLIPS.) Would she not be all rail?—A. I should say by rail there should not be much difference between all rail from New York to Richmond, and all rail to Norfolk.

Q. (By Mr. RIPLEY.) Coming back to the topic we were discussing before, carload and less than carload lots, I would like to ask again whether in changing the number of carload lots you are coming into line with the policy of the official and western classifications or not?—A. Not at all. In the first place, we have not made many increases in the number of carload ratings. I could not say whether it is 8 or 45 or 32, though I am sure it is not 50 since the committee was organized, and if in doing that we are getting any closer to the condition of things in the western or the official territory it is merely a coincidence. It is not the result of any belief that theirs is a better system of ratings than ours, nor to increase the advantage of the carload shipper. If that were our intention, or it were believed to be a better thing by the committee, we would have gone ahead and increased the number and be done with it.

Q. The point I wish to make is this, whether you are getting into line with the official in various ways, so that at some time there may be a prospect of uniform treatment of shippers all over the country in respect to the distinction between carload and less than carload lots?—A. It may be we are drifting closer together. I do not think it could be said we are getting wider apart; but there is no systematic effort, so far as I know, on the part of any one of the three classification committees to get closer together.

Now, as I stated, in making our general revision some time ago we did watch the official and the Western as we went along, and on light articles especially I believe it would be found there is more uniformity than 5 years ago. I may leave here to-morrow to attend a meeting of the official classification committee, a special meeting to consider carload minimum rates. In the letter I wrote Chairman Gill before I left home, I said I thought that with respect to the question of minimum carload rates all three classifications might be brought into closer harmony, because the conditions are probably the same everywhere in the country. If 12,000 pounds is a proper minimum carload weight in one part of the country, then it should be a proper minimum all over the country on the same article.

Q. Will you explain what is the basis on which you introduce a carload rate?—A. It simply comes up in the ordinary course of business. We have a certain article which is, we will say, fourth class. The manufacturer or jobber, usually in the North or outside of the territory, says: You charge fourth class any quantity. That is not fair. We could increase our business down South greatly if we could come in there on lower rates on carload lots. Unless the matter has already been considered and declined by the committee, I almost invariably tell the applicant that I will list the subject for our next meeting or put it on what we call the docket. The attention of the committee is called to the application and we furnish any information we can, and the committee takes it up and considers it. The committee may think it is not an article upon which it is proper to make a carload rating or that there is no necessity for it.

Q. What determines?—A. Judgment and experience. We have no rule. It is just a business matter. The carriers may say that the article is not a carload commodity; that it does not usually move in carloads, or that, even if it is a carload commodity, there is no good reason for the reduction of their revenue. We may not believe that the making of a carload rate will increase the business enough to compensate us for the reduction in revenue, and we decline to do it.

Q. Just there we might raise the question as to whether a decision upon a business matter of that kind ought really to be made entirely by one party to the contract; in other words, whether some constituted authority—we will say the Interstate Commerce Commission—ought not to have jurisdiction, or whether the shippers ought not to be represented in some way. The complaint is made by the shippers that decisions in these matters are based not on any rule but on what you call judgment; that these decisions are made by one party concerned without any right or power on the part of the other.—A. That is a pretty big question. My own idea of that is that the carriers ought to be allowed to make their own rates. Those rates must be reasonable in and of themselves. If the shipper does not feel that he has been fairly treated he ought to appeal to the courts, and the carriers as taxpayers ought to aid or assist through the medium of State commissions or through the medium of the Interstate Commerce Commission by paying part of the expense of that suit. That is as far as I go. I do not believe it is a part of the business or function of the Government to fix rates. This is deep down in me. I have been with this thing for a good many years, and that is my deliberate opinion. The seller fixes his price. The seller is the carrier. If it is a yard of dry goods there is no recourse. In the case of a common carrier there is a recourse because of the peculiar business or functions of the common carrier. It has been pretty well settled that the rate must be just and reasonable, and that the courts have authority and power to determine whether or

not it is just and reasonable. The shipper should not be put to the sole expense of having it determined for him as to whether he is being treated fairly or not. I say every private or corporate citizen (including the railroads) ought to aid in maintaining a tribunal which would relieve the shipper of the burden and cost of having that case determined for him. As a citizen I am willing to chip in my share of that cost, but I do not believe it ought to be in the power of the Government to fix rates. I can not in my own mind disassociate or clearly distinguish between the power to make rates and the power to make property unprofitable.

Q. (By Mr. PHILLIPS.) Do you believe the State has not the right to fix the rate of travel per mile as well as freight rates?—A. That is my belief, that the State ought not to have power to fix rates for the transportation of people or articles.

Q. (By Mr. A. L. HARRIS.) The States do fix them?—A. They do.

Q. (By Mr. LITCHMAN.) Why do you take that position?—A. I do it because I believe that capital invested in the railroad business ought to have the same free swing and latitude as capital invested in any other kind of business, except that the carrier ought to be made to fix its rates at fair and reasonable figures, to be determined by the courts if disputed.

Q. Do you not support State control when you take that position?—A. No; I think there is a distinction between saying that the State can fix the rates and saying that the courts can determine whether or not the rate is fair and reasonable.

Q. You take into consideration that the existence of the railroad as a public carrier is due to special privileges?—A. I understand that.

Q. Under the special privilege, should not the State step in to protect its people?—A. Does that mean fixing the rates?

Q. Yes.—A. As I said, owing to the peculiar business of railroads, owing to the close influence that their rates of transportation may have on the making or unmaking of business, and owing to the fact that they are given certain privileges, the right of eminent domain, and so on—owing to all these things, they are somewhat different from sellers of ordinary merchandise. They sell their services to the public. If you go to buy an article the price is fixed by the seller. You have no recourse unless you can go somewhere else and buy it. I do not think it would be right to have railroad rates exactly on that basis.

Q. But when you go to the railroad to buy transportation you have nowhere else to go.—A. You may or you may not. I am willing to concede the difference between them and the seller of a yard of dry goods, from whose price there is no appeal. I concede that, because of the difference in the nature of their business, the price for transportation must be fair and reasonable in and of itself. I say further, if the shipper feels he is not getting that kind of rate, that he is not being treated fairly and reasonably, he ought to go to the courts and he ought not to be compelled to give up his business and go to the expense of employing an attorney and making a test on his own hook. I am willing to contribute to the maintenance of a railroad commission in the State or an interstate commission, whose duty it shall be to take that case up and handle it for him through the courts. But I do see a great and clear distinction between that and that the State shall make the rates.

Q. (By Mr. PHILLIPS.) Ought he not be heard before appealing to the courts?—A. That is another point. Suppose the carriers do say that they will make no important changes before consulting the other fellow. How will they go about it? We have shown clearly that the interest of the Merchants' Association of New York may not be the same as the Southern Hardware Jobbers' Association. We would have to advertise that there would be a public hearing as to whether or not we should change the classification on certain articles. And when everybody got there they would not be able to agree among themselves. It is a historical fact that a good many years ago committees from Atlanta and Athens and Macon and various other commercial centers attended a meeting of the old Southern Railway and Steamship Association, to urge a more favorable adjustment of freights. Sol Haas, who was at that time traffic manager of the Carolina roads, said, "Gentlemen, you go off and agree among yourselves as to your relative adjustment; how much higher or lower one point shall be than another. We will adopt your figures. We will not reduce our rates, but if you can agree how much higher or lower one point shall be than another, we will accept that." There were delegations there from all these towns, and the question was on rates on corn, flour, meat, etc., from the West. They went off and had a meeting, but they could not agree at all.

This suggestion that the public ought to be called in to our deliberations in advance of a change would not apply to reductions. I do not suppose anybody would object if we were going to reduce, and the history of rates in this country is a history of reductions. The only substantial advance that has ever been made at one time in the South was this classification 27, and I believe if we had known what was coming we would not have made that. There has been not only the evidence submitted to the commission here, but floods of correspondence and oral hearings and all. We thought there was going to be some complaint, but not that there was going to be so much.

Q. (By Mr. LITCHMAN.) How far would you strengthen the powers of the Interstate Commerce Commission in that direction?—A. I do not think it ought to go any further than I have stated.

Q. Would you have a court of appeals that would expedite a decision of the cases?—A. I think the matter is getting so enormous that there ought to be an auxiliary supreme court or something of that sort, some court of equal and conclusive powers to handle just these railroad questions—these differences between the carriers and the public; and that the Interstate Commerce Commission should first review these cases and, as it does in many cases now, advise the complaining shipper whether there are any good grounds for the complaint. If it felt there were grounds justifying further procedure in the matter, it should tell the shipper, "We will handle this for you and call upon you at the proper time for your testimony." I am willing as a citizen to contribute my share, whatever it may be, to the maintenance of that sort of a tribunal.

Q. (By Mr. PHILLIPS.) Would you have that national?—A. I would be willing to have it both State and interstate.

Q. (By Mr. A. L. HARRIS.) You would have two courts of last resort in the country?—A. What I mean is this, that, as a railroad traffic official, I am not willing that the Interstate Commerce Commission shall fix or have the final authority to fix all interstate rates. I would be willing that an auxiliary supreme court or some similar tribunal should have the power to finally determine the question brought up as a legal question by the Interstate Commerce Commission. If a man feels that he is not getting the right kind of a freight rate he must carry that question now through all the courts to the Supreme Court of the United States.

Q. You would avoid the long delay in some way before the case is decided?—A. Yes, yes; if a rate is unfair, then it ought to be determined. If it is unfair, the shipper is being unfairly treated, and that ought to be found out and corrected as soon as practicable, because it is possible that the shipper's business is being destroyed while that is going on. Such a case is possible. But I am not willing to say, nor do I believe it right, that the railroad commissions in the several States or the Interstate Commerce Commission ought to have the power to fix the rate on that article before or after a complaint.

Q. You are aware of the 8 years that expired between the time of bringing the complaint before the Interstate Commerce Commission and the final settlement by the Supreme Court of the Chattanooga case?—A. Of the Chattanooga case?

Q. (By Mr. FARQUHAR.) Do you not think, and would not every railroad man in the whole country think, that there ought to be some legal measures to bring a case for final decision in the appellate court before 8 years, when the decision is as to the principle involved in the long and short haul clause, as it was in that Chattanooga and Nashville case?—A. Why, it seems to me that it ought not to take 8 years to decide that question.

Q. Wouldn't you think, considering that the case came into court properly and that it was 8 years before it reached the appellate jurisdiction of the United States, that it was a farce?—A. If a certain rate is unfair to a man and consequently injustice is being done him, it is not right that he should be held up and that the injustice should continue in force until a constituted body like the State railroad commission of Georgia or the Interstate Commerce Commission here could get that to a final decision in the Supreme Court of the United States. When you ask me whether it is unfair or a farce that it should require 8 years to settle this or any other matter, I do not know. I do not know the causes of the delay, or if there was a delay. It seems to me it ought not to require 8 years.

Q. (By Mr. A. L. HARRIS.) Suppose a complaint is filed before the Interstate Commerce Commission, as now constituted, that a certain rate is unreasonable, and it takes 4 or 6 or 8 years to decide it. Would not many changes come upon freight rates before the case were decided?—A. Oh, they might.

Q. And the complainant lose all interest in the matter?—A. Oh, he might. The road might voluntarily reduce rates below the rate asked for by the complainant originally.

Q. You think that there should be some more speedy action in some way?—A. It seems to me so; but bear in mind I couple with that the strong conviction that the State ought not to have the power to fix that rate per se, and I say that as a citizen as well as a traffic man. I have been in touch with this subject a good many years and I do not believe that the State ought to fix the rates.

Q. You do not feel that it is even practical, then, after the railroad has fixed a rate, for the Interstate Commerce Commission or any body like the Interstate Commerce Commission to have the right of approval?—A. Well, it would have the right of approval in this way, that every rate is supposed to be all right. It seems to me that it is understood to be all right until it is complained of.

Q. But you would not submit it to the Interstate Commerce Commission in the first instance for its approval?—A. I do not think the carriers ought to be required to do that by law, or ought to be expected to do that.

Q. That is partly owing to the fact, is it, that rates are changing from time to time and the roads could not raise or lower the rates without consulting the Interstate Commerce Commission?—A. Why, I think the carriers ought to be allowed to go along in their regular business and make the rates from time to time and from day to day and file them with the commission. If the approval of the commission be necessary before a rate can be put in force, does not that carry necessarily with it the idea that the commission makes the rate?

It could continue to withhold approval until the rate reached a figure, higher or lower, that it could approve. Would not that be fixing the rate? Our country has gone along growing and developing; the railroads have gone along with that growth and development, and it has been done in the way we are doing now, the traffic officials making the rates and publishing them. They ought to be required to file them with the commission, and they should have publicity. There ought not to be anything secret about them, and there ought not to be anything preferential about them, but they ought to be as fair as they can be made, and certainly fair as between people at the same place. Subject to the general provision that they must be just and reasonable, I think the country is safe to let them go along at that.

Whereupon, at 1.08 p. m., the commission took a recess until 2 p. m.

At 2.10 p. m. Mr. McGovern took the stand and resumed his testimony as follows:

Q. (By Mr. RIPLEY.) I see on the cover of these classifications the statement "subject to change on legal notice." Does that mean that these changes of classification are made without any previous statement to that effect to the shipper? We have had some complaint at various times from the shippers that they make contracts for long periods in advance, and that these changes in classification are promulgated suddenly and without warning, subjecting them to considerable inconvenience and loss. What is your policy in that matter?—A. Legal notice simply means the notice required by the act to regulate commerce as amended, 10 days' public notice in case of advance and 3 days' in case of reduction. Now, that is the means we have of advising the public of changes; we issue the classification; we give them out as soon as we can after the matters are acted on by the committee in session. In the case of subjects that have been taken up and acted upon on the request of a shipper, or anyone else, we advise him before publication, you understand. In other words, there is no disposition at all to hold back this information until we are ready to plump it at them, as it were. I undertake to reach all complaints as soon as I can after action upon them by the committee, and to tell the complainants what we have done. I wrote letters just before I left home advising of an advance we are going to make the first of next July on the dry goods question.

Q. You are speaking now of advances which are to occur next July?—A. One advance is to occur next July.

Q. Are you going to make any change, or have you considered any change in the dry goods classification with special reference to cotton piece goods?—A. That is the very thing I was talking about.

Q. Will you explain the situation in that respect?—A. Our present classification shows a long list of articles here under the head of dry goods, which we term the cotton-factory products, backbands, calicoes, cambrics, canton flannels, etc., etc. Now, the dry goods people say that this list has outlived its usefulness. It may have been all right when we began specifying these things, but that the whole nature and character of the dry goods business has changed since then. They no longer sell an article as calico; it has some fancy name, some French name. The word calico is hardly ever used, and they asked us to change the wording of the classification somewhat in line with the official, which simply says, "cotton goods in the piece." Now, we have agreed to do that. The wording is not exactly the same as ours. We make it "cotton fabrics in the original piece," "made wholly of cotton," and so on. In doing that the committee decided that a little later on, the first of July, they would increase the rating from fifth class to fourth class. So the shippers will have plenty of notice of that. We don't try to withhold any information from the public as to what has been done, but that pointing to the classification is the means we adopt for the general publication of it.

Q. And wherever possible, as in this case, you give notice 2 or 3 months in advance, so that shippers may accommodate their contracts?—A. No; not 2 or 3 months. Usually it is just from the time the letter is written until we can get out our next publication.

Q. You recognize, do you not, that many contracts between merchants are made; necessarily, a number of months in advance, and that a change introduced in the freight rate may cause confusion where sales are on close margin—as, for instance, in cotton piece goods?—A. I recognize that, and that particular custom seems to be growing, but it does not disturb that much when we reduce. We make more reductions than advances. I really don't see how, in the making of a particular classification, we can accommodate it to all those trade conditions. If 10 days is not enough legal notice in the case of an advance, then make it 20 days; if 3 days is not enough for reductions, then make it 15 days, or 10 days; but when you undertake to say that

the makers of the rates, whether the railroads or any other rate-making body or authority, must try to accommodate themselves to all of those trade conditions, why, then, it means that there could hardly be any change at all. Now, about the largest dry-goods jobber in Atlanta, Mr. Dougherty, of the firm of John Silvey & Co., happened to come up with me on his way to New York City to make his next-fall purchases. At this time, when people are just commencing to wear their light clothing for the warm months, he is on his way to New York to make his fall purchases. He said that the postdating of bills was bad, and they are trying to get an agreement between jobbers all over the country to discontinue it. That started, probably, by the dating of bills 15 days ahead, or 10 days ahead—just far enough ahead to get the goods there; now it has gone into months. I do not see how we could accommodate a thing like freight classification or freight rates to every trade condition.

Another instance: Leggett & Co., of New York, have explained to us that they bought their canned goods almost a year ahead, and they urged that in putting canned goods up from fourth class in less than carloads up to third class in less than carloads we had disarranged their business. The reverse is true in most cases. We have made more reductions than advances since Publication No. 27. Of course there is no complaint, then, even if it goes into effect right away.

Q. Are you in position to show us specifically, or insert in the testimony specifically, the list of the items on which advances and reductions have taken place? You have made the statement that on a number of items more reductions than advances have been made. We hear complaint from many quarters that while the number of reductions may be greater than the number of advances, that the items so changed are such as to yield an increased revenue to the roads?—A. Oh, I think that must be incorrect. It can hardly be possible to say that we have picked out two or three little unimportant articles and made reductions on them, and that we get it all back by putting up the rating on important articles. It is simply incorrect and untrue in every sense. Absolutely, that is not true. No. 27 contained general advances. We have now started with that, and we are making four reductions or more where we make one advance. I know, from just my general knowledge of the matter, that since the issue of No. 27 we have made four reductions to one advance.

Q. (By Mr. CLARKE.) Is it a fact that when you have made reductions you have generally increased the revenue of the roads?—A. I can not say that that is a fact; but we do often make reductions because we believe it will increase the business an amount sufficient to compensate us for the scaling of the rating.

Q. Is not that the general experience of railroad companies?—A. It is the general experience that when they make reductions they believe it will increase business, that it will inure to the benefit of the company.

Q. Now, I would like to inquire what is the occasion for the advance on cotton piece goods that you propose to make the 1st of July?—A. I am glad you asked that. Under our present classification the fifth-class rating applies only on certain specified articles; they are clearly designated. That low classification was originally intended to cover only the articles made by the Southern mills 15 or 20 years ago, when they first began the manufacture of cotton fabrics in the South, and in fact even less was charged then than now. The articles consisted of rough sheetings, domestics, and all those coarser, cheaper fabrics and yarns, and the Southern carriers put them first on the sixth-class basis, so as to enable those mills to get on their feet. It was a species of protection by means of a freight tariff or classification. They were afterwards raised to the fifth class. That list has been increased from time to time, until it includes many more articles than it did at first, because there are many more different kinds of these cotton goods made in the Southern States than there used to be, but it does not include a lot of other goods; for instance, it does not include corduroys. Within the last few days I have had a letter from a New York house about corduroys. He insists the cheap corduroys ought to take the fifth-class rate, because they are not worth more than some of the things we have in this list. Well, now, when we changed the wording so as to read "cotton fabrics in the original piece," it evidently let in corduroys, upon which we are supposed to be getting first class to-day. In other words, we put in under the reduced basis a whole lot of fabrics not in there before; and we think that in changing the classification so as to meet the trade demands as to phraseology we are fully justified in putting the rating up, after a little further notice, to fourth class. My own opinion is that it ought to be third; I told some of our members at a recent meeting that I believed it ought to be third. It is third in official territory, and when you take the character of the business, the weight and value of these cotton goods, I do not see why it ought not to be third.

Q. (By Mr. RIPLEY.) Respecting the amount of these advances resulting from several classifications, one of the shippers recently looked up a rate upon axes, and the figures which he gave as illustrative of the changes during the last few years—from about 1896 to the present—were as follows:

From Louisville, Ky., to Atlanta, Ga., the rate on axes about 5 years ago was 68 cents in less than carload lots. It now appears to be 81 cents. The rate from Louisville, Ky., to Jacksonville, Fla., on less than carload lots, 5 years ago, was 40 cents;

it now appears to be 50 cents. The rate from Louisville to Birmingham, Ala., was formerly 47 cents; it now appears to be 58 cents. The rate from New York to Atlanta on less than carload lots was formerly 73 cents, and is now 86 cents. Those rates show a very substantial increase during the last 4 or 5 years, and I want to ask you whether those, for any particular reason, would seem to be abnormal, or whether changes corresponding in amount to these have been introduced all along the line. In other words, by reason of the introduction of these several classifications have the rates been advanced, roughly speaking, 5 per cent, 10 per cent, or, as in some of these cases, 15 or more per cent?—A. I see. Now, with the exception of Jacksonville, Fla., to which point I think those are commodity rates—those are class rates. With the exception, then, of Jacksonville, all of that has grown out of the change from fourth class to third class, and you needn't go back several years. That was one of the advances we made in No. 27, classification No. 27. We now have it third class. Those figures you name there except as to Jacksonville are former rates for fourth class, and the advanced rates are third-class rates. Now, that was advanced from fourth class to third class, and I think that would be a fair average of all advances we have made. There has been no horizontal advance or anything like it. We advanced aqua ammonia in bottles, I remember, from fourth class up to first class. We did it because, as explained in this letter to Captain McInnis, we made all druggists' articles in boxes first class, and for the additional reason that the other two classifications had it first class, as I remember, and for the still further reason that we did not see why it should be down on the fourth-class basis as it is used only as a toilet article. We thought it was an article that could be fairly put up a little bit higher. But on the whole I should say that the advances shown on that statement as to axes will represent a fair average on all articles which we advanced.

Q. The advance of, say, the 15 per cent?—A. Yes; I think that would be fair. It might be 14, it might be 12, it might be 19, but I will assume that is a fair average.

Q. (By Mr. LITCHMAN.) To the superficial observer, does not that justify the claim that has been made that you had advanced the rates by changing the classification?—A. Why, of course, we advanced the rates when we advanced the classification. Certainly no traffic official or witness has ever denied that.

Q. Now, the claim made before this commission is that that is a method of changing rates, and that it is unjust to the shipper.—A. Well, when we advance the classification we certainly advance the rates.

Q. (By Mr. RIPLEY.) You did it with that end in view, of course?—A. Partly. I have stated in this letter to Colonel McInnis that there would have been, and ought to have been, a general revision of the Southern classification regardless of trade conditions at that time. There were two objects. One was to overhaul it and improve it, and the second was to get more revenue. We did not make any attempt to deny that we were for more revenue, but that we were after both objects.

Q. I would like to, if possible, bring out the basis on which you make such changes, where you advance from one class to another. Do you ever compute or have in mind the direct increase in revenue which will result, or do you look solely to the commercial conditions which prevail in respect to that commodity?—A. We do both. We try to consider everything, every fact, every circumstance surrounding that particular question. Our committee adjusts that matter precisely as this committee would do if called upon to state what the rating ought to be on any article, say, candles in boxes. You would want as full information as you could get; or if you had already fixed it and were asked to reduce it you would want all the light you could get. The principal duty of the chairman of the classification committee is to get that light. In the old manner of handling it, they did not have anyone whose duty it was to get that information. We take an article, consider the weight, the specific gravity, and all that sort of thing; and the value of it. Then perhaps further facts are presented to show that local factories are springing up in the South, etc. There is nothing exact in it. If there were, we would all find it easy. We take a thing and measure it and weigh it, and compute its risk to begin with.

Q. The cost of transacting the business is in a very small degree the basis of your charge?—A. Of course we always have that in mind, especially with respect to heavy articles; but we do not figure what the cost of transportation would be. We can not do that.

Q. You have some letters there illustrative of the way in which you handle some of these questions. Perhaps one or two of those might be of interest, without taking very much time.—A. I brought along a few—I will leave them all with the commission—a few of what we call docket advices. I will read one. (Reading:)

[Docket No. 1291.]

SOUTHERN CLASSIFICATION COMMITTEE,
Atlanta, Ga., April 9, 1901.*Hair, for plastering. (Previous No. 1012. File 831.)*

Listed upon request of Mr. W. T. Tilden, No. 250 North Front street, Philadelphia, Pa.

The present classification on plastering hair is as follows:

Hair, viz:	Class.	
Plastering, pressed in bales, or in paper sacks, compressed in bundles, L. C. L.	3	
Same, C. L.	4	
Official:	L. C. L.	C. L.
Hair, n. o. s., in paper sacks, compressed in bundles	2	..
Hair, n. o. s., in compressed bales	3	..
Hair, as described above, min. wt. 20,000 lbs.	..	5
Western:		
Goats', hogs', and plastering hair—		
In paper sacks, machine compressed, in solid bundles	3	*5
In sacks	1	*5
Pressed in bales	3	*5

The request is that the minimum carload weight be reduced to 20,000 lbs., on the grounds that that minimum is accepted in Eastern territory and that an ordinary car will not load to the required minimum.

Respectfully submitted.

P. J. MCGOVERN, *Chairman.*

Now, that was not reached at the last meeting. We did not complete the docket, or I could tell you what they decided to do. What I think they ought to do is to grant the request. I think that the minimum on that plastering hair ought not to be more than 20,000 pounds. I will see if I have another one.

The witness submitted Docket No. 1295:

[Docket No. 1295.]

SOUTHERN CLASSIFICATION COMMITTEE,
Atlanta, Ga., April 9, 1901.*Butter and cheese in common and refrigerator cars. (Previous Nos. 336, 501, and 561. File 324.)*

The Armour Packing Company, of Kansas City, Mo., has written several of the members, and also the chairman, urging a reconsideration of butterine.

Prior to the issue of Classification No. 26, the rating on butter was as follows:

Butter (in common and refrigerator cars), viz:	Class.
In cans, boxed or crated	3
In cans, n. o. s.	2
In kegs, firkins, buckets, pails, and tubs	3
Classification No. 26:	
Butter, viz—	
In cans, boxed or crated, kegs, firkins, buckets, pails, or tubs, in common cars	1½
Same, in refrigerator cars, carrier's option	1
Classification No. 27:	
Butter, viz: In cans, boxed or crated, or in kegs, firkins, buckets, pails, or tubs	1

The chairman understands that the Armour Packing Company request that the ratings shown in Classification No. 25, and as quoted above, be restored.

Respectfully submitted.

P. J. MCGOVERN, *Chairman.*

That butterine question has a history all by itself. We advanced that further back, independent of that general advance, because we had it so low that, when we did the icing on mixed lots, it cost the carriers sometimes more than the entire

* Min. C. L. weight 20,000 lbs.

revenue. Mixed lots of cheese and dairy products were carried so very cheaply down through Louisville to Atlanta and that country that some of the lines—and especially those which carried for way points, so that there was very little left in the car for the long distances—paid more out for ice than the gross revenues on the shipment; therefore, we put the rate up. The Armour Packing Company asked that we restore that old classification, because they said that their butterine is shipped in with mixed packing-house products, and that they pay their own icing. (Reading last paragraph of Docket No. 1295:)

"The chairman understands that the Armour Packing Company request that the ratings shown in Classification No. 25, and as quoted above, be restored."

Well, now, that was denied. If all butter and butterine were shipped in or with solid earloads and the shipper paid for the icing, we could probably afford to do it, but we can not make a lower rating on that than we do on the butter business generally shipped in small lots. So the committee denied the application.

Q. Have you ever had an appeal to the courts in respect to your classification of any particular product, or to the Interstate Commerce Commission?—A. I do not recall any complaints since the committee was organized. The Merchants' Association of New York, I understood, was going to file a complaint with the Interstate Commerce Commission; whether general or specific I do not know. I have not heard anything further about it. I do not recall anything done by the committee which has been made the basis of a complaint to the Interstate Commerce Commission.

Q. Another topic that I would like to have you speak upon, if you will, is that of underbilling and the degree to which the railroads might possibly be protected against underbilling by the action of some governmental agency, through the Interstate Commerce Commission, through inspectors, or some other way. Will you describe the situation as far as underbilling is concerned?—A. I am glad you asked that question. This matter of underbilling, by which we mean either underreporting of weights or false description of goods for the purpose of getting a reduced rate, is one of the most troublesome things that the transportation lines have to contend with to day. It is not only because they lose revenue by this underbilling. That is probably not the most serious feature of it. It either prevents the honest shipper from doing business or drives him into underbilling himself. That is the very worst feature of it.

Q. Will you give us some examples?—A. Well, I do not want to mention any names. I do not want to name any firm. I have a particular individual or firm in mind, and this kind of test was recently made. The shipments of a large jobbing concern in one of the Southern cities by a single line of railroad from that point in one day were weighed and carefully inspected, and were found to be underbilled some \$11. Thinking perhaps that it was an exceptional case, the parties making the investigation waited a week or 10 days, or some longer time, and made another somewhat similar investigation, and found the underbilling to be \$17 that day. Now, there are several lines at that point, and the conclusion then reached was that that particular house was probably underbilling \$50 a day. Whether they got the benefit of it or simply gave it to their customers, we have no means of knowing. If they sold the goods delivered, they took the benefit of it themselves; if they sold f. o. b., of course the customer would get the benefit of it. But the very worst feature of that particular thing is that there is another house in the same city and in the same line of business that, I believe, does not underbill, or certainly does not want to underbill. I maintain that it is the business of the carriers, no matter what it may cost them, to stop the underbilling by the concern that does underbill, and therefore remove the temptation from the other concern that does not want to do it.

Q. This same underbilling may take place by what we might call underclassification, may it not?—A. I meant by underbilling the underbilling of weights and misdescription of the goods to get lower than the published and legal tariff rate.

Q. Did you not state to me that they went to the extreme at one time of shipping matches and gunpowder in the same package?—A. I do not remember that. I remember stating that we found a case where whisky was billed as molasses. If I had the time to show you all the ingenious ways in which this thing is attempted, how brazen some of them are, the commission would probably be astonished. Whisky was billed as molasses. Vinegar was billed as molasses.

Q. (By Mr. PHILLIPS.) Well, vinegar billed as molasses would be cheaper than molasses, would it not?—A. The rates in that country on molasses are lower. Whenever the rate on one article is no lower than on the other article, there will be no false classification.

Q. Could you name some other matters along that line—some further illustrations of underbilling?—A. I could mention some apparently systematic underbilling. Why, it is coming up every day, and more frequently—all sorts of false descriptions.

Q. Explosives?—A. I don't remember anything so desperate as that. They will take a part lot of machinery that has a fly wheel in segments and try to get that shipped separately on a different car as rough castings. There are thousands of devices.

Q. Do the railroads ever have part in that in order to give cheaper rate of freight?—A. Undoubtedly. There is no doubt in the world that many soliciting agents have put the shippers up to it. A man came to me a year ago—a manufacturer of overalls and hickory shirts in Atlanta—and showed me a letter from Rice, Stix & Co., of St. Louis, complaining that the rate had recently been put up. Well, the fact was that he had been billing as cotton-factory products, and some inspector had discovered it. He said: "I do not remember who it was, but some fellow told me to bill my goods as cotton-factory products." I did not try to pump him about it. I did not care. It was none of my business, but I advised him what to do and wrote him a letter. I said: "I could lend you encouragement and say that the matter will be taken up at the next meeting, and you would go home satisfied that something was going to be done; but I will not do that, because I know they won't reduce the classification. What you want to do is to go to the rate makers and get rates from Atlanta to Ohio River points and St. Louis, etc., on your goods as a commodity; and because you can show that you compete with Baltimore that you are entitled to low rates out in that country." Whether he did it or not, I do not recollect. As to what percentage of the total underbilling is either instigated or connived at by the railroads it would be the merest guess in the world, but I am satisfied that it is a very small per cent of the total.

Q. Would it not be criminal where the railroads have connived with them?—A. It would.

Q. It would be a violation of the law in discrimination, would it not?—A. Yes; the worst kind—morally bad as well as legally bad.

Q. You believe that obtains quite largely in your section?—A. I think it is a small percentage of the total underbilling. I say I have not the slightest doubt that in many cases it is started in that way. The soliciting agent is greedy for business, you know, and tells his customer how to go about the matter; to bill his goods as cotton-factory sweepings or bill it as something else. But I am sure that is the cause of a very small percentage of the total underbilling.

Q. (By Mr. RIPLEY.) And yet the percentage of all shipments which are underbilled is considerable?—A. It is considerable. I seem to see more of it all the time. Now, whether it is a greater percentage of the total volume of business than it was 10 years ago I do not know. The business is larger, and it may be that there is not any greater percentage of underbilling, but it seems to me there is.

Q. Are the agencies, such as your committee, protecting the roads or acting in any way to prevent this?—A. Our committee has no machinery for that at all, but the traffic associations have. An effort is under way now to extend that work very much in the Southern territory.

Q. (By Mr. PHILLIPS.) Well, do the traffic association take measures to prevent this, do you think?—A. Yes.

Q. You think they are working for that, do you?—A. Yes; they have some agents, but they have not enough.

Q. (By Mr. RIPLEY.) Would it be possible in the nature of things for any single road to be rigorous in its policy of making inspection and of enforcing a particular classification rate from a general agency?—A. It should be from a general or joint agency.

Q. Do you see any advantage in having the enforcement of that classification to some degree intrusted to a body like the Interstate Commerce Commission?—A. I do not.

Q. Do you think the railroads are perfectly competent to take care of that themselves?—A. I do, if they want to; yes. I go further; I say if they want to do it they can do it, and if they do not want to do it either the Interstate Commerce Commission or any other tribunal would have trouble in attempting it. They would have all sorts of obstacles. The record books would be in the press, and a thousand excuses would be given. Now, if the roads want to do it—and I think they ought to do it in protection to the honest shipper—they can do it, and they are doing it to a greater extent in the North and East than we are.

Q. (By Mr. PHILLIPS.) Have you any legislation to suggest along that line to prohibit that?—A. To prohibit underbilling?

Q. Yes.—A. I think the present legislation is adequate, but it seems hard to convict; at least convictions are very few. The penalty is all right now for underbilling. Maybe it is too heavy, and if made lighter there would be more convictions. There ought not to be any imprisonment. I think the fine is enough. There is a fine and imprisonment now. I think the imprisonment feature ought to be repealed. It is more difficult to get a railroad agent or a shipper up to the scratch of testifying against the other fellow when the penalty is a term in the penitentiary than it would be if the penalty were a thousand dollars or five hundred dollars fine. I think the imprisonment feature might be profitably omitted.

Q. Do you think a fine would be sufficient to prohibit?—A. I think it would in a great many cases.

Q. Would you make that fine cumulative?—A. I would if it could be shown that it was deliberate. I would not stop at one prosecution. If a fellow had been under-billing vinegar every day, from one to five dollars a day, he ought to pay more than the fellow who did it only once. The presumption would be that he did it deliberately, and he ought to be made to pay for his wrongdoing. But apart from the question as to whether the law provides adequate penalties, or whether it is practicable to enforce a law in that respect, it is the moral duty of the carriers, regardless of expense, to see that this thing is stopped, if only to protect the shipper who does not resort to it. It is one of the greatest abuses to-day in the whole traffic field, in my judgment.

Q. (By Mr. PHILLIPS.) Are not the companies who own their own cars using them for discriminating purposes also?—A. Shippers who use their own cars?

Q. Yes.—A. You refer to the mileage question, now?

Q. Yes.—A. It has been done. You mean that private companies carry their own goods in their own cars and receive a greater mileage than allowed others?

Q. Yes; lower rates.—A. Yes; that is correct. It is done, as I understand it, by allowing them a greater rate per mile for wheelage than is paid others, and which is usually three-quarters of a cent per mile per car. I have heard of cases where they paid 1 cent, and often more, per mile to the owner of that car.

Q. (By Mr. FARQUHAR.) Do you regard the giving of commodity rates as a discrimination on the part of the roads in favor of shippers?—A. Not at all.

Q. Are commodity rates a favor to the road or a favor to the shipper?—A. If a commodity rate is made by a carrier it is supposed to be an advantage to both. It enables the shipper to move his business and enables the carrier to obtain new traffic at a profitable rate.

Q. What is your policy in respect to giving commodity rates instead of putting it into classes?—A. Well, in most cases the commodity rate governs only where the business is to move. If you reduce the classification you reduce it all over the territory. Now, I gave an illustration of that a few moments ago. There is a man at Atlanta manufacturing these cheap overalls and shirts. He wants to ship to St. Louis. I told him it was useless to ask the classification committee to reduce the classification on those things to fifth class; that he did not need it; that he did not want to have them reduced unnecessarily. I asked him if he had any trouble shipping to Birmingham? He said: "No, sir; no trouble in shipping to Birmingham or to Chattanooga. The only trouble is to get out to St. Louis and the other territory and up there where I come in competition with Baltimore." I went on to tell him how to get it to the attention of the traffic association and then wrote him a letter confirming that. Now, if it were a question between that man's not doing business at St. Louis and our reducing our rates all over the Southern territory on overalls and shirts, we would be obliged to say: "You can not do that business; it will cost us too much to enable you to do that business."

Q. Why should you take care of his business in St. Louis?—A. I do not think it was wrong. On the contrary, it was right for the roads to help him to go to St. Louis, because the roads are in business and he is in business, and they help each other and it becomes a partnership. I have got a pair of overalls here that I have to land in St. Louis at a certain price, and in order to do that I will put my price down and you must put your rate down. It seems to me it is a fair, sensible business proposition.

Q. Well, if you take up overalls, how many other articles will you take up and make commodity rates on?—A. The rate-making people are taking up and extending the rates all the time.

Q. So your policy of classes will amount to a very little if you go on?—A. It amounts to a great deal.

Q. Through commodity rates you can encourage the road there to give commodity rates when they can not take regular class rates?—A. It does not encourage the roads to give commodity rates. I do not know that I clearly understand you.

Here is an article that is first class in the classification. If it were reduced to fifth class that would reduce it all over the South on every line, regardless of distance, regardless of origin or destination. I say to a manufacturer that it is useless to ask the classification committee to do it, but that there is no reason, it seems to me, why he ought not to have a rate to St. Louis which will correspond to the rate that his competitors have, and that in order to accomplish that he must go to the traffic associations, and I tell him how to go about it. Now, I can not see that that was not a perfectly sensible proposition from both sides.

Q. In other words, he was a pet patron, and all the rest had to take the classification you gave them?—A. Not at all; no pet. It was no more than I would do for any other manufacturer.

Q. Why, the railroad immediately interfered there in the Baltimore trade?—A. Yes. The Baltimore fellow did not like it, and the line running from Baltimore to St. Louis probably did not like it.

Q. No other manufacturing man in Atlanta there got the advantage this man did to get the goods out to market?—A. Yes.

Q. Commodity rate?—A. Yes. We do it for the furniture people, bag manufacturers, paper-box makers. It is the policy of the Southern roads to do that, and, I may state, the policy of the Western roads and the Northern roads. When they reach out beyond their own territory to compete with other shipping points they put down the rates or make commodity rates.

Q. It has been the general policy of the Southern roads to give commodity rates?—A. No, sir; I can not say that. What I would say is it has been the policy of the Southern roads to make commodity rates for Southern manufacturers, to enable them to reach out for trade, but not to reduce the classification of freight within the territory, because it is unnecessary.

Q. (By Mr. RIPLEY.) Do I understand that by the reduction of commodity rates all persons got that same rate, but that the reduction of the commodity is made by each railroad independently?—A. No; the commodity rate shows exactly between what points it governs. That is what we mean by a commodity rate.

Q. In other words, all manufacturers of that commodity in Atlanta get the same advantage in reaching St. Louis?—A. Precisely.

Q. Without discrimination?—A. And, further than that, if there were similar manufacturers of the same goods in Birmingham, Montgomery, Macon, or Augusta, or any other point down there, we would give them a corresponding reduction.

Q. (By Mr. FARQUHAR.) Is not that a discrimination?—A. That is a discrimination in their favor, but not an unjust discrimination. I claim that is a sensible business-like discrimination, and that is just how the business of the country has been built up. Unless it can be shown that the purpose was directly to give that man an advantage over somebody else in his neighborhood or in his territory, I can not see anything wrong about that. That has made our Southern iron business. We make lower rates northbound on pig iron than on manufactured iron articles coming into that territory.

Q. I believe you said the reason you raised the iron and steel tariff there was because the railroads, in their equipment and otherwise, had to use iron and steel, and a higher price made a higher rate?—A. Yes.

Q. How long did that measure of recompense hold on the roads?—A. It is in effect yet.

Q. Now?—A. Yes. And that brings up another feature of that iron matter. The Old Dominion Works at Richmond had some correspondence with me about that iron and steel list, and I told Mr. Clark, who is president, I think, or wrote him, that it might be that a little later on we would have to revise that list again. Things might settle down; we might have to put the ratings back, but we did not think the time had come yet. We can not tell what the conditions may be a year from now. We may have the ratings on iron 12 months hence lower than when we started.

Q. (By Mr. CLARKE.) Are these commodity rates mostly remunerative to the roads?—A. They are believed to be. I do not believe that any general freight agent or any traffic manager has ever yet made a rate lower than he believed it would cost him to haul the business.

Q. That being the case could not the roads afford to reduce all their rates to substantially the basis of the commodity rates?—A. Not at all. I have just said on this question of overalls that we would tell the manufacturer in Atlanta that if it were a question between our having to reduce the whole classification all over this territory to the fifth-class basis, and saying to him that he should not ship to St. Louis, we would be obliged to say to him that he should not ship to St. Louis. Now, it seems to me that answers that question. We can not afford to reduce it all down to the commodity rate basis, but we can afford to haul it at a much lower rate to St. Louis than we are hauling it for, and still make some profit on it, if it enables the manufacturer to do business. It seems to me that it is precisely like a man's stock of goods. He will sell some of it at 5 per cent profit, and some at 10, and on some he is obliged to make 40 or 50.

Q. (By Mr. FARQUHAR.) That is honest.—A. That is the whole traffic question right there.

Q. (By Mr. CLARKE.) If you had only commodity rates then, you would hardly be able to do business?—A. If we reduced all the rates down to the lowest rate basis, commodity rate basis, we would go into bankruptcy.

Q. Then the commodity rates are remunerative only as an exception to the rule?—A. They are remunerative as additional business—for increased traffic.

Q. Do you have any other shipment contracts with any steamship companies?—A. You mean for the Southern railways.

Q. Yes.—A. They have their traffic arrangements for dividing the rates on percentages. You mean coastwise steamship companies?

Q. No.—A. Oh, I do not know of any contracts with transoceanic lines. There may be; I do not know anything about that.

Q. (By Mr. FARQUHAR.) Is it a fact that the great Southern manufacturers and producers of iron and steel and coal there got their start from discriminating rates, commodity rates?—A. They got their start from our joining with them in meeting the competition outside of their territory, but we did not reduce the rates correspondingly on all the iron products coming into the territory. To illustrate: The Peninsular Stove Works at Detroit wants a lot of pig iron, and they say they are going to get it where it suits them best. The furnaces of Birmingham have to enter into competition with the Mahoning Valley furnaces and the Pennsylvania furnaces, and in order to enable them to do that the Southern roads make them a rate as low as \$1.50 a ton from Birmingham to the Ohio River, but not less than what it costs, them to handle it. They still think they made a little profit. The pig iron is made up into stoves and shipped back to Anniston or Birmingham. If it came to a question of hauling all iron in that territory on the pig-iron basis, or telling the pig-iron furnaces to close up, they would have to say, "Gentlemen, you will have to shut down your furnaces. We are not going with our eyes wide open into bankruptcy, and that is what this would mean." There is one feature in this whole thing that it seems to me we always ought to keep before us. The making of a competitive freight rate, mind I say competitive, is subject to precisely the same conditions as the price of the thing unshipped. You meet competition if you have to, and the maker and the carrier join in a partnership, and both are helped, and nobody is hurt, except the man who would have done business from some other point of shipment, possibly. The shipper is not hurt, the carrier is not hurt, the user or consumer is not hurt, and that is the plan on which the internal commerce of this country has been developed.

Q. (By Mr. RIPLEY.) Is it not true that there has been a very great increase in the number of these commodity rates in recent years?—A. They are on the increase. Your mean in our territory?

Q. In your territory.—A. They are on the increase.

Q. Quite rapidly?—A. They are increasing right along, and usually the increase is on some new article of manufacture. There is a concern in Atlanta just starting in the manufacture of rugs. How in the world they do it, I don't know. They bring the wool from Philadelphia, and make it into rugs, and then they ship them out West. The secretary of that concern talked with me, and he probably has asked for a line of commodity rates on his products from Atlanta, not to points right around there, but to points out West where he was reaching out into that territory.

Q. You spoke sometime ago of the rates upon pig iron as compared with manufactured products. Do I understand you to say at the present time that the rate on pig is lower than the manufactured iron?—A. What I meant was this: That we make lower rates on pig iron, and for that matter, on other products of iron from all points in the South to points outside of that territory than we do on all iron products coming into the territory. For the cast-iron pipe people at Bessemer and Anniston, we make rates on their pipe out to Ohio and all that Western country, and East, at about the same rate as pig iron.

Q. (By Mr. KENNEDY.) You can not make it lower outside of your classification boundaries can you?—A. As far as we reach. We make them through to New York and Boston, and to the Ohio River when going to the Western territory.

Q. (By Mr. RIPLEY.) However, there have been times when the rates on pig iron was higher than the rate on manufactured iron?—A. Yes; that was true once, and it came about in this way. There was a time some years ago when they made the cast-iron pipe rates from the Birmingham district to the Ohio River the same per 100 pounds as pig iron. You see that made it read less per ton because cast-iron pipe is 2,000 pounds and pig is 2,268 pounds per ton.

Q. Right there, in that same connection, is it not true at the present time that the rates on cotton manufactures are lower than the rates on raw cotton?—A. Yes; in some cases they are. They are higher and lower. The rates are not made with relation to each other, but it is a fact that the cotton rates from the South are in some cases higher than the rates on the factory products. As I say, they are not made with relation to each other; they are made on a different basis.

Q. Would it not seem to introduce an element of injustice between Northern and Southern mills if the Northern mills have to pay more on their raw material than you charge on their manufactured product?—A. Oh, in a general way, yes. I would say that the raw material ought not to be higher if it would cut any figure. I do not believe it cuts much figure, and, in a general way, I would say that the rate on raw cotton ought not to be higher than on the same thing when its value is increased by the application of skill, or by manufacture.

Q. Now, is there anything in the nature of the railroad business itself which would tend to lead the carriers to bring into line the raw product and the manufactured product for the protection of the New England competitor?—A. If it had amounted to anything, it would have come up before this. Now, the New England manufacturers have not raised the point, and if they did raise it and urge it, I do not know whether we would reduce cotton rates or put up the other thing; but it does not seem to have affected the business one way or the other. I do not know that there is any necessity to reduce those cotton rates.

Q. I found quite a little complaint at Richmond of the difficulty introduced into business by reason of the fact that all their products coming in from the West to be shipped into the Carolina territory came into Richmond on the official and then went south on the Southern, whereas the Western manufacturer who ships directly into the South ships on the Southern classification all the way?—A. That is right.

Q. Can you suggest any way of obviating that difficulty by the extension of the uniform classification, or anything of that kind?—A. Well, it does not grow out of that trouble. The complaint would exist even if there were only one classification. It comes about in this way: The rates from the West to Richmond, proper, are subject to the official classification—that is, the rates to Richmond on goods stopping there. The rates are made the same as to Baltimore. But on through business going into the Carolinas, not Atlanta, not Charleston, not Savannah, but into the Carolinas and a few points in Georgia through Richmond, they have what they call proportional rates to Richmond, subject to the southern classification. It has been done since 1886. That is what the Richmond people complain of. In other words, it is not so much of a classification question as it is a rate question. If there were only one classification, we might still make a lower proportional rate to Richmond on business going beyond than when it stops there. Take Cincinnati. Cincinnati to Richmond is 62 cents, but the proportional rate on business going to the Carolinas is only 32 cents. The classification does not have much to do with it.

Q. A very important question before this commission is that of uniform classification, prescribed or not by the Interstate Commerce Commission, but in any case a uniform classification for the whole country; and a large contingent of shippers in the South complain at the present time because of the difficulty in computing or verifying their rates, through the existence of these different plans of classification. In your judgment is it possible or will it ever be possible to bring these several classifications together, or to prescribe a single one for the whole country?—A. A great deal has been said about a proposed uniform classification to govern all over the country. In my judgment that thing is not impossible, but I believe it to be impracticable, and I believe that if they had it they would find that it did not cure all their ills, that its value had been overestimated. I have stated that I believe it would be impracticable. I will explain that. Ignoring all questions of exception sheets, just let us suppose that there are only three general classifications in the country now without any exceptions to each. Suppose that it was the duty of the Interstate Commerce Commission, or of a general committee, or of this commission, or any other body to unify those three classifications, and to bring them into harmony and at the same time not to violently disturb existing rates. Now then we would go about it something like this. We would take the official classification and the Western classification and the Southern classification, and we would go through them item by item. We would strike an article that was first in one and second in the other and third in the other. To bring it down still finer and better, perhaps, take cotton-factory products. They are first in the Western territory, they are third in official territory, and they are to-day fifth in the Southern territory. Now, how would we reconcile that? Bear in mind that we do not want to violently disturb existing rates, which are believed to be about right. Well, the official man would say, I do not want to put that up to first-class, and I do not want to reduce it to fifth. Now, Mr. Western, you must meet us half way, and Mr. Southern you must meet us half way. We must strike a compromise somewhere, and, if we do, we will have a complaint from everybody where we advance rates, and we will reduce unnecessarily in some other cases, or else we must start a separate class. Well, call that class 19, if you please, or class 36. When we got through, there would be probably 80 or 90 or 100 classes. Now, nobody wants to see anything of that kind. Nobody wants any 100 class classification. That is why I say I believe it would be impracticable. Fundamentally, and more important still, I think is this: That the country is so vast and conditions are necessarily so unlike. Conditions are not the same in Maine as in California or Florida. As an illustration of that: Some time ago we established a rating on tree-covers. A man in Florida has a patent there for what he calls a tree cover. It is made of canvas, and there is a framework that folds up and is put in a package. It is made to protect the orange trees in case a sudden frost is threatened. Now they have not anything like that in Indiana; they have not anything like that in official classification territory; and we made a much lower rating, I am satisfied, on that than if it were to govern all over the United States, because we wanted to protect the oranges so we could get the haul of them.

Q. (By Mr. PHILLIPS.) Now, there is one statement you made in regard to the difference of classifications in the different sections of the country on cotton.—A. Cotton-factory products?

Q. Yes. Now, would there be a reason why it should be class No. 1 and a much higher rate in the West than it is in the South and East?—A. There is an excellent reason.

Q. And is there much difference on other things in the other classifications in these different districts?—A. The rates may be higher or lower in one section than in another, but here is a case where the classification also differs.

Q. Well, the class No. 1 in the West would be much higher than No. 4 would be in your section, would it not?—A. Yes; it would be higher there. Their first-class rates for like distances are higher than our fourth-class rates, I think; but even if they were not higher, there would still remain the difference in the classification, whatever the scale of rates might be in the different sections. We are supposing that we want to try and harmonize these classifications. Now, the only way we could do that would be to start a new class for cotton-factory products. I do not see any other way in the world to do it.

Q. But if there were no difference in the cost of hauling, then you could make a lower classification, couldn't you?—A. Oh, we would not stop at the cost. We would have to consider all the circumstances. Now, answering the chairman's question as to why cotton-factory products ought to be first in one section and third in another and fifth in another. I do not know about the Western territory, but I can understand that out there it is purely a consuming territory. They are simply dry goods to them. There is no question of encouraging the development or growth of cotton mills. It is a simple dry goods proposition out there, and they have got it first class. The official territory where they are third class is both a producing and a consuming territory, and the third class, I have no doubt, was a compromise in 1887 when they first made and adopted the official classification; a compromise on all the rates they had in force. I have no doubt that about 1887 the New England mills had very low commodity rates to the West. It was probably 50 cents to Chicago, and the third-class rate from New England to Chicago to-day is 50 cents. I have explained as to our territory that we started out with sixth class, which is the lowest merchandise class. That was done to put these Southern mills on their feet. We afterwards put it up to fifth. To-day we have commodity rates to the West, in competition with the New England mills, which are lower than fifth class and actually even lower than sixth. We have tried to fit the tariffs and classifications to the conditions, and that is what the other fellows have done, I am satisfied, in the North and West.

Q. (By Mr. KENNEDY.) What will they do when there comes a community of interest in all these railroads?—A. I think it will gradually level itself up when the conditions get alike as to density of traffic and when each territory is a producing as well as a consuming territory. It will gradually level itself up, and I think that finally, though it may be some time hence, the rates will be as low in one section as in another. There is not any inherent reason why a road in the State of Ohio, earning so much per mile per annum, should not have about the same rates as a road in any other State where the population and business are about of equal density, which earns about the same revenue per mile per annum. There is no inherent reason why the rates in Florida should be higher or lower than in California or Maine. It is a question of commercial conditions.

Q. (By Mr. A. L. HARRIS.) Is it possible to have a uniform classification all over the United States?—A. It is possible, but you would have so many classes that it would be an impracticable thing. It can be done, there is no doubt about that, but it might take 200 classes—I don't know; but if you were going to put everything in the same class in all of the three classifications, and at the same time not violently disturb the present rates, it could be done only by the multiplication of the number of classes.

Q. If it could be done, would it simplify rates going from one territory to another?—A. It would where the rates are made on combinations, as we call them. A combination rate means a through rates, made by adding two rates; and where you cross these boundaries, like the Ohio River and the Mississippi River, you have to make a combination rate. Undoubtedly it would be more easily done if the same classification governed up to the boundary and beyond. But a great deal of the trans-boundary business is made on through rates subject to classification for example; and from Pittsburg and all territory east of there through rates to our section are governed by the Southern classification. You go to Buffalo or Boston and ask for the rate to Atlanta and they will show you a tariff with a through rate governed by the Southern classification. That is done for convenience, and done also to keep the interior in line with the port.

Q. (By Mr. RIPLEY.) I would like to ask you to speak on the peculiarities of the Southern situation as far as the long and short haul is concerned, the existence of water competition, and the difficulties which the roads experience in making rates under those circumstances.—A. The principal difference between the rate system in the South and in the other two general sections of the country is that we have lower rates to what we call basing and competitive points than we have to the small local stations. Those competitive points started out with water points like Nashville, Pensacola, Selma, Augusta, Savannah, Charleston, and New Orleans. They begin there. When the first roads were built they had to meet those rates. If they did not exactly meet those rates they partially did so and had to fit their tariffs to the conditions as they

found them. Later on, as new roads were built, a new kind of competition sprang up; that is, the competition between rail carriers. Here is Atlanta, a point of consumption; here is Baltimore. There is a system of rail carriers from Richmond to Atlanta, say, and another set of carriers from the West to Atlanta. There was competition between carriers and between markets that got the rates down to these large all-rail points, where there is no water at all, and those points have grown in number, but not greatly so, from the construction of new roads. Now, in the South, we have not believed that we ought to be called upon to put down rates to every intermediate point, where competition does not exist, because we do meet the competition at one of these competitive points. That is our position on the long and short haul clause. The only difference in conditions as between Georgia and Ohio is that in Ohio they had about reached a flat fourth-section basis before the law was ever passed. I remember asking Mr. McLeod, of the Cincinnati, Hamilton and Dayton road, just after the law went into effect, or about that time, how he made grain rates from points along his line to the East before the act to regulate commerce went into force. He said, "Well, of course, at Cincinnati we had our rate fixed at 87 per cent of the Chicago rate. Then we would go out and make the first group of stations about 1 cent higher than Cincinnati. We found that that was about as high as we could get, because at the next group we would strike nearly always East and West lines, and if we made it more than a cent higher from a given point, why then we would find it going some other way." When he got through, I said, "Then your rates are about the same as they were before?" And he said, "Just about." I said, "You get just about the same proportion out of them?" And he said, "Just about." I had previously said to him, "How did you divide your rates when you made them just 1 cent or so higher than the common point?" He said, "We added that 1 cent to our common-point proportion. After the law was passed they all blocked their roads out so as to give each line not less than 150 miles in the division of the rates." So I said, "Your rates are just about the same as they were, and your proportion is just about the same?" And he said, "Just about." That country up there is so gridironed with roads that they can not make the rates as we do in the South. The conditions are different. When we get enough roads in the South we will get to make our rates as they do in the North; we will just fall into it naturally.

Q. Your justification of the reduction of the rates to a competitive point where there is either water competition or the competition of several roads would not seem necessarily to apply to points which are not on the water and where railroad competition is not so extreme? I refer to places like Albany and Americus, Ga., and Cordele. Those are purely arbitrary basing points, are they not?—A. They are not; no. If one single line at one of these points says "we are going to make this a basing point because we believe it to our interest," there is competition and the others must meet it. You have got to compete not only with sensible traffic officials on the roads, but with others who are not so sensible but who are still doing what they believe for the best interests of their road. Now, competition is anything that compels a carrier to reduce a rate.

Q. Does it seem fair and just that the action of one road which, as you characterize it, may not be acting in the wisest way, in designating a certain point as a basing point, and giving it lower rates than the surrounding district, should be followed by the other roads, and that thereby that particular town should be built up at the expense of the surrounding country?—A. It is the road that first reduces that does it.

Q. And it compels all the others to do the same thing?—A. They must meet the rate or stay out.

Q. Is there not a disposition on the part of some of the more conservative roads to object to the designation of some of these new towns as basing points?—A. Undoubtedly so. I do not say that every basing point ought to have been made so, and I think some of them ought not. I think Cordele is one that ought not to have been made a basing point, but one line forced it and thought it was going to be to its interest to do so.

Q. Do you not, in admitting the system, open the way to just such arbitrary discriminations between towns as you have described?—A. Why, yes; we make it possible.

Q. And does it not sometimes operate to the disadvantage of the more conservative policy of the roads themselves?—A. Why, undoubtedly; if a line makes an unnecessary or unwise reduction, it operates to the actual loss of the more conservative lines.

Q. Do you see any way in which, either by legislation or by change of policy on the part of the roads of the South, this tendency to designate a number of towns arbitrarily as basing points may be stopped?—A. It will not be stopped, but it is going on very slowly, and there is very little more of it now than there was 15 years ago. There has been no tendency to rush into the thing. There have been very few points added to those low-rate points.

Q. I find a good deal of dissatisfaction in parts of the South, in certain towns, because competitive towns have been thus designated as basing points, on which the rates to the whole surrounding country are based and fixed, and there seems to be a feeling on the part of those towns thus discriminated against that they should be protected in some way by the interstate-commerce act or by some other agency, by the railroads themselves, perhaps.—A. I know there is such a feeling. I have testified in cases of that kind.

Q. Can you suggest any remedy, or have you any to propose?—A. I do not think they are entitled to any remedy. It is due to competition and competitive rates. If you reduce all the points around there, that is not competition. That is where the injustice may come in.

Q. Do I not understand that there are basing points where there is no competition—points on a single road?—A. No; I do not know of any such points. We speak of basing points and competitive points and common points in about the same sense. I referred to Atlanta, Macon, Albany, Americus, Selma, Birmingham. Birmingham has no water competition, but the rates have been forced down there below the Atlanta basis from the West. They are always lower than to Atlanta from the West. In the Social Circle case I think it would be a great injustice to Augusta to give Social Circle the same rates.

Q. You say that Birmingham has lower rates?—A. From the West.

Q. Lower from the West than Atlanta?—A. Yes.

Q. Is it not true that Birmingham and Atlanta have the same rates from the East?—A. That is true.

Q. Now, I find great complaint at Atlanta from that condition. They say that if Birmingham has the same rate east through Atlanta that Atlanta has the roads in the opposite direction ought to give Atlanta the same rate that Birmingham has.—A. Not at all.

Q. Will you explain why?—A. Yes. From the East those points have been grouped. Birmingham and Atlanta have always been in that group. It was a compromise.

Q. Who put them in that group?—A. The roads.

Q. For what reason?—A. Because they had a group basis; that is all. Now, coming to the adjustment from the West, the rates were about the same to Birmingham as to Atlanta. But when the Kansas City, Memphis and Birmingham road was built from Memphis to Birmingham, some 12 or 13 years ago, why, the map was changed. That road said: "We are not going to make the rates from Memphis to Birmingham, our own points, any higher than from Memphis to Chattanooga." They finally compromised on a scale of figures. They made them themselves. They did not compromise with other carriers, but they compromised with themselves on a scale of figures beginning with 75 cents first-class. Before that it had been 90 cents first-class, as I remember. They made it 75 cents first class, and those are the rates to-day. I was with the Louisville and Nashville road at that time, and we endeavored to hold the rates as they were from the Ohio River, Louisville, Cairo, Evansville, and Cincinnati, and we did hold them for a while. Finally one line from one point on the Ohio River said: "We will not stand it any longer. We are going to put in a rate of 4 cents above Memphis." This is the established differential and was fixed by Judge Cooley's decision in 1886. And they made a 79 cent scale from Louisville, Cairo, and Evansville to Birmingham, and those are the rates today.

If Atlanta is entitled to lower rates from the East than govern to Birmingham and other points west of Atlanta, then why is not Athens, Ga., entitled to lower rates from the East than Atlanta, because Athens is east of Atlanta; and why, in turn, would not Elberton, Ga., be entitled to lower rates from the East than Athens, because Elberton is east of Athens? Yet Atlanta and Athens and Elberton all take the same rates from the East. It is simply this: That each shipper is, naturally and properly, looking out for his own interests. Now, if you scale the rates out on distances, regardless of general conditions, commercial and otherwise, which govern in fixing freight rates, you would make Anniston lower than Birmingham and Birmingham lower than Montgomery, which the Atlanta man does not want. We simply stopped at Birmingham, so far as the rates from the West were concerned. The situation at Birmingham was forced upon us, as already explained. We did not go farther than that.

Q. Why not stop at Atlanta and force it on some other town?—A. There was no line reaching Atlanta which sought to force down the rates to Atlanta. It was the new line at Birmingham which forced the reductions at Birmingham. That line, as already stated, was the Kansas City, Memphis and Birmingham road. They said, "We do not see how we can undertake to maintain higher than these figures from Memphis to Birmingham," and they would not maintain higher, and the rates have since been continued on that basis. I have told other people just what I now tell the commission, and have insisted, on the witness stand and otherwise, that the carriers could fairly and fully defend the lower rates from the West to Birmingham than to Atlanta.

Q. (By Mr. LITCHMAN.) The solution is for Atlanta to build another railroad?—A. Atlanta's rates are all right. Atlanta is growing faster than any other point in that country. Atlanta is not suffering from freight rates, and she would not solve it, either, by building another railroad. She has got all the railroads she wants. Birmingham did not build that road from Memphis, and Atlanta is not going to build a road from Memphis or from the Ohio River to get a reduction of rates.

Q. (By Mr. RIPLEY.) Is there not, however, a new road being projected to Atlanta?—A. I think it is problematical. I think that these different rates that have been heated and forged and welded and pounded and hammered into their present shape are about as near right as practical people can make them.

Q. But commercial conditions may change?—A. They may change and we will try to meet those conditions. It is our business to watch that and try to fix the rates to fit the conditions.

Q. Here is an example that I should like to ask you to explain, simply as an illustration of the system in the South. At Montgomery, Ala., which is about 175 miles above Mobile, the rates from the north are all based on Mobile. The combination rate to Mobile, plus the rate from Mobile up to Montgomery, is less than the direct rate from the north. To illustrate specifically, a merchant in Montgomery told me that he shipped 2 carloads of fruit jars from Crawfordsville, Ind., to Montgomery. He shipped them to Mobile and then paid the local rate from Mobile back, those fruit jars going through Montgomery on the way out. By having them hauled 350 miles farther he saved \$75 on the two cars. Now, that is the situation which I find prevails in all lines of business.—A. I can explain that. For a great many years past the Mobile and Ohio Railroad has said that it would make the rates from the western country to Mobile the same as to New Orleans. I never believed, and I do not believe now, that it was justifiable or that it was necessary, but that was another condition and not a theory. That was the condition, and the rates from the West to Mobile to-day are the same as to New Orleans; and the rates to New Orleans, as you may easily understand, are very low as against direct river competition. Now it is true that you can take some of the rates to Mobile, made in that way, and add the rate back and it will cut the direct rate. You may naturally ask why a lot of sensible traffic people allow that thing to continue, and my only answer is that they have found it better to let some business go that way than to reduce the Montgomery rate, which they fear would carry with it Columbia, Eufala, Atlanta, Columbus, and all those places. Here is where it began. Through the policy of one road reaching Mobile, the rates to that point were forced down to the same basis and held on the same basis as the rates to New Orleans, where the good Lord has fixed competition for us, and where God's highway is. Now, that is healthy competition. It may have been wrong; I think it was wrong. Colonel Clarke, of the Mobile and Ohio road, knew more about the railroad business than I do, and I am sure he thought he was right. But through that policy the condition is forced on a man that enables him to ship down to Mobile and back to Montgomery at a lower rate than he could have shipped directly to Montgomery for.

Q. Why shouldn't they haul it and stop it and claim the same rate?—A. Because they used to do that and they found that gradually the agents were hunting combinations. Now, they have stopped that, and they say that any shipper at Montgomery has a perfect right to ship to Mobile and reship; but if he does, they will not give him a bill of lading to Montgomery at lower than their published legal rate filed with the Interstate Commerce Commission.

Q. My point is this: Why not change that combination to charge what it costs to Mobile, plus the rate back, but not go through the farce of hauling the freight down 175 miles and hauling it back?—A. It might come down another way. It does not necessarily go through Montgomery, but it is given to Mobile, and it is taken as a Mobile shipment, and the Montgomery man must have his arrangements to have it reshipped.

Q. I find that Atlanta shippers, for instance, claim that they can very much more cheaply conduct their business by establishing houses or agencies at, we will say Mobile, or possibly Charleston, certainly at Savannah, for the distribution of goods, while the center of their business is at Atlanta. In other words, instead of bringing the goods into Atlanta, it is better to stop them at Savannah and distribute them from that point on account of the high rates to Atlanta. In fact one man, an important merchant at Atlanta, made the statement to me that there was a strong tendency on the part of all the jobbers in that city, by reason of the freight rates in force, thus to establish branch houses at Savannah and not to ship their goods into Atlanta at all. Is not that likely to operate to the disadvantage of a city like Atlanta?—A. I had not heard of any warehouses at Charleston or Mobile. There are four or five or more concerns in Atlanta, with their headquarters and principal business at Atlanta, which have located warehouses in Savannah in order to get the benefit of the lower rates to Savannah, made via ocean routes, and then to reship inland, not to the entire inland territory, but to such territory as they can reach from Savannah, at a better total combined rate than the rate into Atlanta, plus the rate from Atlanta. Now, as to how much of that is being done or how much will

finally be done, I do not know. If it comes to pass that Atlanta commences to do all its business at Savannah, it will be up to the roads to decide what they will do about it, because there are some roads that haul Atlanta business that do not see any Savannah business. They are all looking after their own various interests, and they are watching as closely as they know how. Now, if that business grows to sufficient volume, it may force a reduction to Atlanta, and finally it may force a reduction to all interior points.

Q. I know that one jobber told me that by threatening to establish a branch house at Savannah he had been able to force a particular road to grant him a reduced rate to Atlanta.—A. Maybe he was mistaken about that. I think Mr. Charles Conklin, when he got his commodity rate on tin plate east and west, used as an argument that if they did not give it to him he would move his works to Savannah and get his plate there by water. Now, whether that induced them to do it or not I do not know. I did not think they ought to make a rate as they did at the time, and I do not think so yet, for this reason, that the rate has not been used for manufacturing purposes. He ships a great deal besides manufactures. I did not think the rate ought to have been made; but if it had not been made and that gentleman, whoever he was, had moved to Savannah and established his manufactory there, and that sort of thing should go on increasing and the manufacturers at Atlanta, Chattanooga, and other points should find after a time that they could not do business, why, it might come to the roads to say that they would put the rates down or would do just what they thought was for their own interest.

Q. You have spoken thus far as if there were effective competition between these several roads. Is it not true that there is a strong tendency toward an amalgamation of these roads? In other words, is not the Central of Georgia controlled by the Southern road, and are not a number of other roads, such as the Nashville, Chattanooga and St. Louis, controlled or owned by what is called the Southern system? Is there not a tendency on the part of all these roads to go into common hands, so that the competition that was effective protection to the public has ceased?—A. There is current history enough as to the consolidation that is going on. What the final outcome will be I do not pretend even to surmise. I do not believe any of us can tell now. But as long as there is healthy competition between two or three or more roads for any particular traffic this consolidation is not going to hurt anybody.

Q. (By Mr. PHILLIPS.) How many miles at present are controlled by Mr. Spencer's present Southern system?—A. The Southern system has over 7,000 miles. I forget the exact mileage.

Q. How many miles are there outside of that system controlled by individual corporations?—A. Well, our last monthly statement showed over 29,000 miles. I forget exactly. They have over 7,000. Our committee expenses are apportioned on mileage basis, and they pay a little over 20 per cent.

Q. (By Mr. RIPLEY.) Does that control the Central of Georgia?—A. That does not include the Central. That is managed separately, and is a strong competitor of the Southern, and each line is working as hard for the business as if they were deadly enemies. Now, how much harmony of policy among the owners there may be, I have no idea in the world; but in actual daily practice if a man wants to ship from Atlanta to New York, the Central man does not, by any means, get out of the way until the Southern man can get the shipment. The management is charged with the making of rates, the solicitation of business, and there is the same general hustling for it just as though there were an absolutely separate and distinct organization and ownership, as well as management.

Q. Is it likely, however, that they can continue this competition with the Southern?—A. I think so, until they are actually taken in under one management and have the same traffic officials. I have known traffic officials on different divisions of the same road to compete with each other, each looking out for the interests of his division. As long as you do not have them under one management you will have competition.

Q. Isn't it the simplest thing in the world, however, to extend the single management, as far as the traffic officials are concerned, over an absorbed road?—A. Oh, yes; very simple. It is done by a circular.

Q. Suppose the Southern System controls at the present time a majority of the stock of the Central of Georgia and that the Central of Georgia controls in turn two or three other smaller roads. It would require merely the issue of a circular to extend the traffic management of the Southern over the entire group, would it not?—A. Well, they would have to take it into ownership first. But what I meant was that there is no practical difficulty in extending jurisdiction of the traffic official over a new road any more than over a branch line that is completed.

Q. (By Mr. PHILLIPS.) Is there a tendency to further combine?—A. I think there is; I think they will divide into groups. I make the point right here that I, as a railroad employee, am just as much interested in that proposition as any shipper. Whenever there ceases to be competition for John Doe's business, there will cease to be competition for my services. Now, it seems to me that we are approaching the time when there will be 5 or 6 separate systems in the South. They may all work in

harmony to the extent that the separate owners of the separate properties may agree among themselves—and it will take only a few men to agree to it—that in a general way they will maintain rates. In a general way they may take some sort of action—some concerted action—with respect to legislation or litigation, or what not. As long as there is active competition (and there will be active competition as long as the roads are under separate managements) between 2 or 3 of these roads at a point, I have no fear for the future. I believe that my services will be in demand for what they are worth, and that there will be the same kind of competition for the merchants' and the manufacturers' shipments, too, and I do not feel at all alarmed at this consolidation. To a certain extent it is perfectly natural and proper. The continuing of a disjointed lot of little lines under separate interests or managements has not anything to recommend it.

Q. (By Mr. RIPLEY.) Did not the Louisville and Nashville and the Southern System come together in just that way that you describe?—A. They compete at a great many points. They are strong competitors. There is absolutely no merger or community of interest about their management that I can see.

Q. The absorption of the Louisville and Nashville by the Southern System, or by a system like the Pennsylvania, which, it is reported in the South, is looking at the problem of purchasing both the Southern and the Louisville and Nashville, would bring all interests together, would it not?—A. Well, if they could be consolidated, after a while there would be no competition, and I do not want to see that come. I think it will be a bad thing for the roads, as well as for everybody else. I honestly believe that final consolidation and removal of all competition would be just as bad for the roads as anybody else.

Q. What would be the evil effect?—A. Public opinion. That is something that the roads can not afford to ignore.

Q. (By Mr. LITCHMAN.) Do you think that after that consolidation had taken place the public would begin to ask who should run the combination?—A. The public would find some way of giving expression to its dissatisfaction; and no one of us, railroads or anybody else, can afford to ignore that. What shape it would take nobody can guess. It is too remote. This gigantic combination and consolidation is an entirely new condition. I do not know of anything like it in the history of the world. What the final outcome will be would be guesswork, and what the people might do would be guesswork. But I do not believe it would be a good thing for all the railroads of the United States to be under one management. I do not believe it would be a good thing for the roads themselves, or anybody else.

Q. (By Mr. CLARKE.) Do you think it would be a good thing to have a very few great systems which would compete with each other?—A. I think probably to a certain extent that would be a good thing for the public and for the roads themselves. As I stated before, up to a certain point consolidation is perfectly natural and proper. Take the Southern Railway, for example. I have counted over 50 original lines in that system. The system, as it is, may be unwieldy and it may not; I do not say; but why should rates have to be made over three or four roads to get from Washington to Atlanta? Isn't it better for there to be one system from Washington to Atlanta? I do not see that the public need fear their dividing into groups until they reach a point where there ceases to be groups and it becomes a group. They may group the whole system. I do not believe that would be a good thing. Taking our own territory down there, it seems to me that if they should have 5 or 6 systems in the country east of the Mississippi River, there would be plenty of competition.

Q. Do you recognize discriminations as an evil to the public as well as to the railroad?—A. You mean unjust discriminations?

Q. Yes; I mean bad discriminations.—A. Well, I think that some few unfair discriminations will always arise; they are bound to arise from the nature of the business, the multitude of the transactions, the immensity of the thing. Why, there are bound to be unjust discriminations, though not intentional, perhaps.

Q. Are they not likely to be very much diminished by the community of interest found in one system?—A. If you refer to rebates and that kind of discrimination, I think so. They are likely to be diminished by consolidation.

Q. When a merchant knows that he is getting the same rate as his competitor, is it not to the advantage of trade?—A. Unquestionably; and to the advantage of morality.

Q. (By Mr. RIPLEY.) I would like to bring up for discussion the so-called discrimination of rates against Charleston, a case which was argued before the Interstate Commerce Commission about 2 years ago and upon which a decision has not yet been rendered. I bring that up simply in order that you may use it as a basis for a discussion of the system of rate making in the South. The complaint of Charleston before the Interstate Commerce Commission is that it is unfairly discriminated against by rates from the West. The rate from Chicago, I believe, through Asheville to Norfolk is 72 cents, whereas the rate from Chicago to Asheville and from Asheville to a point an equal distance down is \$1.35. That great discrimination against Charleston prevents, so they claim, the growth of an export trade in any way equal to the growth of the export business at Norfolk. I should like to

ask you if you could explain the system on which the rates from the West to Norfolk and Charleston, respectively, are made, and the justification the roads find for the very much higher rate of \$1.35 as against 72 cents?—A. The simple answer is that they maintain as high rates to both points as they can. That is all there is of it.

Q. Does it not seem, however, that there should be some final court of last resort which should equalize in some way, either up or down, the rates of those two cities?—A. We have a court like that now. We have our final court. If you mean some tribunal that should decide immediately whether or not Charleston is being unjustly discriminated against, I believe I answered that question this morning in a general way. But as to that Charleston v. Norfolk rate question, it is perfectly simple. They maintain as high rates to each point as they can. The fact that one road does a little business through Asheville cuts no figure whatever. It might withdraw from the Norfolk business. It does not haul enough business from Chicago to Norfolk to pay for axle grease. The rates to Norfolk are the same as the trunk-line rates to Baltimore. The rates to Charleston are maintained as high as they can be as against the rates through Baltimore and thence *via* ocean. They do not fully meet the ocean competition, but they approximate it. But here is the serious point about Charleston. If you voluntarily reduce Charleston so as to put it on the Norfolk basis, how are you going to refuse to reduce Augusta, Macon, Atlanta, and all these points? They are still higher than Charleston. Chicago to Atlanta is higher than Chicago to Charleston.

Q. Atlanta is not as remote by a considerable distance, however, is it?—A. It is not so far and yet the rates are higher. Now, our defense to the Atlanta man is that we maintain Charleston as high as we can maintain it. We can not put it up. A great deal of the business is going down by ocean now at the present rate. But if we should give Charleston the same rates as Norfolk, we would have no moral defense on earth for holding up the rates to these interior points.

Q. You have already admitted that you do not conform to the long and short haul clause. Why need you, then, by reducing Charleston also reduce Augusta?—A. I said voluntarily. If we voluntarily put down Charleston because some other place having trunk-line competition is lower, what moral defense could we have, leaving out the question of legal defense, for not also reducing Macon, Augusta, and Atlanta, etc?

Q. Have you not the same moral defense as elsewhere throughout the South?—A. Not at all. Where we have a lower rate to a farther point there is some sort of competition at the point beyond which has forced it down. It does not make any difference whether it is a wagon line or a steamboat line or a rail line or what.

Q. But if it is a railroad whose action is unreasonable?—A. It makes no difference. Anything that forces down a rate is competition.

Q. Is it exactly safe for a community to trust to that policy?—A. We believe it is. The roads are looking after their own interest in this, and in doing that they are looking after the interest of the towns along the road. What has brought about this relative adjustment in that country? It has been arbitration and warfare. It has been molded into that shape. I venture to say if a proposition were made tomorrow to reduce the rates to Atlanta some line would insist that corresponding reductions should be made to Macon and to Augusta, etc.

Q. Is it not possible for these roads to see that their interests are one, that this friction which prevents wise adjustment in the interest of certain districts may be overcome?—A. It is not friction. It is competition. It is healthy competition. It brings about a fair relative adjustment, an adjustment that the carriers believe is fair to the patrons of their lines at the points at which they are most interested. It is the best kind of competition.

Q. The traffic manager of the Southern system desires to reduce rates on cotton from the Mississippi Valley to Carolina mill points?—A. Yes.

Q. The instant he proposes to do that the Mississippi Valley roads say, "We will not permit that to be done, because that is taking business which we haul up through Cincinnati to the East." Consequently, Mr. Culp is prevented from granting what he believes to be a measure of justice to the Carolina mill points?—A. That is right. The Mississippi line says, "If you reduce the cotton rates from Mississippi to the Carolina mills to fit a new condition or demand up there, it will take business away from our lines; it will take business away not only from the Eastern spinners through Ohio River gateways, but more especially the dealers or factors at the port of New Orleans; and if you reduce, we will make corresponding reductions. We will have to put down the rates." I can not see that all that is preventing a fair adjustment of rates or that that sort of friction is not a good thing for everybody. Would it be a good thing to let them reduce the rates to the Carolina mills and let the New England factories be kept from handling it? It seems to me that the carriers, in looking after their own interests, are looking after the interests of the manufacturers on their own lines.

Q. They are, on their own lines, but how about the other communities?—A. Is not that likely to bring about a relatively fair adjustment in the whole territory? Is not that healthy competition?

Q. It is. As I see the situation, except that each system, wishing to correct certain abuses in its own territory, what it regards as evils, is prevented from correcting these by the inertia or competition of other roads; and conditions that may be iniquitous are perpetuated because of this pulling and hauling between competing interests. When they all get together in one consolidation, or harmonize their interests, may they not readjust the entire matter?—A. Now, I know you did not intend it, but it seems to me you put it in an extreme way when you say, with reference to the cotton rate to Carolina mills, that the proposition was advanced to cure any evil or what might be an iniquitous evil. It was not that at all, nor are there many such cases, I believe. I think that is putting it in an extreme way. I think this is a fairer way to state it: There was a general adjustment of rates in the territory, which included the cotton rates and all other rates. It was not made haphazard, nor as a matter of caprice. It was made as a matter of judgment and arbitration, controversy and war. After so many years it has settled down into that condition, and it is very difficult to disturb it. If we voluntarily reduce Charleston, so as to make it the same as Norfolk, we ought to put down the other points I have mentioned. As to the cotton question, that is a new condition. The mills have multiplied so rapidly in the Carolina territory that they can not get sufficient home cotton to meet the demand.

Q. (By Mr. PHILLIPS.) Is it fair or equitable that Charleston and these other cities should pay a greater rate than Norfolk?—A. I think it is.

Q. (By Mr. RIPLEY.) The distance is the same.—A. No; Charleston is farther from Chicago than Norfolk.

Q. Not from Asheville.—A. No; but you must take the short line every time. The roads that make the rates are the direct roads—the Norfolk and Western, the Chesapeake and Ohio, and the trunk lines—and they make them the same as Baltimore. Baltimore is a little under New York, as you know—3 cents, I believe.

Q. The gist of this whole argument is to bring out, if possible, the degree to which the competition of competing carriers in any territory may prevent the correction of what each one of these carriers may concede to be an injustice within its own territory, and which it would correct if it could act alone.—A. It could act alone.

Q. That means war.—A. It may mean war, but some people in this country think that would be the very best thing; that you should price your transportation rates as you do coffee and sugar. What was the effect on the cotton question? The rates are lower than they were. There were two conflicting views and there was a compromise. The arbitrators told them to meet halfway, and the rates were reduced. That is all healthy competition.

Q. But I think you will find that the several parties to that arbitration still feel that if they had been left to act alone they could have granted a greater measure of justice to their patrons.—A. Yes; but it might have been a great measure of injustice to somebody else. The former rates on cotton from Mississippi to Carolina mills were not unjust rates, and hence the reduced rates are not unjust. So I do not think you ought to say that the full measure of justice was not done. Probably those who differed in their views are not convinced, but they have accepted the arbitration, so far as I know.

Q. Come down to this case of Charleston again. The argument of Charleston is that it is the same distance from Chicago practically that Norfolk is.—A. Through Asheville?

Q. Through Asheville; and consequently that it is entitled, perhaps, not to the same treatment that Norfolk is, but that at least it should not be subjected to a discrimination amounting to the difference between 72 cents and \$1.35. And they applied to the Interstate Commerce Commission some two years back, although the decision has not been rendered yet. If the equalization of those two rates would enable Charleston, as is claimed, to participate in some of the export business of raw products from the West, who is going to finally decide that matter unless the Interstate Commerce Commission be given an extension of its power?—A. The courts finally decide it.

Q. Do you see any objection to conceding to the Interstate Commerce Commission the authority to pass upon such matters as a court?—A. I do not see how it can pass upon these questions, as it now does under its present functions, and then also be a court of final resort in addition to that.

Q. (By Mr. PHILLIPS.) Would it be best for the decision to stand until reversed?—A. No; it is not right to assume that the railroads will do wrong, pending the final decision of the Charleston case, and to assume that the Interstate Commerce Commission will do right. I think it is better to let the roads go on as they have done, making their own rates subject to review by the courts.

Q. (By Mr. RIPLEY.) If you go to a city like Charleston and see the grass growing in the streets and business stagnant, you can not help feeling with them there should be some remedy.—A. Is there grass growing in the streets down there?

Q. I saw plenty of it.—A. It is not on account of the freight rates.

Q. (By Mr. LITCHMAN.) Is not the direct distance from Chicago to Norfolk less than the direct distance from Chicago to Charleston?—A. Considerably less.

Q. Is not the freight rate to Norfolk made by the railroad or transportation lines of the shorter distance?—A. Yes.

Q. Is not the rate on the route by way of Asheville fixed in a measure to compete with the rate made by the shorter line?—A. Not only in a measure but actually.

Q. Then that is the secret of the condition, is it not?—A. Those are the conditions as to Norfolk.

Q. (By Mr. FARQUHAR.) Why should Chicago freight go by the Asheville route at all?—A. I do not know.

Q. As a railroad man, why should it?—A. They do not handle enough to amount to anything, and I do not believe they make much money out of what they do haul. The Southern Railway Company and some of its connections have a through line, which they call the Asheville line, and they publish tariffs applying from St. Louis, Louisville, Cincinnati, Lexington, and Cairo, and they have put Chicago in. There may be a little money for them in the Chicago-Norfolk business, but I do not think there is much, and certainly not if they try to compete for the export business. But it is just like the case of a man who will keep certain articles whether he sells any or not. The Asheville line does not fix the rates at all. The rates are made the same as to Baltimore. That is the fixed basis.

Charleston has gone ahead very little in the last census decade. Savannah, just below there, with the same rates, has gone ahead 25 per cent. Atlanta, an inland point, with higher rates than either Charleston, Norfolk, or Savannah, has gone ahead over 30 per cent. I think Atlanta has increased 37 per cent. That is a remarkable thing. I said recently that the longer I stayed in this business the more I am coming to believe that freight rates do not have much to do with the making or unmaking of a community. You can find many illustrations of that fact. Nashville, Tenn., has better freight rates than any other inland city in the South, better than Chattanooga, Birmingham, Knoxville, or any of those points, and yet she has gone ahead only about 5 per cent. Atlanta had only about 65,000 in 1890 and Nashville 80,000, while Atlanta now has 89,000 and Nashville 81,000. Richmond, with undoubtedly favorable freight rates (not because the roads want to give it to her, but because her competition gives it to her), has gone ahead very slowly. Atlanta has passed her in population. Now, right in the Atlanta group are the cities of Rome, Dalton, and Athens, and others that have gone backward, and yet they have precisely the Atlanta rates. Here is Danville, where they have felt so strongly about freight rates for some years (they make the same complaint about Lynchburg that Charleston makes with reference to Norfolk), they have gone ahead about 40 per cent in population, whereas Lynchburg has lost a few hundred in population. Of course, I do not argue that if you want a town to flourish like a green-bay tree you must put up freight rates, but it does look as though rates did not make much difference.

Q. (By Mr. LICHMAN.) How far has the development of new industries tended to build up those places?—A. I do not know. Danville is a large manufacturing point and has very successful cotton mills. Its backbone is its tobacco. Lynchburg is a good tobacco town. Danville pays higher rates on tobacco than Lynchburg does, and Danville people may very sincerely say that they would have doubled in population if it had not been for freight rates, but it does not seem to me that there is anything conclusive in freight rates.

Q. Has not the marvelous development of industries in the South had an effect on the increase of the population?—A. Then why should Danville go ahead so rapidly and Lynchburg, just north and having the same kind of trade, standstill?

Q. They have no cotton manufacturing?—A. No; I do not think they have built any new cotton mills in Danville; but in Asheville they have no cotton mills and that has increased in population.

Q. How far has the use of Asheville as a winter resort tended to increase it?—A. That would have increased it some. There may be good reasons why two twin cities like Charleston and Savannah, just a few miles apart, should differ so in their growth, one stand still and the other go forward 25 per cent.

Q. (By Mr. CLARKE.) Have you studied the problem with reference to the changing character of the populations of those respective places?—A. No; but I would suppose, as between Lynchburg and Danville, in the same State, with the same social life and all that, and the same commodities constituting their principal business, it could not have been the character of the population that would hold one at a standstill (and that the lower rate point) while the other should go ahead so rapidly.

Q. Is it not a fact, as a general proposition, that the growth of towns depends largely upon certain enterprising men in those towns?—A. It might be facilitated by freight rates. In other words, if a road should set out deliberately to kill one town with freight rates and hothouse process the other, it might be able to do it as against local wealth and energy. No one knows why Atlanta is as big a town as it is or why the capital seems to float in there. That city is conceded to-day to have more fine buildings than Louisville with 204,000 people. I am not trying to get in an advertisement for Atlanta, but it is the fact.

Q. (By Mr. RIPLEY.) Your argument is the same as that of the little boy, "Father

is dead and mother is dead and I have got to hustle."—A. It may be. Look how Chicago has gone ahead of St. Louis. We all remember the time when they were rivals.

(Testimony closed.)

WASHINGTON, D. C., May 8, 1901.

TESTIMONY OF MR. EDWARD P. WILSON,

Secretary of various Ohio commercial organizations.

The commission met at 10.43 a. m., Mr. Phillips presiding. At that time Mr. Edward P. Wilson was introduced as a witness, and, being first duly sworn, testified as follows:

Q. (By Mr. RIPLEY.) Will you state your occupation, address, and previous experience?—A. My residence is Cincinnati. I act as secretary for the National Association of Manufacturers, for the Cincinnati Board of Trade, Bureau of Transportation, the Manufacturers' Club of Cincinnati, the Merchants and Manufacturers' Association of Cincinnati, the Cincinnati League, and the Ohio Valley Improvement Association. I have been in this class of business since 1890. Prior to that time, from 1863 to 1890, I was connected with the traffic bureau of different railroads.

Q. You may state one or two of the important roads in order that we may see your interest and experience.—A. My first service was with the Louisville and Nashville Railroad, and, following that, with the Louisville, Cincinnati and Lexington, which is now a part of the Louisville and Nashville; following that, with the Cincinnati Southern; following that, with the Chicago and Northwestern. I left the Chicago and Northwestern in 1890.

Q. You have had experience with a passenger business as well as freight?—A. Yes.

Q. The first topic we might take up is the interest of Cincinnati in the trade of the South, and especially the relative adjustment of rates as between Western and Eastern trade centers.—A. Cincinnati has been for the last three-quarters of a century developing in growth and prosperity upon business with the South. She was one of the principal points of supply and distribution to the South during the old days when the steamers carried the goods to all points south from Cincinnati and distributed via river and bayou throughout the South. They carried her goods there on as good terms as they could be carried from any distributing center in the world; and consequently Cincinnati gained a prestige in Southern business that she has never lost. But the revolution which was brought about after the civil war by the construction of railway lines into the South, and by improved service in transportation by rail, of all goods, threatened to take from Cincinnati her prestige as a distributing center by reason of better facilities being awarded to rival cities in the nature of railway development. The Louisville and Nashville Railroad was the first important railroad built from the Ohio River into the South, and as it formed its connections through the South, naturally Louisville was brought into prominence as a distributing center and threatened somewhat to rival Cincinnati.

The fact that communication from Cincinnati to Louisville was for a long time only by river, and after that by an independent line of railroad, placed Cincinnati at a disadvantage in regard to rates of distribution. This caused a demonstration of strength and power in the construction of her own railroad at an immense expense. At her own expense she built a railroad to Chattanooga, which was considered the most important strategic point south of Cincinnati for distribution. Since that road has been opened and its facilities thoroughly decided the position of Cincinnati and her relative position to rates in the South has been very largely improved, but by certain influences that I will explain later it has never been what the people of Cincinnati consider themselves entitled to by reason of their geographic position and the rail construction.

About 1879 competition for Southern business was exceedingly brisk, both from the Eastern seaboard and from Western centers like Chicago, Cincinnati, St. Louis, and Louisville. The railroads were independently handled and managed, and competition was very brisk and threatened to destroy them all. This condition naturally brought about a disposition to agree on something, and in the final round-up the agreement was made to divide business and maintain rates and to give to the Eastern cities practical control of the trade in manufactured miscellaneous articles which had their practical origin at that time on the Eastern seaboard, and to give to the roads leading south from the Ohio River a good rate and good trade in what were then known as the peculiar products of the West—packing-house products, grain, and its products, and the indirect products in the shape of whisky and beer, etc. Those were practically the staples in which those cities had their advantages. In addition to that there was a considerable shipping trade, which was more or less affected by this agreement.

The result of the agreement was to make rates of freight from the Ohio River points about what the roads pleased on the heavy products, but to maintain high rates on the miscellaneous industrial products and to protect the Eastern shippers in the enjoyment of that trade with the South, their output being transported by ocean to the Eastern seaboard and distributed inland by the very excellent system of railroads that even then existed. It will probably be remembered that Georgia had more railroads than any other State in the United States before the war, and the Eastern seaboard had excellent facilities, consequently, for hauling the trade in miscellaneous articles.

Now the development of commerce and the development of the country and of agricultural products naturally has been westward, and manufactures of all classes have gone westward until the line of the Mississippi River is hardly the boundary line of the manufacturing district now, whereas the Allegheny Mountains were the boundary line before. All of that territory between the Allegheny Mountains and the Mississippi River is growing into a manufacturing district, and every diversified product of human industry is produced there and offered for sale to the South. There is scarcely an article on which the rates are not higher proportionately to the consuming section than from New York and New England, and many of our manufacturers have been driven to maintain warehouses in Boston and New York for distribution to the South.

Q. You mean they ship to the warehouses and distribute from there?—A. Yes. There are certain articles stored in New York and distributed by ocean and rail to the South that might be sent from the factory direct if the rates were not against them.

That is probably an extreme statement of the case, but, to illustrate, I would like the privilege of reading a statement that was made in 1892 to the Interstate Commerce Commission, and which was practically true of business for the 12 years previous to that, and practically true for the business since, for there has been no material change in the principle. Atlanta, for example, is a very important distributing point South. I have a table before me prepared then showing the distances from Cincinnati and New York to Atlanta, the comparative rates, and comparative percentage. Cincinnati is 475 miles from Atlanta and New York is 876 miles from Atlanta by rail. The distance from Cincinnati is 54 per cent of the distance from New York, but the first-class rate from Cincinnati is 91 per cent of the New York rate; the second-class rate is 94 per cent of the New York rate, as is also the third-class rate. Coming down into the lower classes, one is 69 per cent, but that is on one of the articles on which we use the privilege of Western product rates. This illustrates what we regard as a solecism in the making of rates. Why first-class and second-class articles of manufactured products, which are as indigenous to Ohio as they are to New England, should now be 94 per cent of the New York rate, when flour, which is now being produced more largely in the Northwest and has almost left the Cincinnati district, is carried for 69 per cent, we do not see. This condition is found very marked at some of the other Southern points. For instance, the distance from Cincinnati to Meridian is 55 per cent of the distance from New York to Meridian and the first-class rate is 107 per cent of the New York rate.

Q. You refer to Meridian, Miss.—A. Yes. I have only selected a few figures from this statement, but it is analyzed and presented to the Interstate Commerce Commission in 1892 with this statement. (Reading:)

"The burden of this Complaint lies against the relation which exists between the current rates of freight on manufactured articles and merchandise from Eastern Seaboard Territory to Southern Territory, and the current rates of freight exacted upon light commodities when shipped from Central Territory to the South, and against the unfair basis of the general construction of the tariffs under consideration, whereby the rates charged for transportation of commodities classified under 'Numbered Classes' bear a much higher percentage relation to the rates from New York than do the rates on commodities enumerated under the 'Lettered Classes.'

"Complainants allege that this improper relation, between rates as above set forth, which has the effect of restraining and impeding the growth of productive industries in Central Territory and encouraging and promoting similar industries in Eastern Seaboard Territory, is the direct result of an agreement established by convention between the officers of defendants above described, whereby, in order to secure stability in rates of freight and to prevent competition between the lines leading, respectively, from the Eastern Seaboard and Central Territory to the South, it was decided to secure to the Eastern Lines and Eastern Territory the traffic in merchandise and manufactured articles and to the Western Territory the traffic in food products and similar heavy commodities.

"The complainant submits that a compact as above recited was made during 1879, and that the principles then agreed to still govern the construction of rates, notwithstanding the changes in trade conditions and the development of transportation facilities which have taken place during the interim."

That is the burden of the complaint presented in 1892. That complaint was decided upon by the Interstate Commerce Commission May 29, 1894. From their

syllabus I will quote [reading]: "It is ordered and adjudged, that the above-named defendants, and each of them, engaged or participating in the transportation of freight articles enumerated in the Southern Railway and Steamship Association Classification as articles of the first, second, third, fourth, fifth, or sixth class, do, from and after the 10th day of July, 1894." * * * Then follows a table specifying the maximum rates to be charged, being a practical reduction of about 40 per cent from the tariff that was complained against. This is the deliberate judgment of the Interstate Commerce Commission and was carried to the United States court, but the case has never been decided upon its merits. The only point that has been reached—and that is the sticking point in this case—is the decision of the Supreme Court that the Interstate Commerce Commission had no right to name any rates; in other words, that there was no jurisdiction. Nothing was said about the merits of our case. Hence I submit this statement as my testimony sustaining and supporting the fact that there is a malformation of the tariffs from our Territory to the South, as compared with the tariffs obtained from the Eastern Territory to the South.

Q. Do we understand the contention of Cincinnati, then, to be that in 1879 a virtual agreement was made by the roads operating in the South that rates should be so adjusted that the Eastern centers should have a monopoly of manufactures in the South, whereas the Western centers should have the market for the packing-house products and grain products from the West; and since that time conditions have changed so that manufactures have now moved westward and that the West demands entrance on equal terms for her manufactures into this Southern territory?—A. That is right.

Q. Was this original agreement in the nature of a formal contract, so far as you know?—A. The record of this case that I have quoted from will support the statement that the agreement was partly formal and partly informal—the record of the Southern Railway and Steamship Association introduced in evidence before the commission. The written contracts are a part of the record, and the inference is a part of the record. The proceedings of the Southern Railway and Steamship Association have been printed and submitted as evidence before the commission. The contention was supported by the evidence.

Q. And although the case was presented in 1892, any readjustment in favor of the West has up to this time been denied?—A. A general readjustment has been denied, and there are only spasmodic instances of relief in specific cases, and I am not able to go into the details of that.

Q. Is there not some justification for lower rates on all classes of commodities from Eastern centers by virtue of the existence of cheap water transportation to Savannah, Brunswick, Mobile, and New Orleans?—A. Cotton is very compact, and there is not very much competition there. Of course that is the excuse, but they were controlled in their rates by agreement, and it is rather an excuse than a fact.

Q. Do we understand, then, that there is no real competition between the Eastern coastwise steamship lines and the railroads?—A. Less than it is represented to be; I will not say none. It is less fierce than the testimony of the officers would lead you to suppose.

Q. Are you aware of any friendly interest, through ownership or contract, in the steamship lines by the railroads?—A. When this compact was made the Central Railroad of Georgia owned the Ocean Steamship Company. It was its own line and it controlled it as absolutely as it did its railway lines, and there were close agreements with the other lines; so the members of the Southern Railway and Steamship Association had very little competition in fact. When the matter was brought before the commission the testimony of the officers generally referred to tramp steamers, and practical men know the competition of tramp steamers for regular trade is not very severe. It is more for specialties.

Q. Is there not water transportation down the Ohio and Mississippi to New Orleans and other river points to meet this water competition by ocean from Eastern centers?—A. That water transportation is recognized very much to the disturbance of trade relations at all river points. The rates down the Mississippi to New Orleans and all river points to Mobile, Pensacola, and other points that are claimed to be ocean points are very much less than the rates to the interior. The rates to Atlanta, for example, and rates related to Atlanta are very much higher than the rates to New Orleans and Mobile. Selma, where our rates are 104 per cent of the New York rate to Selma, as against 55 per cent of the distance, is excluded on the basis that there is water competition by way of Mobile from New York.

Q. Are you aware of any further agreement between the several lines operating in the South as to a division of business between Eastern and Western centers?—A. There were a number of agreements on that question made, but they were practically abandoned, as far as records are concerned, with the enactment of the pooling clause of the interstate-commerce law. So there has been no recorded agreement to that effect. It has simply been a practice.

Q. But the practice is as effective?—A. The practice is effective in keeping up

these rates. The published rates have been better maintained into the South than any other territory of the United States in the last 20 years.

I find in a circular entitled "Division of Territory South of the Ohio River" the following clause, which is called "Territorial apportionment of traffic between Eastern and Western lines:"

"(1) Western lines shall not make joint rates on traffic passing between points east of Buffalo-Pittsburg zone and points east of a line drawn from Chattanooga, Tenn., through Birmingham, Selma, and Montgomery, Ala., to Pensacola, Fla.

"(2) Eastern lines shall not make joint rates on traffic between points west of Buffalo-Pittsburg zone and points on or west of a line drawn from Chattanooga, Tenn., through Athens, Augusta, and Macon, Ga., to Liveoak, Fla.: *Provided, however*, That the Norfolk and Western Railway may participate in traffic via Kenova at the rates established by the association between points in the territory on and east of its line from Columbus, Ohio, to Kenova, W. Va., and on and south of the line of the Pittsburg, Cincinnati, Chicago and St. Louis Railway, Columbus, Ohio, to Steubenville, Ohio, and points on and east of the Chattanooga-Montgomery-Pensacola line as defined in paragraph (1)."

Q. That would appear to be still further division of this territory in the nature of a traffic agreement?—A. I doubt whether it is supported by any traffic agreement, but is a declaration of policy. That is about correct. I believe it corresponds with the practice at the present time.

Q. You criticize that policy?—A. That is a practice in restraint of trade. It deprives the purchaser as well as the seller of the absolute freedom that ought to exist between those two parties.

Q. The decision which was rendered by the Interstate Commerce Commission in this particular case was of no effect, you say?—A. Of no effect.

Q. (By Mr. PARQUHAR.) Was the decision based on nonjurisdiction?—A. It has not been decided, except for that decision of nonjurisdiction in the making of rates.

Q. Have there been other decisions of that character? Is it violating a line of precedents?—A. That was the pioneer decision on the rate question. That has been the center around which the conflict has raged ever since.

Q. Then, wherein is there any remedy by appeal to the Interstate Commerce Commission?—A. There is no remedy practically. The Interstate Commerce Commission can develop the facts and may announce its opinion for the education of the public; but its opinion has no legal standing, as I understand it—no vital force. It is simply a finding.

Q. This case went before the commission in 1892 and was decided by it in 1894?—A. Yes.

Q. And you have no decision of this particular case from the Supreme Court?—A. Nothing but the partial decision on one point. The case rests in the courts ready to be taken up at any time on the other pleadings.

Q. (By Mr. CLARKE.) Have your people ever brought any new complaint before the Interstate Commerce Commission?—A. No; not any people that I represent. There have been complaints from that region of country, though very few; I can not recall any now.

Q. Why would it not be of advantage to complain that the rates made are unreasonable and in restraint of trade, and get a recommendation, if possible, from the Interstate Commerce Commission to that effect, recommending the roads to change their rates?—A. That ground has already been traversed and defined by this record, and there has been a positive order of the commission directing the change, but the change has never been made. The courts, under the law, must intervene to order that change to be made, and they have not done so. It is hardly worth while to go at it again, and in fact our people are so thoroughly discouraged that I would not like to ask them to put up the money again.

Q. I understand you to say that the decision of the court was they had no right to prescribe rates. That did not go to the extent, did it, that they had no right to recommend a change of rate?—A. Well, there is a distinction that I perceive, but it has not been a consideration that would prompt our people to come to the front and try to use that agency any more for their protection. If a positive order, which the law allows this commission to make, is of no effect, where would its recommendation have any virtue? We have the moral support of the facts and of the commission in this record to fall back on now. We can quote from it any time. Our position is clearly recognized by that commission now. To reinstate the pleadings in order to modify the act of the commission from an order to a recommendation would be all the effect the further proceeding would be, would it not?

Q. Is it not within your knowledge that most of the railroad commissions in the country have only a power to recommend, and that their recommendations are generally observed by the railroad companies?—A. I believe that the railroad companies are more sensitive to the opinions of any other commission than to those of the Interstate Commerce Commission. It has been my observation that the State commissions within their jurisdiction have more respect paid to their decisions by the

railroads than the railroad systems of the United States have ever paid to the decisions of the Interstate Commerce Commission.

Q. Is it a fact, then, that since the decision of the court the complainants have practically abandoned the case?—A. No; they have rested upon their rights. They have not withdrawn it from the court nor in any way abandoned it. The lawyers still have the matter in hand, but have not seen a good opportunity to take it up.

If you will pardon me for the digression, I want to correct a statement I made a moment ago. I said I did not remember any complaint made since. I recollect that there is a very important complaint pending before the commission, which originated in Cincinnati, and which I had forgotten.

Q. What was the principal ground of appeal by the railroads to the court in your case?—A. The only point they made was that there was no jurisdiction.

Q. No jurisdiction to fix rates?—A. No right to name rates. Here was an order to make certain rates. The railroad companies concentrated their fight on the non-jurisdiction and the lack of power to name the rate, and all the fight has been centered around that point.

Q. Do you not think it would at least be of moral advantage to the complainants to have a recommendation from the Interstate Commerce Commission that the rates be reduced?—A. Well, I would not say that it would be of any advantage. Our people have simply been so paralyzed by the failure to get any good out of the stronger document that they have not considered it worth while to go ahead for a weaker one.

Q. They sought a remedy which the court has said could not be granted by the particular tribunal to which the complaint was made?—A. Yes.

Q. That tribunal continues to make recommendations in other cases, does it not?—A. Oh, yes. We are quite willing other people should make history; we have made our little bit of history.

Q. (By Mr. PHILLIPS.) Can you give any reason why the railroads pay more heed to the decisions of the State boards than they do to the national boards?—A. There is a smaller volume of business, probably, affected by the purely local State boards, and then there is a closer intimacy between the management of railroads and the State boards. A sort of everyday, neighborly relation obtains. The managers of the railroads are very well acquainted with all the commissioners along the lines of the roads in the various States. Their work in the States comes very near to corresponding with the wishes of those commissions. It allays dissatisfaction, although they have had some pretty fierce discussion.

Q. Do they not fear adverse legislation from the States more than they do from Congress?—A. That is speculative. Possibly that may be true.

Q. (By Mr. C. J. HARRIS.) Is it not a good deal of a fact that the State railroad commissions in many instances have the definite power to change and regulate rates?—A. That is my impression. I am not technically familiar with all the State laws, but it is my impression that that power exists in some of the States.

Q. (By Mr. RIPLEY.) The railroads have defended their action in most cases in making rates by saying that a reduction of rates in the interest of shippers would follow from what they call enlightened self-interest. Applying that to this particular case, does there seem to be any prospect of opening a way into the South from Western manufacturing centers by the voluntary action of the roads?—A. I believe that will have some influence, as intelligence works its way through the brains of the railroad men.

Q. Is there not, however, a certain obstacle toward action in that way by a single road because of these several agreements which exist between all the roads operating in that territory, so that no one of them will take any action until it has been agreed to by the others?—A. Well, it is customary to take joint action, and it is very difficult to secure joint action that involves any particular change looking to the reduction of rates unless it carries some decided advantage to the carrier with it. It is hardly worth while to go before these boards, or commissioners, or committees, with any change unless you can establish a feature of advantage to all the railroads.

Q. For instance, is it within the power of the Louisville and Nashville or the Queen and Crescent route to reduce rates from Cincinnati and Louisville into the Southern territory?—A. They have the power, but they do not consider it expedient. They naturally fear the consequences of independent action, because they all admit the necessity of acting together. That is the mistake with a number of individual officers. The officers of individual lines have recognized the unfairness of this adjustment, on evidence before the Interstate Commerce Commission. They recognized the unfairness of this adjustment, but said they did not dare to disturb it lest they would precipitate a rate war. That is their excuse for not doing justice—that their other interests would threaten their revenues in other directions if they did what they considered to be common justice in this particular regard.

Q. Is this, then, the situation, as far as the railroads are concerned—that the lines into the South from Western centers hesitate to grant what they might consider to

be in their own interest by reason of the opposition of the lines in the South on the eastern half of the Southern territory?—A. That is probably the controlling influence.

Q. Is it not true, on the other hand, that some of the lines into the South—into the eastern half of this territory—are hampered in granting certain reductions which they might otherwise make by virtue of the opposition of the roads into the South from the West?—A. Yes; each one follows the other when they do not want to do it.

Q. The point I would like to bring before you and ask you to discuss, then, is whether this balance of interest as between Eastern and Western roads does not prevent substantial justice by any one of them?—A. That is practically the effect of the situation.

Q. Is it a situation peculiar to that part of the United States?—A. I think it is—I believe it is. I do not know of any glaring instances of injustice maintained by any system of railroads that begins to compare with this system of unjust tariff from the Ohio River to the interior South, and I do not know of any case where the complaint has been clearly defined and supported, and has been so conspicuously ignored, as it has in this territory; and I attribute it to the fact that there are a very few dominant interests governing the transportation of the South, and that the dominant interests are pretty close together in their determination to protect each other in order to protect themselves; that is, I have reason to believe that a few prominent capitalists own the larger proportion of the stock in all of these organizations that do business in the South, both steamboats and railroads, and that they have agreed, not in writing probably, but practically among themselves, that they won't hurt each other.

Q. Do you see any tendencies at work in the nature of actual consolidations or leases, or reported unanimity of control, which promise any relief? In other words, will the consolidation of those roads still further enable the conflicting interests—the Eastern and Western lines into the South—to be reconciled?—A. Yes; I believe it will. As to whether it will result in relieving these specific difficulties or not I am unable to express an opinion, but the conflict of interests will be minimized in the near future by combination.

Q. Has Louisville been a party to the complaints before the Interstate Commerce Commission?—A. No.

Q. Are there any other points along the river that have taken issue with Cincinnati?—A. With this construction of rates, you mean?

Q. Yes. A. Both Louisville and St. Louis were offered an opportunity. They were afraid of their local roads, afraid to enter into any combination. Chicago and Cincinnati came together and employed counsel, but the people who had that sort of business in charge in Louisville and St. Louis asked to be excused, saying that they were too closely in the power of their local roads to take an antagonistic position of that kind.

Q. Chicago, however, did join issue with Cincinnati?—A. Chicago joined with Cincinnati.

Q. Did there seem to be any tendency on the part of Louisville and St. Louis to stand together as opposed to Chicago and Cincinnati?—A. I think they lacked cohesion, they lacked organization. The shippers at these points into the South did not organize or do anything in one way or the other.

Q. Does Louisville have any particular advantage over Cincinnati by reason of the adjustment of tariff on the Louisville and Nashville Railroad as against Cincinnati?—A. That fact is constantly asserted by shippers, but they have never been able to prove it with sufficient clearness to make a complaint.

Q. Is there a feeling on the part of shippers that Nashville also enjoys peculiar advantages in the distributive jobbing business as against Cincinnati?—A. It is known that Nashville is the recipient of a great many favors not accorded to any other inland city. It is not a matter of very great significance, but certain trades are so affected by it that they have established their warehouses in Nashville rather than fight it. I know some pretty large manufacturers who have warehouses in Nashville, and everybody gets the benefit of those preferences.

Q. (By Mr. FARQUHAR.) Is there not a reason why Nashville should receive the discriminations on account of both the rail and water rates?—A. That is the reason.

Q. (By Mr. RIPLEY.) Was not the Cincinnati Southern road built by the city of Cincinnati as a public enterprise?—A. Yes.

Q. And for what reason?—A. To bring Cincinnati into strategic touch with the South, independent of the passage through Louisville.

Q. Is there not a proposition pending for the lease of this Cincinnati Southern Railroad to the Southern system?—A. No.

Q. Or is there not a proposition for purchase?—A. No.

Q. Is there not a proposition of some kind now pending with a view to the absorption of this line, or of a part of that line leading from Cincinnati to some miles South?—A. No. There is a proposition to extend the lease of the Cincinnati Southern Railroad, which is now held by an independent organization known as the C., N.

O. and T. P. Railroad Company, a corporation organized under the laws of Ohio for the purpose of leasing that road, and the proposition is to extend that lease for 65 years. That proposition is being very favorably considered by the majority of people in interest. It is a mistake to think that that is the act of the Southern Railway or necessarily involves absorption by the Southern Railway. Unless something more definite is developed than has yet been made of record, the relations of the Cincinnati Southern Railway will not be changed by this extension of the lease from what they are now. The C., N. O. and T. P. Railway has had control of the road for 20 years, and the extension of it for 65 years to the same company under modified terms is all that is practically or officially developed. The impression is industriously circulated in Cincinnati and elsewhere that the outcome of this will be the control of the road by the Southern Railway system. If that could be assured to the people of Cincinnati, I think there would be very little difficulty in securing the extension; but that fact is very carefully guarded in all negotiations. Mr. Spencer is president of the Southern Railway, and also president of the C., N. O. and T. P. Railway. The trustees of the property have never received a proposition from Mr. Spencer as president of the Southern Railway. Everything he has offered has been as president of the C., N. O. and T. P. Railway. Now, that distinction is quite clear, quite practical, quite confined, and yet it does not exist in the minds of half the intelligent people of this country who consider the subject.

Q. (By Mr. C. J. HARRIS.) What is the C., N. O. and T. P. Railway?—A. Cincinnati, New Orleans and Texas Pacific Railway Company, a corporation under the laws of Ohio. The majority of its stock, nearly 80 per cent, is held by the Southwestern Investment Security Company. That is a company organized under the laws of New Jersey to trade in Southern securities. Now, then, the stock of that Southern Security Company in turn is owned partly by a syndicate known as the C., H. and D. syndicate; partly by the syndicate known as the Alabama Great Southern Junction Railway Company, Limited, which is a London company; partly by the New Orleans and Northeastern, or lines that are known as the Flower lines.

Q. (By Mr. RIPLEY.) Would you mind indicating on the map where it runs?—A. There are no maps. It is on paper. The Southwestern Security Company was organized by Ferdinand Ward and was one of the enormous companies organized to speculate in general securities, buy and sell, and they have gotten into their treasury about 75 or 80 per cent of the stock of the C., N. O. and T. P. Ry. Co., and have hypotheicated it to secure an issue of bonds. The Southern Railway owns a majority of the stock of the Southwestern Security Company, and the Southwestern Security Company controls the C., N. O. and T. P. Through that instrumentality the Southern has dominant influence in the councils of the C., N. O. and T. P. Ry. Co. It dictates its policy without being responsible for its debts or its transactions.

Q. (By Mr. FARQUHAR.) How much money did the city of Cincinnati put into this road?—A. The original sum was eighteen million six hundred and some odd thousand dollars, and they have borrowed money to pay deficiencies in interest. There were eighteen million six hundred and some odd thousand dollars of city bonds issued, and the proceeds of those bonds was put into the road. The city has been carrying those bonds, the road has been paying a part of the interest, and the city the rest, so that the road stands the city an outlay of about \$30,000,000 cash, while its income is a rental of \$1,000,000 a year. If the bonds which are about to expire can be refunded at current rates of interest the city, instead of having a deficiency in its income, will have a surplus. Hence a great many of the citizens of Cincinnati are very much in favor of perpetuating this lease on practically little better terms than they have to-day for 65 years, because their old issue of bonds will expire within a few years. They can borrow money at a little less than 3 per cent right here, and have an income from the road, and if it is leased I think the lease will be extended on those terms, on account of the excellent financial condition in which it will leave the city.

Q. Suppose that the road is leased, then, for the 65 years, what opportunities of absorption by the Southern system or any other system is there?—A. There is a clause in the proposed lease which is said to look to this absorption by the Southern road. It reads, "The right to sublet this property to any other than the Southern railway is denied." It is not a positive right to sublet to the Southern railway, but there is a limitation in the lease preventing their transferring the lease to any other road.

Q. But the subletting relates entirely to the mileage?—A. That is all.

Q. It does not relate to the ownership of the bonded condition at all?—A. The ownership will never be absorbed. The city of Cincinnati will never sell that road. The absolute ownership will probably never be changed, within the terms of this lease, at least.

Q. (By Mr. RIPLEY.) Will that absolute ownership, however, amount to anything?—A. You understand that I think that it won't sell. Of course we can't tell what it will decide to do in 40 or 60 years. Possibly legislation in Ohio, Kentucky,

and Tennessee will allow the city of Cincinnati to pass the title of the property to anybody whom it may choose, but it would be subject to these laws. The main thing to be accomplished to-day is to lease the property upon a long rental and give the city an income.

Q. You say in that lease there is only the clause of subletting, which seems to indicate the possibility of selling the system?—A. Yes; that is the interpretation that the hopeful put on it. It opens the door for the Southern Railway ultimately to absorb the control of the management of that road.

Q. On the basis of earnings, so far as you know them, would the terms of this lease seem to be favorable to the future of the road?—A. Very.

Q. As well as to the city?—A. Yes.

Q. Are there any clauses in that lease which guarantee to Cincinnati favorable treatment?—A. The fighting to-day is over that clause, how to express it, how to get it in there. There is a clause in the present lease which is very general, so general that it is insignificant and has been ignored, in which it is said that the lessee company shall not, under any circumstances, discriminate against the citizens of Cincinnati, or Kentucky, or Tennessee, but that is all it says. There is no penalty provided to secure its enforcement, and it is so general that it has amounted to nothing. Now in renewing or extending the lease the shippers are interested in having some declaration of policy, and are quite anxious to have the lessee declare and enforce a policy of protection according to their geographical situation and rights. They endeavored to insert a clause in this lease, and there the fight is going on just now. There are organizations in Cincinnati that will oppose the confirmation of the lease unless that clause is made very definite. There are a great many other interests in Cincinnati which believe that the numerous advantages that obtain from the lease are sufficient without forcing that, and therefore Cincinnati is not a unit in determining what will happen.

Q. The Southern road has been one of those against which Cincinnati has complained?—A. Yes.

Q. In this case before the Interstate Commerce Commission?—A. Yes; the Cincinnati Southern Railroad having been leased to foreign control has been controlled by the policy that has ignored the territorial advantage that Cincinnati claims she should have through its construction. We are powerless to affect the situation without going into a rate war with other roads that would be fatal, and there the controversy has begun and ended time and again.

Q. Now, suppose all those roads of the South whose opposition to one another prevents an equitable adjustment into the South from Eastern and Western centers came together into a single consolidation, or were owned by the same persons, would there or would there not be a greater possibility of eliminating rate wars and of adjusting the rates in every direction than there is now?—A. That could be made possible, naturally, by absolute control. The doing, of right, would be within reach and there would be no excuse, growing out of the competition of others, to offer. But then comes the old question again. The securing of equitable rates for Cincinnati depends on investment by the railway interests. The Southern is controlled in Cincinnati by other interests which are dependent upon the prosperity of the Eastern territory for their income.

Q. Have you any knowledge other than the press reports of a possible absorption of the Louisville and Nashville by the Pennsylvania Railroad Company?—A. None whatever.

Q. What would be the effect of such an absorption, either by lease or purchase, upon the interest of Cincinnati?—A. I do not feel able to answer that question. I do not apprehend any particular change one way or the other. We have the Pennsylvania Railroad interests all around us in Cincinnati and they are quite acceptable, and we have the influence of the Louisville and Nashville Railroad in the other direction. Their interests in Cincinnati are growing constantly, so that their service is being improved and, aside from their blindness to our rights in the way of relative adjustment, they are a very favorable adjunct to Cincinnati commercial prosperity. A consolidation of those two great systems, therefore, with the average intelligence that controls them both, should not cause any great degree of alarm, in my opinion.

Q. Have you any knowledge of any negotiations leading to the connection by lease or purchase or common control of the Southern Railway with the Cincinnati, Hamilton and Dayton, or other roads leading from the Ohio gateways north to Chicago?—A. None whatever.

Q. You mentioned sometime ago the adjustment of rates from St. Louis into the Southern States as compared with Cincinnati. Is there any ground of complaint there?—A. There has been very serious complaint by the shippers of grain from Cincinnati against the policy adopted in St. Louis, and from St. Louis to the South, whereby competition by way of Memphis from the grain fields of the West is made through St. Louis, but is not made through Cincinnati. For example, for a time the

rate applied from St. Louis to Southern territory on business coming from the Kansas grain fields in competition with the Kansas City, Memphis and Birmingham road was only 1 cent higher than the rate from Cincinnati and the roads from St. Louis to Cincinnati asked 7 cents for bringing grain from St. Louis to Cincinnati. The roads South would have been compelled to cut their rates about 5 cents a hundred pounds in order to equalize totals. This they refused to do, and that had the effect of erecting a barrier against the passage of any grain from points west or north of Cincinnati through Cincinnati, and the South gave the market to St. Louis and Western merchants.

Q. Is there any remedy available?—A. The only remedy is the consent of the roads to adopt in their practice the ordinary practice of longer lines, that of making the totals between any two points the same, and distributing them among themselves as they may deem equitable and just.

Q. In this case, as in the other that you mentioned, would the shippers of Cincinnati, do you think, be inclined to resort to a tribunal which had full power to prescribe or to regulate rates in such cases?—A. I would not advise them to—could not advise them to.

Q. Have you knowledge of any other complaints which would be laid before such tribunal if its powers were full and complete?—A. Not at this moment. There is no telling what might develop if the tribunal existed.

Q. (By Mr. FARQUHAR.) You said in your testimony that natural advantages possessed by one business center might have to be measurably sacrificed in making up those railroad rates for a section for the benefit of a place with less natural advantages. Do you think there is any equity in that?—A. I think you misunderstand what I said. Each locality competing with others in a common market is entitled to reasonable and just rates at the hands of the carriers serving it, and to the benefit of all its natural advantages, and no departure from the rule requiring rates in all cases to be reasonable in themselves can be justified on the ground that it is necessary in order to maintain existing trade relations, or "to protect competing markets," or to "equalize commercial conditions," or to secure to carriers traffic from certain territory assumed to be exclusively theirs.

Q. What is your notion as a railroad man in respect to a proposition of that kind?—A. When I was a railroad man I studied the immediate interest of railroads. If you could get a thing through it was all right.

A. Was the policy of the Louisville and Nashville at that time to the advantage of Nashville or other places and to the disadvantage of any places just as good on that line in cases where your directors had no interest in the landed property?—A. I do not think that I am quite prepared to deal intelligently with that proposition. That is a matter of ancient history. We were very crude railroad men in those days.

Q. Is it not pretty generally known that the system in the South has tended to build up sectionalism there? That is, were not geographic zones of influence built up to the advantage of certain great corporations?—A. There has been too much paternalism practiced by the railroads. I do not think the railroads have got any right to assume paternal functions over any city, locality, or individual. That is the basis of the Interstate Commerce Commission and the spirit of it. It was to break down practices of that kind that that law was brought into existence. Those practices prevail to a greater extent, maybe, in the far West than they do in the South.

Q. Have you any knowledge yourself as to whether the great importation of goods into the South is not entirely from the Northeast and the ports of the Atlantic and other distributing points instead of from Cincinnati or from the Northwest?—A. The Northwest and the immediate North are gaining on that business all the time, but they are gaining in spite of discriminations in favor of the Northeast.

Q. Do you think it would be the railroad policy of the Eastern association to make lower rates to admit these Eastern goods into the South than they would make to the Western men?—A. They have always done it.

Q. Will you call it self-interest or an inducement of trade, or what?—A. Well, my theory would be that there has been a large capitalistic ownership in the case of steamship lines, and that they make a great deal more money carrying business from the Eastern seaboard into the South than they would if the railroads carried it from the West.

Q. (By Mr. PHILLIPS.) When you were connected with the railroad system was discrimination quite common against shippers?—A. Yes; it was.

Q. And to the injury of the large shippers very frequently?—A. The large shippers generally had the advantage over the little fellows.

Q. Were there many people who lost their fortunes and their interests largely by discrimination of railroads?—A. Yes; there were. There were more losses of that kind, more people driven out of business through the help extended by the railroads to the favored shippers in those days than there are now.

Q. Well, what is your view about discrimination now—your observation? Is it

extensive yet?—A. Yes; it is extensive yet. The public has no idea of its extent, and I would not be in position to define its extent. I know it now rather from hearsay, but I used to know it from contact with the business. I still know from hearsay, but it doesn't amount to evidence; many other people know it, and you know it, so I am making no disclosure.

Q. What form does discrimination generally take now, from your best information?—A. Well, take the combinations of heavy shippers who have cars of their own. There are quite a number of them who own their own equipment, and the rental that they are able to command for the use of those cars is a veritable feast. It is a very ingenious way of affecting competition, and it has the effect of driving out of business the firms who don't see fit to own cars of their own, and has the effect of forcing firms and corporations who did not want to own to buy them or lease them. That is only one effect. There are others, probably.

Q. Have you any other?—A. I do not think of any other. That is one of the most clear.

Q. What effect, if any, in your judgment, has the Pullman Palace Car Company had upon the railroads generally?—A. I think that the facilities it has offered have been the most valuable of all facilities furnished to railroads from the outside, and probably the most equitable and the most defensible, and I believe that the Pullman Palace Company's management has enabled the railroad companies to afford to the public better service than could have been maintained by any other system. The merging of all the other lines into the Pullman Palace Car Company has been simply the survival of the fittest. The most powerful of the railroads have attempted to furnish that sort of service of their own, and it has proved a failure.

Q. (By Mr. RIPLEY.) The policy of the roads operating in the South, with which I understand you are somewhat familiar, differs, does it not, in respect to maintaining the rates at a perfect equality for all shippers?—A. Yes; I believe that the published rates have been better maintained in the Southern territory in the last 20 years than in any other territory in the United States. There have been fewer glaring breaks. There was, I remember, at one time a concession made from New York for the season to all Southern States of about 50 per cent of the tariff rate, by which means they took the entire spring business of the Southwest from the jobbers of the West. That was followed by a cut of rates, when it was too late, by the Western lines. They healed that difference up within a few months, and I have not heard of any such outbreak since, but those outbreaks have been constantly occurring in other directions.

Q. Now, proceeding to the discussion of the long and short haul clause, and the nature of water competition in the Southern States, will you make any general statement about that?—A. Well, my statement is more a matter of judgment and observation. I believe the prosperity of the Southern States has been largely depressed and impeded and delayed by the false principle of ignoring the long and short haul principle. I believe that the development of the entire country and the development of the railroad business has been pulsed by a principle to which the roads in the South have adhered after it was abandoned by all the other roads in the universe. The great railroad systems of the country rarely have any trouble over the long and short haul clause. All the contention is centered on that clause, as far as I know, in the Southern territory, and it all centers around the idea that they have got to make a low rate to meet water competition, and then add a local back to the interior and keep all the interior country which is without water competition checked up to high rates to give advantages to certain towns, whether they have commercial merit or not, that happen to be situated on a railway, creek, or canal. Any old thing serves the purpose of reducing rates on water competition if they want to reduce them. They can ignore it in nine cases out of ten just as successfully as they can maintain freight rates at other points. That policy has maintained higher rates to interior points all through the South and has been a barrier to Southern progress. That is my opinion.

Q. Has not the Louisville and Nashville Railroad been prominently identified with the opposition to the long and short haul clause?—A. It is the policy of the Louisville and Nashville Railroad that I have referred to.

Q. Was that policy in force before the enactment of the interstate-commerce act?—A. Oh, yes; it was an ancient custom all over this country. Most of the roads got well out of it long ago.

Q. You were familiar with its operation, then, at the time you were a traffic official of that road?—A. Yes; that principle was the principle in the beginning.

Q. So that you speak from personal knowledge of the situation as a traffic official?—A. Yes; I have observed the development of those roads in the last 35 years.

Q. Have any changes taken place in the nature of competition between waterways and railways which would affect this proposition?—A. Very serious changes. When the Louisville and Nashville Railway opened the business after the war to Nashville, water competition was the real thing from Cincinnati and Louisville. The boats

were plying constantly, and we had to meet that question every day. To-day it is a very rare thing that a boat loads with freight from Cincinnati to Nashville, Tenn., and yet the rates are made from Cincinnati to Nashville based on old river competition. The river itself has lost its prestige as a river, and is drying up. Unless it is improved it will soon be a highway instead of a waterway.

Q. It has not been drying up the last month or so?—A. That does not help navigation. Navigation is conducted under greater difficulties than usual. As a matter of fact, Ohio River shipping has lost its existence, with the exception of the transportation of very heavy commodities. In very heavy commodities it still carries a greater tonnage than any river in the country, but I discriminate between that and ordinary merchandise, commercial shipping. It is not probable that any system of railway transportation could ever deprive the Ohio River of its immense tonnage in the coal trade. It would be useless to attempt it. It is increasing constantly, but there is no shipping now of sugar or molasses. You would think you could get a much better rate from Cincinnati to Nashville by boat than by rail. Take a good whaleback steamboat rate to-day, and as you go into the higher commodities insurance militates to increase the rates. The excuse of river competition is used to depress rates to a point like Nashville, and the rates to the surrounding country are made higher by adding locals to them. The effect of that river competition is not so apparent as it was. When the principle was first inaugurated we had to make rates every day to beat the boats. There is no necessity for that now.

Q. Is it true that the basing point system to which you have already referred is in a way a derivation from the long and short haul system of making rates?—A. It is a successor to it, but a railroad crossing became a competing point, to which lower rates were made than to the locals on each side.

Q. Do you mean, then, that beginning with the theory that rates must be reduced where there was competition between water and rail, they extended that principle to the reduction of rates at points where two railroads cross?—A. Yes.

Q. Have you observed at any time any evil effects from the system?—A. Yes; it is evil in my opinion; evil to the railroads and evil to the people. It often prevents and has prevented the establishment of industries at more eligible points upon a railroad because they could not get rates to that point that they could get at the crossing. A great many enlightened railroad managers recognized that all through Pennsylvania, New England, Ohio, Indiana, and Illinois, and broke it down because of this argument: "If this man locates his industry 10 miles from the crossing that business belongs to us, and we had better carry it at the crossing rate than to put it in jeopardy." And they scattered industries all along the lines of the roads and it made them rich. The Pennsylvania Railroad is one system that has done this and has scattered industries from one end of the road to the other. A man doesn't have to own a corner lot at a crossing in order to get decent rates. But you go on the other side of the river, and you have got to go to Danville Junction or some place to get a basing point, or to Louisville, or to Bowling Green or some crossing. The Cincinnati Southern never debated that question, and there has never been any conflict with the long and short haul clause.

Q. How are they enabled to operate in practical competition with the Louisville and Nashville, one road adopting the long and short haul clause and the other opposing it every time?—A. Well, they build up their country; the Louisville and Nashville does not.

Q. (By Mr. PHILLIPS.) I would like to recur to one matter in regard to discrimination which seems to be quite general yet. Have you any remedial legislation to suggest along that line—any remedial legislation to prevent discrimination?—A. No; I am afraid that is beyond the reach of legislation. It has its root in the selfishness and ability of men to accomplish those things. I do not believe legislation can reach it. Possibly consolidation can reach it; possibly if Rockefeller gets more railroad stocks than Standard Oil stock he won't want the railroads to make rebates to the Standard Oil Company.

Q. A great evil, you admit, exists in discrimination, and yet you think there can not be any effective legislation passed to meet that?—A. I may be alone in my opinion. That is my opinion. There is ample legislation to reach all those people, but it is the instruments you want—the men, the moral force behind the guns. You have got plenty of legislation to reach all those things, but there is not the determination on the part of the courts or the people to enforce these things. Human nature is human nature. We have got lots of good laws that are dead letters, you know, because the people don't want them enforced.

Q. (By Mr. RIPLEY.) Do we understand that in your judgment the Interstate Commerce Commission has power sufficient to secure many of these results, but that the difficulty comes more in the disposition than in the law itself?—A. That is my candid conviction after about 10 years of diligent effort to use the interstate commerce law for the protection of the people. There is an apathy among the people which is just about as great an obstacle to its enforcement as any defect in the law.

I have been an officer of organizations seeking to get protection through the Interstate Commerce Commission during the last 10 years, and my observation is that the indifference of the people is more of an obstacle. A gentleman asked me a moment ago why we didn't reinstate our case before the court. It is because our people are indifferent.

Q. (By Mr. PHILLIPS.) You think the fault is more with the courts than with the Interstate Commerce Commission?—A. I do not like to say there is any fault in our courts. I believe the root of the evil in this country is that the people are not alive to the necessity of this thing. The courts will follow pretty nearly the impulses and requirements of public opinion.

Q. Would you be in favor of giving the Interstate Commerce Commission authority to enforce their decisions until they are repealed by the court? That is, to make them binding or mandatory until the court finally decides?—A. I have always felt that it would be right that the decision should take the same course as the decision of any other tribunal; that it should be mandatory unless the party against whom it is rendered takes an appeal and gives bond. That makes it effective from the time it is given, and suspended under bond as any other decision is suspended under bond. I do not believe in making flesh of one and fish of another. I do not believe in a different practice before the Interstate Commerce Commission from what obtains before any other court. A man gets a decision before the Interstate Commerce Commission and then he has to sue to get that enforced instead of letting the other fellow appeal. That is one of the most radical defects in the practice of that body.

Q. (By Mr. RIPLEY.) I was going to ask next for your views upon the question of classification and the enforcement of a uniform classification for the country at large.—A. I consider that a very important commercial question and one that I have been interested in for a great many years, the reducing to uniformity as far as possible the practice of the railroads in classifying freight. It can not be absolutely done; it can only be done approximately; but a uniform classification could be declared as the standard and put into effect at a given time. At the same time provision should be made for such flexibility as commercial circumstances would require, subject to investigation. That is, the commission or whatever other body had power over the administration of that classification should have the right to make modifications upon proper representations, and that should be the standard, in the absence of any ruling to the contrary. That would give us a basis of uniformity throughout the entire country and would at the same time afford relief against inflexibility. I do not think transportation rates can with safety be absolutely inflexible all over this country.

Q. Does Cincinnati, lying on the boundary between two great classification territories, suffer from the lack of uniformity in classification?—A. Yes; it is a practical inconvenience. In making business calculations shippers must take into consideration all the time what territory they are shipping into and what classification governs. If they are shipping into Southern territory, one classification has got to be arranged for; if into Western territory, another. The official territory is their immediate natural classification, and the Cincinnati merchant, therefore, has practically at all times to deal with at least 3 classifications.

Q. Do you see any possible resource in intrusting a greater measure of power over classification to the Interstate Commerce Commission?—A. None whatever.

Q. You would favor the right of appeal however?—A. Always.

Q. To such a body?—A. Oh, yes. I intended that it should be understood in respect to all my remarks in regard to the practice before the commission that the inalienable right of appeal should not be withheld from anybody.

Q. Do you recognize any distinction between the power to prescribe and promulgate rates, as conferred upon the Interstate Commerce Commission, and the power to approve of those rates when promulgated in the first instance by the railroads?—A. Yes. The power to approve of the rates in the first instance by the commission or the responsibility of approving of them would be demanding more than any commission would be capable of doing, and would be placing upon the commission a burden of responsibility that would be unwise and useless. The proper order of procedure, in my opinion, would be that every railroad should accept the responsibility of promulgating its rates and should have the right to enforce those rates until they were proved to be wrong, the burden of attacking them being upon the party who originates the proceedings against them. It is fair to suppose that railroad managers are honest and intend to make an equitable tariff in the first instance, but they are liable to error, and the demonstration of that error should not be made before themselves. I object to the principle of their deciding upon their own errors, and that is the only resort we have at present. Last winter the railroad companies, by one announcement, advanced rates throughout this country from 25 to 50 per cent on about 30 per cent of the commodities that were shipped, levying an additional tax upon the people by a stroke of the pen of several millions of dollars, and they knew it. Now, a great many of those changes were not resisted by the parties

to whom they applied. The greater proportion of the changes stood; but in some instances it worked absolute oppression, prohibition, and destruction of business; and the decision as to whether those rates should stand or not rested only with the railroads who made them. An appeal to the Interstate Commerce Commission only drew forth an opinion, and when that opinion was carried to the officers of the Government, the officers would not act upon it. Therefore, there was no tribunal except the parties themselves before which that matter could be brought. It was brought before them and a considerable modification was accomplished, which proves that the rates were not perfect. There are some of those changes that are still subject to litigation. Now, if the Interstate Commerce Commission or the representatives of the Government had had the right to suspend those changes until they were justified, the burden would not have been placed upon the manufacturers. There were instances where the entire profit of a business, built up after 11 or 12 years' effort, was absorbed by a stroke of the pen in a change of the classification of the output, and there were many instances where a large proportion of the profit was absorbed. Now, that is wrong.

Q. (By Mr. A. L. HARRIS.) I do not know whether I understand the witness with regard to the remedies which he would suggest for this condition that he has just spoken of. Is the remedy sufficient now with the courts?—A. No; it is a very long remedy to go before the courts. I know of one case that we prepared for the courts, and the preparation of that for the courts is costing the parties really more than is involved.

Q. Has the Interstate Commerce Commission at this time sufficient power of jurisdiction in a question of that kind?—A. They disclaim any power. They gave an opinion adverse to many of the changes but they disclaim the power to act.

Q. Now, suppose we go back to the power to approve rates. Would not that carry a little more power to the Interstate Commerce Commission in regard to the approval of the rates upon complaint?—A. That would be an endless task. There is no commission in the world that could go over a tariff and approve it. The man who made the tariff had probably an intelligent impulse in his mind when he made each adjustment. If you are passing in review my work, you have got either to absorb from me by some magical process my methods of thought or else you have got to ignore them, and you are liable to make very grave mistakes in passing in review my work. If I am an expert and I do that work subject to your criticism, you stand ready on receipt of a practical complaint to make me justify my work in one particular instance or in a dozen particular instances. That is a simple process and you are judicial and you can do that. But when I hand you this document and I require you to approve this and you take the responsibility off my hands, you take a responsibility you are not able to handle.

Q. As I understand, the present condition of the Interstate Commerce Commission is that even if it finds that a rate is unreasonable, its work is at an end there. It may make an order but that is all there is of it?—A. Oh, no; they are charged with the duty of summoning the district attorney to bring a suit to enforce that order. Then it goes before the court. It is a most lop-sided way of getting at justice. Your court of first resort decides the thing, and then you have got to become the prosecutor and the defender and the proponent of your own decision before another court instead of sitting still and letting it be appealed against you and the appeal justified.

Q. Do the railroad companies or the company complained against make any defense before the Interstate Commerce Commission, as a rule?—A. They do now; they did not at first. They make a vigorous defense now because the courts have made one or two orders excluding them or making them justify very clearly any effort to take further testimony. The first practice, you remember, was that they were not required to produce any testimony until they got into court and the court had the whole thing *de novo*.

Q. Would you make the finding of the Interstate Commerce Commission *prima facie* evidence in the court above or court of appeals?—A. It is made so by the law now, is it not? The evidence is *prima facie*. Yes, I would make the finding *prima facie*, and let the burden rest on the other side.

Q. Yes; then would you have a provision in the law to advance those cases upon the docket?—A. That is already there, is it not?

Q. Already in the law?—A. I think so.

Q. I was under the impression that it was not, for the reason that there were such long delays in the courts.—A. The courts have been very good in advancing cases. After they come before the courts, the courts have been very good about advancing them, as far as that is concerned.

Q. I had in mind a case that was just decided the other day in the Supreme Court on the long and short haul, between the Board of Trade of Chattanooga and the Eastern Tennessee and Georgia Railroad. That was stated in the papers at the time to have been 8 years from the time the complaint was filed.—A. Yes; in a general

way I have been cognizant of the progress of that case and I admit I was very much surprised at its coming up at this time. It is rather a matter of surprise to all who have been watching that case.

Q. Did not the Board of Trade at Cincinnati recommend the passage of the Cullom bill, or some bill carrying the provisions of the Cullom bill?—A. Yes.

Q. Have many of those recommendations, do you know, gone to Congress in favor of the enlargement of the powers of the Interstate Commerce Commission?—A. Yes; I think a large volume of them.

Q. Do you feel that the most important matter would be the one in regard to making the railroad or the claimant, whichever it may be, take an appeal the same as is done in any court?—A. I believe that is most important.

Testimony closed.

WASHINGTON, D. C., May 13, 1901.

TESTIMONY OF MR. OSBORNE HOWES,

Secretary Boston board of fire underwriters.

The commission met at 10.55 a. m., Chairman Kyle presiding. At 2.15 p. m. Mr. Osborne Howes, secretary Boston Board of Fire Underwriters, appeared as a witness, and, being duly sworn, testified as follows:

Q. (By Senator KYLE.) Will you give your name, address, and business?—A. Osborne Howes; No. 55 Kilby street, Boston; secretary of the Boston Board of Fire Underwriters.

Q. Have you a prepared article?—A. I have not.

Q. Do you propose to cover the general subject of the relation of Canadian and American railways?—A. Partly that. I have three subjects which I should like to bring to the attention of the commission, two bearing upon questions of transportation—that is, railroad and water transportation from Boston, so far as export trade is concerned—and on the subject of our merchant marine generally; then a third, if I have the time, on our trade relations with Canada.

On the first and the last I speak as a representative of the Boston Chamber of Commerce, of which I am a member, and the intermediate one, as representing the merchants' shipping interest of the past, through my father, grandfather, and great grandfather, and, to some extent, myself.

SENATOR KYLE: Yes. We will be glad if you will follow up that line.

Q. (By Mr. RIPLEY.) Do you have any official position in Boston in connection with the chamber of commerce or other organizations which entitles you to speak particularly about these organizations?—A. In the Boston Chamber of Commerce I am vice-chairman of their committee on reciprocal trade relations with Canada, and as a member I take an interest, of course, in the question of the development of Boston's trade with Europe and with foreign countries generally.

Q. Have you been on State commissions?—A. I have been on two—one that was called the Rapid Transit Commission, appointed for the purpose of improving the systems of transportation in and around Boston, and the other called the Metropolitan District Commission, appointed to prepare a plan for annexing the cities and towns in and around Boston to that city for the purpose of increasing its size.

Q. If you will take up those topics which you have, Mr. Howes, in the way and manner you think best, perhaps it will serve the purpose of the commission.—A. I may state then, at the outset, that Boston, next to New York, is the largest commercial port of this country. Our exports and imports for the year 1900 amounted in value to \$192,488,000; of that amount \$123,858,000 were exports, and \$68,630,000 were imports. The growth of the trade in the last few years has been quite constant, with the exception of last year, when there was a pause, due chiefly to the fact that the war in South Africa had drawn quite a number of the steamships upon which we depended for trans-Atlantic transportation to another line of service, thus leaving us, to some extent, denuded of our customary tonnage. The freight rates on that account were very high; high perhaps from all Atlantic ports, more especially from Boston, so that while at the present time wheat is carried from Boston at about a penny a bushel, last year it was about 3 pence, or 6 cents. This interfered with our development temporarily; now it is going ahead again, and I think this year the export and import trade of Boston will be considerably over \$200,000,000 in value. The reason why we have this trade is that Boston—sooner, I think, than any other city in the United States—through the

enterprise of its railroad companies has developed a system of terminals and dock facilities probably superior at the time they were built to those found anywhere else, and perhaps so to-day. The railroad companies built their own wharves, they built their own landing sheds and elevators, and were prepared, without intermediate charges, to put grain intended for Europe on board the vessels. Besides this, or in part perhaps due to this, we developed at a very early stage the system of carrying freight to Europe in large freight steamers, in contradistinction to passenger steamers or small tramp steamers. We have practically no tramp business in Boston. It is all carried on by the regular liners, running chiefly to Liverpool, so that Boston's trade to Liverpool is greater than that of any other American city—greater even than that of New York City. The steamers have been built of the largest size for freight-carrying purposes, and have been increased in size from time to time; the only limitation just now is the depth of our harbor channel which, unless we can get it increased, will probably put a barrier in the way of a very material increase in tonnage.

The four lines that we have there—the largest freight-carrying lines—are the Leyland, the Dominion, the Cunard, and the Warren. Three of these now carry passengers to some extent; one of them is simply a freight line. The export rates from Chicago or from western points to Liverpool via Boston are the same as those via New York. The local rates—the local east-bound rates—on sixth-class merchandise are 2 cents higher to Boston than they are to New York, and this has been thought to act somewhat as a deterrent upon the building up of a local grain business. That is to say, we have not there—as is found in New York, Philadelphia, and Baltimore—a large quantity of spot wheat, which can be shipped either to one foreign port or another as the exigencies of the trade require. The contracts for shipments are almost entirely made at Chicago or beyond, and it simply passes through Boston, giving us possibly in this respect less of gain in the matter of trade than we should receive if shipment were made directly from Boston, as is the case at New York. This has prevented the building up of a tramp steamship business and has confined our exports a good deal to England. We get very little of the continent trade; we get very little of what is called whole-cargo business, where a steamer is chartered to carry a cargo to one point or another in Europe or elsewhere. Apart from that I am not prepared to say that the 2-cent differential against us is a serious drawback. Theoretically it may be wrong, but practically, if a grain merchant were to bring 200,000 bushels of grain to Boston as a local venture and afterwards should wish to ship it, he could get a rebate from the railroads equivalent to 2 cents. The theoretic wrong is that there is no particular reason why when a shipment of certain carloads of grain leaves Chicago for Boston, part of the cars carrying grain intended for local use and a part of them carrying grain intended for foreign shipment, that the New York Central or the Lake Shore should receive more per car for hauling the former than the latter. They do the same service and practically should be paid the same price; but in working it out I do not think the system causes serious loss. The differential is about \$8 on a carload—that is, on a 40,000-pound carload. The rates at Boston are assumed to be maintained, as they are throughout the United States, by the rules of the Interstate Commerce Commission, but we have a belief that while these rates are officially promulgated they are by no means always observed. The statement is made that if a dealer has a large shipment coming from Chicago he can get a rate made that is a temporary rate. Perhaps the railroad agent at Chicago will write a letter notifying the Interstate Commerce Commission that the railroad has changed its rate, and then 5 minutes afterwards write another letter stating that it has been changed back to the old rate. At the present time we are aware in Boston of grain going to Europe via Baltimore—which has a differential in its favor so far as railroad charges are concerned—in such quantities as to indicate that there has been in addition some cut made in the rates. I think it is thought by shippers in Boston—those interested in steamers and interested in the shipment of grain—that railroad rates are still largely matters of trade; although if a cut is made in rates via one city, it is pretty quickly found out and the others adjust themselves to these new conditions. In times past—and to quite an extent at the present time—the fact that Boston has railroad connection with the West by Canada has been looked upon by our merchants as of distinct advantage. Until quite recently the financial and commercial interests of the American trunk lines ended at the Hudson River, and the tendency of such influences as they could exert in the direction of freight was unquestionably used to the detriment of Boston as a shipping point for grain intended for foreign markets. In this exigency the Canadian roads came to our help. It was for their interest to have the shipments sent to Boston, and through the competition which they could offer we received from the American trunk

lines a consideration which would not otherwise have been accorded to us. It is possible that recently that advantage has been partly neutralized. The New York Central has acquired by lease the Boston and Albany Railroad and now has a financial interest in having goods shipped to Boston, as great as and perhaps even more than it has in having them shipped to New York City. It has acquired the splendid terminal facilities of the company whose property it leased and is preparing at the present time to greatly enlarge these. The Boston and Maine has leased the Fitchburg road, which is also a great grain-carrying road, and the influences that it can bring to bear upon the American trunk lines by the large amount of westward-bound freight it controls has also a tendency to bring business to Boston rather than to divert it to New York or other Southern ports.

During the winter months of the year Boston has been in the past the shipping point for a great deal of the freight that has been brought over the Canadian railways. In summer grain that arrives at Montreal can be sent just as cheaply to Liverpool by steamer from that port as from Boston, and hence there is no reason why this grain should be hauled 260 or 270 miles farther, when it can be put directly on board the steamers at Montreal and carried across the Atlantic quite as well as from Boston. Therefore we never expect to get much grain via Canada in the summer. In winter, when the St. Lawrence is closed by ice, a great deal of grain has come to Boston for shipment. The tendency in the last year or two has been somewhat against this trade. A spirit of antagonism has to some extent grown up in Canada, a feeling due in part to the belief that trade relations between the two countries are not all that they should be, and out of this spirit of antagonism might well arise strong political feeling, which ultimately might have influence upon a great railroad corporation, such as the Canadian Pacific. Its effect has been to lead it to use Canadian shipping points rather than those in the United States, and on this account the Canadian Pacific has lately sent almost all of its winter shipment to Europe via St. Johns, New Brunswick. The Grand Trunk has also developed its terminal facilities at Portland, Me., which have injured Boston to some extent, but Portland is a city of the United States, and the Grand Trunk's winter shipments from that place have grown very materially in size within two or three years past and promise to be very much larger in the years that are to come.

Q. (By Mr. CLARKE.) The Grand Trunk line extends to Portland?—A. In going to Portland it carries freight entirely over its own line. It does not need to share any of its earnings with another railroad company. This is, of course, the reason for its action. This, in a general way, Mr. Chairman, is all I have to say in relation to our local questions of transportation.

Q. (By Mr. RIPLEY.) You might go on.—A. Very well; I will take up the next subject. What I have now to say is not a statement that I am prepared to make on behalf of the Boston Chamber of Commerce, for the reason that the chamber of commerce has never taken any action on the general question of the method to be adopted for the revival of the American merchant marine interest. There has been a division of sentiment between different sections of the chamber, and it has been thought well not to take any action whatsoever, so that these opinions are my own. I may state that my father and grandfather, and, further back my ancestors for several generations, have been American seamen. My father and grandfather were ship merchants in Boston, and it was my expectation to carry on the same business. For that reason I went to sea as an officer in the Pacific Mail Steamship Line, for the purpose of learning the business, and, having acquired more or less knowledge of steamshipping, the business fell flat and I left it. What I wish to say is that I think it is the desire of all Americans to have our merchant marine resuscitated, and that there is a willingness on the part of practically all of our people who think anything about this subject to do all that they can which will, in their opinion, legitimately bring about that result. Our merchant marine in the past has been subject to great fluctuations due to a variety of causes. In 1790 the merchant tonnage of the United States registered for the foreign trade was 364,000 tons. In 20 years from that time—in 1810—it had grown to 981,000 tons; that is, it had increased nearly threefold. That result was chiefly due to the enormous advantages which our people enjoyed in consequence of the disturbances in Europe growing out of the Napoleonic wars. Our country was practically the only neutral nation in the world. We secured a great deal of the freight-carrying which otherwise would have gone to other nations. But after 1810 the merchant marine of the United States suffered a very serious decline, and did not recover from that decline for 37 years. In 1830 it had fallen from 981,000 tons in 1810 to 537,000 tons, and with various ups and downs it continued until 1847, when it gradually gained the size that it had previously attained in 1810. It then amounted to 1,047,000 tons. From 1847 to 1861 it went ahead

with leaps and bounds, so that when the civil war broke out we had a merchant tonnage registered for foreign voyages of 2,496,000 tons, or a tonnage within a very small fraction equivalent to that which England at that time possessed engaged in the same business.

This gain, beginning in 1847, was partly due to the development and opening up of trade with California. The discovery of gold in 1849, and the great influx of migration which took place at that time, was promptly utilized by the American merchants by building new vessels and sending them out there. The profits of the voyages were very great. I have known of some vessels in which my family have been interested—new thousand-ton ships—that when they cleared from Boston Light on their voyages out to San Francisco had obtained freight money enough on that one voyage to pay the entire cost of building. Of course, that was a great stimulus to new construction. When in California these vessels found very little to do in the way of what would be termed a coastwise trade. The trade from New York to San Francisco was coastwise business; but there was no return cargo to warrant making the long trip homeward from San Francisco. Vessels would go to the Chincha Islands off the coast of Peru to load guano, or would go to China, India, the Philippine Islands, and various places to get return cargoes, either to the United States or to Europe. In this way we entered largely into the maritime business of the world. We found at that time that we possessed better vessels; that our officers and sailors were better adapted to the business; that we could make quicker trips, deliver our cargoes in better order than the ships and crews of any other nation. This was so well recognized that for 5 or 6 years before the outbreak of our civil war an American ship in Melbourne, Sidney, Hongkong, Calcutta, or in any of the great foreign seaports of the world, could obtain better charters to carry goods to England or to Germany than the English or German merchants would give to the vessels of their own nations. We obtained them simply because of the superior manner in which we carried on the business.

The decline came from the obvious causes of the war; the destruction of vessels by the Confederate privateers, and also from the high war rates that shippers in American bottoms were compelled to pay. That is to say, if an American vessel was loading in Calcutta for either Liverpool or Boston, she had to take her cargo at what the English merchant ship would get for the same business, less what the shipper had to pay in the way of war premiums, so that it made a distinct reduction in the possible profits of the American ship merchants. However, that would have righted itself when the war was over if the conditions in the matter of price had permitted us to build iron craft, or if we had repealed the laws that prevented the purchase of foreign-built ships by American ship merchants. We had begun iron construction before the war and begun it very successfully. There were 2 steamers—the *Massachusetts* and the *South Carolina*—built to run between Boston and Charleston, S. C., and 2 more—the *Mississippi* and the *Merrimac*—built to run between Boston and New Orleans. All of these 4 iron vessels had been constructed in Boston Harbor some years before the outbreak of the civil war. They were employed part of the time in the Government service as transports. One of them—the *South Carolina*—was in service as a merchant ship only 4 or 5 years ago, and may still be running between Panama and some of the ports of Central America on the Pacific coast, showing the well-built character of the vessels. In spite of this experience the tendency at that time among the American shipowners was to favor wooden rather than iron vessels, and they held to that under conditions which proved to a certain extent disastrous to them. I know of this particularly, because my father was the largest individual owner and manager of a line of steamers which was formed in 1866 to run between Boston and Liverpool, called the American Steamship Company. This company built its steamers of wood in spite of the advice that they should build iron vessels. These were wooden propeller ships. The enterprise unfortunately failed. There was not sufficient business, and the original cost of the craft was too high to make it possible to pay dividends on the business done. The same backwardness in this respect was shown in the case of the Pacific Mail Steamship Company during the time that I was in its service. At that time the Pacific Mail was receiving a large subsidy for carrying the mails between San Francisco and Hongkong, and I was an officer on the first steamer of the line that was built for trans-Pacific trade purposes—the *Great Republic*. There were also 3 others—the *China*, the *Alaska*, and the *Japan*. The company spent some \$5,000,000 in building wooden side-wheel steamers, which were as poorly adapted to the business they were intended to perform as it was possible to have them. They were built after the old type, just as steamers are now built to run up the Hudson River, that is so far as their engines were concerned, although long before that time the English had changed to the

propeller type of engine, and to the iron hull for ocean service. The steamer *Great Republic*, which was the first one to enter on the business, on one of the first voyages I made in her, left Yokohama with hardly any heavy cargo on board, simply coal enough to carry her over, and yet so deeply laden that the sidewheels would hardly turn around, and she proceeded at the rate of about 4 knots an hour until lightened up by the consumption of her coal. Four days out we struck a severe gale, which washed the paddle boxes and a part of the guards off, and we came into San Francisco with the paddle wheels bare of covering over them. Now, the money spent in building these vessels was practically thrown into the sea, so far as the development of American commerce was concerned. The subsidy voted by Congress engendered the belief in the minds of the managers of the company that they could do almost anything. There was in any event a profit obtainable and they built in a haphazard fashion.

The result of subsidies to American steamship lines, so far as they have been tried, has not been in the least satisfactory. A great deal has been said about the Collins Line to the effect that if their subsidies had been continued the line could have been built up. That line, unfortunately, was doomed before the subsidy ended. It was caused, perhaps, through no fault of its managers, but through circumstances, perhaps, beyond their control. As the committee may remember, it lost two steamers—one the *Arctic*, off the coast of Newfoundland under tragical conditions so far as the loss of life was concerned; another steamer—the *Pacific*—sailed from port and was never again heard of. This line at that time and the English lines at that time were largely passenger lines. They did not carry common freight. Freight was not carried by steamers across the Atlantic to any great extent until after the discovery of the compound engine and its subsequent developments; and at that time and now the passenger lines of steamers depend for patronage upon the success and safety with which they carry those who entrust themselves to their care. To lose two of its steamers in a short time would be fatal to the business of any company. In 1873 the White Star Line lost the *Atlantic* on the coast of Nova Scotia, and it required 6 or 8 years before it could recover its ground and have passengers go with it as freely as they did with other lines. A great many people I know would never think of going across the Atlantic on the French line of steamers, simply from the knowledge they have of the troubles that have occurred when an accident has taken place. The fate of the Collins Line was one of those misfortunes which come about through hard luck; through no fault, perhaps, of the managers; through no fault of the officers, because they had a splendid set of men on board of the steamers. Another line, if it had started at that time, and had not encountered these mishaps, would have had very much better success.

It has been frequently said that our merchant-marine business fell off and declined a long time prior to the war, for the reason that earlier in the century we carried a very much larger percentage of our exports and imports in American bottoms than we did at a later period. For instance, in 1826, 92½ per cent of all the exports and imports of the United States went in vessels sailing under the American flag; but at that time all the tonnage that we had registered for foreign voyages was 696,000 tons. In 1865, when we had nearly 2,500,000 tons, we only carried 65 per cent of our exports and imports, but this was due to the fact that our American merchants had found a better business than carrying these exports and imports of our own. They were then the common carriers of the world and were drawing large profits from transacting that business. With the vessels that my father owned and controlled, it frequently happened that they sailed from New York or from Boston on a foreign voyage and did not again return to an American port for 4 or 5 years. They were doing business all over the world. Now and then they would come home again for the purpose of refitting, but we were having such a profitable business at that time that whether the freight was American or foreign was a matter of indifference. At that time, too, when we were building up our trade in this rapid manner, we were paying to those whom we employed as officers and men on our vessels relatively much more, as compared with that paid on foreign ships, than we pay at the present time when compared with these foreign rates. It has never been, in the development of the American merchant marine, a question of maintenance. It has always proved that when we have had an opportunity we could pay more, simply because we obtained a great deal better service for what we paid. I remember on the first voyage that I made across the Atlantic—that was in 1861, on one of my father's ships—that we overtook and passed a number of English vessels, and the contempt was inexpressible with which our American officers looked down upon what they called "the lime juicers." These latter were not in a class with them.

The difficulty that we experience at the present time and have for years experienced is that we can not get the tools of our trade at a low price. So far as the

American shipbuilder is concerned, he has, unfortunately, acted during this long series of years as a dog in the manger in regard to the merchant marine of the United States engaged in the foreign trade. He has not been in a position, due to the high price of materials, iron and steel, to build vessels and maintain competition on equal terms with foreigners. At the present time the annual depreciation in vessel property is very great, representing approximately 10 per cent a year, so that if one vessel costs \$200,000 and another foreign competing vessel costs \$100,000 the depreciation each year practically represents what would be a fair return upon the money invested, and it is a dead loss to the American and a good profit to the foreigner. If the American shipbuilders had been willing—because it is largely through their insistency that the law has not been changed—if they had been willing to permit the purchase of foreign-built ships by American ship merchants they would have had just as much to build themselves for the coastwise business and probably a great deal more in the way of repairing than they have had of vessels engaged in the foreign trade, and would not have been the means of continuing our merchant marine in the paralyzed condition it has remained in for the last 30 years.

Q. (By Mr. CLARKE.) Has there been a difference of one-half in the cost?—A. There has at times. It has varied, of course, very materially with the difference of prices in the different countries, and that has not been a constant factor at all.

Q. You understand the difference to be much less now than formerly?—A. Oh, yes; it is very much less now. It is a curious fact in this connection that the difference in cost between the foreign-built vessel and the American vessel depends largely upon the character of the trade in which she is to be used. The roughly built freight steamer costs relatively more to build in this country than the finely finished passenger steamer. I have no means of knowing, but I have not the least doubt in my mind that Mr. Cramp, when he has succeeded in obtaining contracts for the construction of Russian or Japanese battle ships or cruisers, has made money out of the operation and that he has been given these contracts simply because he could build these war ships just as cheap as the foreigner could build them. The reason that he has been able to do this has been because of the immense amount of American labor that has entered into the construction of these vessels. The relative cost of the raw material in such craft has amounted to much less in the aggregate than would be the case with a common freight carrier, where the cost of the raw material is practically everything and the mere slapping of it together constitutes but a relatively small percentage of the charge. I know that a number of years ago I went through the shipbuilding works on the Clyde of the Messrs. Thompson, who built a large number of the Cunard steamers, and they told me, as an example of this, that they had all the woodwork for their steamers either made in Cincinnati, or had imported from Cincinnati to Glasgow the workmen who were to do it, because the work could be performed very much cheaper in our country or by our countrymen than by foreigners.

I am of the opinion that the resuscitation of our merchant marine would take place at the present time very quickly if the obstructive laws in regard to the ownership of foreign-built ships were repealed and we could place ourselves in this respect on the same plane as all of the other great maritime countries of the world, which have practically no restrictions of this kind. The fact that so much American capital has been invested in foreign tonnage, as, for instance, in the recent purchase of Mr. Morgan, indicates that it is not a question of capital. We can get all the money we want to build up our trade, provided, as I said before, we can get the tools by which that trade is to be carried on upon equitable terms.

Q. Is it your understanding that Mr. Morgan was able to buy those vessels as anybody would have been?—A. No; I should suppose Mr. Morgan, by the large purchases he has made of almost everything lately, was better able than most people.

Q. Then he has not been hampered in any way in buying them?—A. No; I should say in the case of the Leyland line he has been far from hampered. I understand that the Leyland stock represents seven stock waterings and yet he has paid a premium on that.

Q. But he has been able to acquire the tools of the trade?—A. Yes; except that they are under the English flag.

Q. Well, if it will not disconcert you, will you please tell us wherein there would be an advantage to him in having them under the American flag?—A. Oh, I should say, so far as Mr. Morgan is concerned, it would be perhaps a question of sentiment.

Q. (By Senator KYLE.) Of what?—A. Sentiment.

Q. Sentiment?—A. It is precisely similar to conditions that existed during our civil war; a large number of Americans placed their vessels under the English flag, or under the Hawaiian flag, or some other foreign flag. My people did not. They

preferred to pay the war premium, run all the risks of capture, and sail their vessels as Americans. It was a question of sentiment, and sentiment plays a pretty large part in the conduct of the affairs of this world.

Q. (By Mr. CLARKE.) Now, do you think that sentiment would be entertained more strongly by the owner than by the people at large?—A. I think it would be fairly developed. I think that if shipowners could buy their vessels in foreign shipyards that they would do so very quickly.

Q. They can buy them; that has been proved.—A. They can buy them; but I mean give to them American registers.

Q. Well, now, if they bought them there, they would not have them made here?—A. No; but they are not made here now. That is the trouble.

Q. Since steel has entered so largely into the construction of these vessels, and since this country has become the greatest producer of steel, is it not possible that they may be made here just as cheaply as abroad, and perhaps even more so?—A. I think so, in time.

Q. In your opinion, therefore, they do not need to be especially subsidized or encouraged by the American Government?—A. I do not think there is any need for subsidies. I should say even now that the construction of American vessels might be undertaken if we could obtain at our shipyards all of the advantages of our low-priced steel. That is to say, if American-made ship plates were in all cases, or in most cases, sold as cheaply to American shipbuilders as they are sold to the builders of vessels on the Clyde in Scotland and Tyne in England.

Q. If no foreign government was encouraging its merchant marine engaged in foreign trade by way of subsidy or postal bounty or any other method, would you see any necessity for this Government doing it?—A. I do not see any necessity at the present time, for the reason that I am not aware that in the transportation of freight any foreign government, with the exception of France and Italy, where it has proved a failure, are aiding their merchant marine by subsidies.

Q. Is the subsidy paid by Great Britain and also that paid by France limited to their passenger steamers?—A. That paid by Great Britain is entirely. That paid by France is a general subsidy and has proved a disastrous failure. It has not stimulated its merchant marine. I am not aware of a single vessel obtaining a mail subsidy from the English Government that is not a passenger steamer and a mail-carrying steamer.

Q. I hope I have not diverted you from your talk.—A. I had reached that particular phase of it.

Q. (By Mr. FARQUHAR.) The subsidy, Mr. Howes, that is paid to the Peninsular and Oriental, is that paid to passenger steamers?—A. Yes; these are all passenger steamers.

Q. But the Peninsular and Oriental line was never mainly dependent on passenger trade.—A. Probably not; they carry freight as well, but their main source of earnings is their passenger business.

Q. What do you say about the North German Lloyd, that has entered into the same business?—A. On subsidy?

Q. By both a German subvention and an English subvention.—A. The North German Lloyd has entered to some extent, running its steamers to the Far East, dividing its money, as I understand, with the Hamburg-American. These are passenger steamers that they have there. They carry freight, too, but they are more particularly maintained on a mail schedule.

Q. Is it a fair proposition to say that the whole of the Peninsular and Oriental and the joint lines there are not freight lines, simply as a matter of business?—A. No; they are not primarily conducted on a freight basis. The subsidy is paid to them on the ground that they are to make a higher rate of speed than it would be profitable for freight steamers to make. There are a larger number of steamers plying between England and the East that are purely freight steamers and that are paid no subsidies whatever. But the Peninsular and Oriental line has to run on schedule time, make a voyage at the rate of so many knots an hour, and the average has been increased with each renewal of the subsidy. It has had no competitors when the question of the renewal of the subsidy has come around, for the reason that the other lines running craft in that direction do not consider it of enough profit to take the subsidy in view of the conditions involved, the chief one of which is the high rate of speed.

Q. Out of all the Peninsular and Oriental boats, how many are on the mail schedule to China? Do you know the exact tonnage that is floated by them and the number of boats that the Peninsular and Oriental run in the eastern trade?—A. I could not state the exact tonnage. It is, roughly speaking, about 500,000 tons.

Q. Can you say how many are on the mail schedule?—A. Not definitely.

Q. Well, has not the proposition been openly made there, and discussed in Par-

liament there, that it was for the support of the Asiatic trade of the British Empire that that subsidy was paid?—A. Only so far as giving competitive mail service.

Q. Have not the Peninsular and Oriental in their annual statement said there that the subvention from the British Government was the entire aid that they had in competition with other nations?—A. In competition with other English vessels.

Q. Well, with other nations. There are other nations as well as that. The German combined line is almost as strong as the Oriental is, as far as mail is concerned?—A. The Hamburg-American is a large line.

Q. How many steamers have they got in the East?—A. They have not many out in the East; but they have a large number in other parts of the world.

Q. And greater speed?—A. As I said before, it is a question of speed. If the Peninsular and Oriental Company were willing to enter into the freight business, as so many of the other lines have that are not subsidized, undoubtedly it could make money. Its steamers, of course, are not adapted to that class of business. They are a swift class of steamers.

Q. Well, we will put it in another shape. The amount of subvention that the Peninsular and Oriental gets from the British Government is for the support of British commerce?—A. No; it is for the support of the political supremacy of the British Empire.

Q. Well, either way you put it.—A. If we were to run a line of steamers from Manila by way of Honolulu and pay a big subvention, I should not say that we were endeavoring to develop American commerce; I should say that we were endeavoring to combine together the outlying parts of our own domain, just as we pay a star-route mail subvention in our Western Territories.

Q. Well, Mr. Howes, are we not practically doing it now with the little transports without any lines?—A. Practically so. We are doing it because the Government pays for it.

Q. Pretty thoroughly, is it not?—A. Quite so.

Q. You mentioned the fact that the subvention of France had amounted to a total failure. Was not the failure a great deal in the fact that they bought their ships on the Clyde and elsewhere instead of supporting their own shipyards?—A. No; they have paid a higher rate to those which they have built at home; but it does not seem to have been of any advantage.

Q. It was no advantage and never was as long as they had free ships, and the cheap old ships of the world were there ready for the French merchant to get any time, and it killed the French shipyards?—A. No; I beg your pardon. The French merchant did not buy these; he did not purchase anything that was offered. You can not swindle a French ship merchant. The French are the best people in the world in the construction of vessels and in knowing what is the right thing to do. We and the English have copied the models of the French men-of-war from the time of the Revolution downward, because they have known how to construct hulls that were better in model and everything than either we or the English devised. They were not likely to be deceived in that way.

Q. Did Germany when she came to possess her merchant marine take the French plan of subsidy?—A. No.

Q. What exceptions did she make?—A. She never gave a general subsidy. She has subsidized some lines—only one line practically, the North German Lloyd.

Q. You make the proposition there of the failure of the French marine. Is it not a safe proposition to say that if they had not had the subvention the French marine would have been nowhere at all?—A. It is about that way now, for they have not the goods although they have paid the money.

Q. Is it not a fact that France held her own when she had that small subvention?—A. No.

Q. Has she not increased?—A. No, she has not increased.

Q. I am speaking of late years, of 1890 to 1891.—A. She may have for a short time, but they have made the experiment and they have found it a losing one.

Q. While she had the subsidy did they find it to be a losing one?—A. As respects their own past tonnage, no; as respects the tonnage of the world, yes. Relatively she is now worse off than she was before.

Q. Well, you must make a distinction between the tonnage proper of the nation and the carrying tonnage.—A. No, there has been a growth with all of the maritime nations of the world, in which the French have not participated. They have simply marked time.

Q. (By Mr. CLARKE.) I would like to ask one other question in regard to this purchase of Mr. Morgan, or other purchases that you think Americans should be free to make. Why is it that with our great steel production and with the wonderful skill of our builders we are not able now to produce even coarse freight vessels as cheaply as they can be produced in foreign shipyards?—A. I think one

reason is that we have not of late, so far as our shipbuilders are concerned, been able to get altogether the benefits of these low prices. If the American manufacturer of structural steel and steel plates intended for shipbuilding sells those articles to an English shipbuilder at a considerably lower price than he will sell them to an American in his own country, naturally he places the latter under a serious disadvantage when both are endeavoring to construct vessels that are to compete with each other on the high seas. This is the disadvantage which the American shipbuilder seems to be under at the present time.

Q. (By Mr. CONGER.) Do you know if that condition actually exists?—A. Well, it has existed. Prices of steel vary so tremendously in a very short time that it is hard to say that the condition exists now. That it existed last year or year before last, I feel confident.

Q. Do you understand that the structural steel which enters into foreign-built vessels is produced in this country?—A. I think to some extent it has been; steel plates certainly in large quantities.

Q. (By Mr. FARQUHAR.) Was not the reason why we exported steel plates the fact that they had a demand there and we had none here? What other reason have you got for it?—A. There was a demand there. There might have been a demand here at the same price.

Q. That may be, but it was not so as a business proposition?—A. There was a demand there at that price. The question is whether there would have been a demand here at the same price at which they were selling to foreigners.

Q. But we are not advised, this commission or anybody else, that the same price was offered there and refused?—A. What?

Q. The same price that was offered to the American builder that was offered to the foreign builder, so we were where we had always been in this country.—A. I do not know that they have ever been offered, but while—and this comes to me by hearsay, so it has to be taken for what it is worth—the price has been asked, and found to be higher than that at which similar commodities have been sold for at the same time on the other side of the Atlantic.

Q. (By Mr. KENNEDY.) Were you familiar with the subsidy bill that was pending in the last Congress?—A. I was.

Q. Do you understand that if Mr. Morgan had been the owner of these steamers that he has recently purchased at the time such a bill as that became a law, that he would get any benefit from that subsidy law?—A. It would depend on the date fixed in the law concerning the time of ownership. If the bill had been so drawn that any owner of a foreign-built ship, owning that ship on the 1st of July, 1901, could get a subsidy, he would have one. The date was a shifting one. What would have been the date when the bill finally passed no one could have foretold.

Q. Do you think that if that bill should be introduced and passed in the next Congress that these vessels that have been recently purchased would get the benefit of the provisions of that law?—A. I do not think it will pass unless they get the benefit.

Q. That is all I want to ask. [Laughter.]

Q. (By Mr. CLARKE.) What is your understanding of the relative labor cost of constructing freight vessels of steel in foreign shipyards and in this country?—A. I think there would not be at the present time much difference, provided you carried your vessel up to a tolerable high state of finish. I think quite likely that at this time, for a roughly constructed freight steamer, the labor cost of building here would be greater, even if the plates could be obtained at the same price, than it would be on the Tyne. There is always a difference. It is cheaper to build a freight vessel on the Tyne than on the Clyde, although they are both in the same country. One locality builds one class of vessels and the other another; and I think it quite likely that it could be built on the Tyne cheaper than here. But we have in this country a great advantage in the matter of labor. We hear a great deal of talk concerning its high cost, and less about its daily efficiency. On the occasion that I was speaking of, of going through the large shipyard on the Clyde, the chief of the house told me that he was able to get only about 4 days' work a week from his men; that it was the rarest occasion that the best men came to the yard in a condition to do work until Wednesday—usually about Wednesday noon. It took them that time to sober off after Sunday. He said this was one of the most serious obstacles that they had to contend with, and that it struck down his best men, as a rule. I found it true, through almost all of the northern part of England and the southern part of Scotland, that the loss to labor and capital in consequence of excessive drunkenness was something which Americans—unless they have been through those large industrial establishments—have no conception of. It is a condition which puts us—where this evil does not count as a practical factor in our operations—at a tremendous advantage in all industrial undertakings.

Q. (By Mr. PHILLIPS.) Do you believe with Mr. James J. Hill that ships can be constructed in this country as cheaply as they can on the Clyde?—A. I think with the same cost of raw material—I will include that—that a great number of large vessels can be built as cheaply here as they can there.

Q. He makes that assertion?—A. Well, he ought to know.

Q. (By Mr. KENNEDY.) It might be said that he might change his mind on that question because he did not come out in favor of the subsidy bill last winter.

Mr. PHILLIPS. Well, he made this statement in Chicago while this subsidy bill was pending, and was so quoted in the newspapers.

Q. (By Mr. FARQUHAR.) While you were speaking about the purchase of these boats by Mr. J. Pierpont Morgan, the Leyland Line, do you know what per cent they paid annually, the Leyland Line?—A. It has been a very profitable line. It has been a close corporation and it has not disclosed the amount of dividends paid; but it is currently reported that it has paid 15 to 20 per cent a year.

Q. It has been said it was 15 per cent?—A. I beg pardon?

Q. Take the proposition that it was 15 per cent.—A. As I said before, it has paid this on a capital that has represented 7 distinct waterings; that is, in stock dividends.

Q. (By Mr. LITCHMAN.) Then they water stock across the water?—A. Oh, yes; they are adepts at that.

Q. (By Mr. FARQUHAR.) Now, when the question is asked about the effect of the subsidy on Mr. Morgan, if he has purchased the line for a large sum of money on the stock and they make from 10 to 20 per cent there, do you think Mr. Morgan needs any subsidy to run his line?—A. I did not suppose the bill was based on needs.

Q. Do you think there is any necessity for Congress to give it to him?—A. No, I do not think there is any necessity for Congress to give it to him or to anybody else.

Q. Well, do you think the purchase of that amount of tonnage by Mr. Morgan there, that Mr. Morgan's plans are simply the fact of owning the tonnage and boats there as a productive industry, or that it is really an extension of the transportation features of the American continent into Liverpool and Southampton and Antwerp and elsewhere?—A. Oh, I think you are right that this is simply a development of his general system of transportation.

Q. (By Mr. CLARKE.) Would you see any objection to this country granting precisely the same subventions that other countries grant for rehabilitating the merchant marine?—A. Which other countries?

Q. In countries with which it would have to compete?—A. I should see no objection at all to our copying the English system under like conditions. I may say, answering your first question, that I went before the Committee on Commerce of the House a year ago, when it had the bill under advisement, and said that, while I did not believe in subsidies in the least and thought they were entirely useless, it seemed to me that there should be a brief amendment put into the bill, if it were going through, which would give to me, or to anyone else who did not want a subsidy, but was prepared to carry my business on on business principles without aid, the right to purchase my vessels wherever I saw fit. If those who built vessels in America, or who before a certain time owned foreign vessels and should agree to build an equivalent additional American tonnage, were to get a subsidy, that was granting logical protection to the American shipping interest. It was direct protection, instead of the customary method of indirect protection. But I never understood that the system of protection intended prohibition; it was simply to give a certain advantage to a national industry. If, after granting this direct protection, the law that prohibits the purchase of foreign-built vessels was repealed, I would, if I were a member of Congress, under such conditions, believing that the subsidy feature would fail, and feeling sure that under the other conditions the commerce of the country would grow, vote for the measure, subsidy and all—that is, taking the two together.

Q. (By Mr. FARQUHAR.) Now, Mr. Howes, about what amount of money do the Americans pay for the carriage of their goods to Europe and elsewhere?—A. That depends upon what you mean. You can not very well compel an Englishman to pay you for transporting goods over to England and then also pay you for transporting goods back again. We must limit ourselves either to the export trade or to the import trade.

Q. Take the joint exports and imports; how much does it cost the Americans?—A. I do not know that it costs—

Q. (Interrupting.) To use foreign tonnage, to pay foreign tonnage—how much money?—A. I think perhaps what we should legitimately pay them would be perhaps \$25,000,000 or \$30,000,000 a year.

Q. How much does it really cost, then, to carry the American exports and imports? We only carry 8 or 9 per cent of them.—A. Yes; 8.

Q. Well, whatever it may be—8 or 9 per cent. What does that 8 or 9 per cent cost the freighter?—A. I think, so far as the imports are concerned, those enter as a factor into the cost as a nation; so far as the exports are concerned, they do not enter at all. The English buy grain in Chicago, and they pay the transportation; we do not pay it.

Q. Would you say it is from \$175,000,000 to \$200,000,000 a year paid in cash?—A. Nothing like it; nothing like it.

Q. How much?—A. It is simply guesswork, but it can not be that. I should say \$30,000,000 or \$40,000,000 at the outside. That would be our import trade, which is all we can legitimately claim. We can not expect that the foreigner is to allow us to carry our goods to him and carry his goods to us. If we divide, that is all we can expect; and all that is rightly ours is what we import. If I buy 1,000 bales of jute in Calcutta and I bring it to this country, why, it ought to come, we will say, on an American vessel. The American tonnage even at the present time is carrying a great deal more of the import trade, and always has, than of the export trade. Last year we carried between 13 and 14 per cent of our import trade and only about 6 per cent of our export trade. If an Englishman buys 1,000 barrels of flour or 500,000 bushels of wheat in Chicago, he has the right to say how he will carry it. We can not expect to carry it for him, except to carry it over our railroads and deliver it to him at his vehicle, wherever that is.

Q. So you would say, then, that it only costs the American freighter for 12 months about \$30,000,000 a year?—A. I should say probably about \$40,000,000 a year.

Q. Have you seen any figures different from that?—A. I have seen a great many which I did not believe in the least.

Q. In what way?—A. I think they were overestimates.

Q. What do you make the basis of your estimate in finding the freight rates?—

A. On the average of freight rates on the quantity of stuff we import.

Q. What do you calculate in the ton? What figure do you make in calculating the tons, as all other people do?—A. There is no fixed charge, because it depends on where the bulk of your business comes from. If it is a long distance, it is quite high; and it depends also on the character of the commodities offered. Some are expensive and some are cheap goods. Now, you have to take into account that while with the magnitude of our export and of our import business the tonnage is tremendous in the exports, because we export so much grain and so many things of bulk rather than of value, our import business is in tonnage relatively small. That is, what we bring into this country, as a rule, are goods of a relatively high cost. They take up very little space, and do not represent a tremendous amount in the cost of transportation.

Q. Is there any agreed figure at all about the freight per ton on the average of all the imports and exports of a nation?—A. I do not think there can be.

Q. Would you take Mulhall as an authority? Would you take the British Board of Trade as an authority?—A. Yes; very good authority.

Q. Have you ever seen any figures where it had been figured at \$15 a ton, and that it cost this country \$180,000,000 to \$200,000,000?—A. I have seen in Mr. Chamberlain's reports something to that effect, I think, but I did not take any stock in it.

Q. Do you know that that is usually the figure that is used there in Great Britain by the British Board of Trade?—A. Fifteen dollars a ton?

Q. Yes.—A. It is possible. I did not know that. I beg your pardon, but I would like to ask you one question as to how large a part of that is based on wheat that is now being carried across the Atlantic at 2 cents a bushel?

Q. That is inclusive of every single thing on the British import line.—A. Imports, not exports?

Q. Exports, not imports.—A. I have not seen that statement.

Q. What I wish to say is that this has been the general figure of statisticians. Whether it is true or not, I am not pretending to say. Now, suppose it is \$100,000,000, or \$75,000,000, or \$50,000,000, is it not a good deal better, then, that the Americans should have that profit, as long as we could get a friendly bottom or friendly ship to carry that to America, than for the whole of our business to be controlled by foreigners?—A. I do not consider that represents profit. If it was \$100,000,000, if that were the cost, it might be done at cost prices. It may be no more than the labor is worth. If we were to divert that \$100,000,000 of freight, were to pay a subsidy equivalent to it, we should simply pay that in addition to paying for the service that was rendered.

Q. Well, I am not talking about paying it out in subsidies. I am talking about

keeping it inside the United States.—A. Other things being equal, it is more desirable, no doubt, to do as much of your own business as you can, if you do not have to pay too much for it.

Q. It would be the thifty way to do it?—A. Yes.

Q. (By Mr. A. L. HARRIS.) Is there any other way of estimating the cost of freight, by per cent of the value of freight?—A. I suppose that there might be, but it is very difficult to figure. It is not only a very difficult thing to determine, but your basis of calculation varies every week. The quantity and distance of shipments vary, and then the price charged varies according to classification; so that it is about as nearly guesswork as any statistical compilation you could possibly make.

Q. I have seen, of course, the amount of freight carried stated and the estimated cost of carriage at 10 per cent, making out, of course a large amount paid for the transportation of American freight.—A. I do not believe that that basis is at all to be depended upon.

Q. Ten per cent, I believe.—A. Take it at the present time—the rates on our products. A bushel of wheat is worth 60 or 70 or 80 cents a bushel; the export charge is 2 cents; on corn the export charge would be 2 cents and the price less, of course; and rye in like manner. Now, on cattle the cost of carrying is very much less than 10 per cent; so if you go in this way through the great items of exportation you will find that the freight rate does not come anywhere near 10 per cent. There are, no doubt, certain articles, where the value is very small and the bulk large, that 10 per cent would constitute a fair freight charge; but I should say, as an average, it would be very excessive.

Q. (By Mr. CLARKE.) On imports it would be still less, would it not?—A. On imports it would be rather less, I should think; values enter so largely into the question.

Q. The agent of one of the lines in Boston told me that the cost of freighting some articles from Europe to this country was probably less than one-tenth of 1 per cent of the cost. Would you think that unreasonable?—A. I should say on cases of silk from Liverpool to Boston, coming from Lyon and across in that way, that that would be probably a fair estimate.

Q. (By Mr. PHILLIPS.) Recurring to the subsidy just a moment, is it or is it not a fact that Norway and Sweden have developed their merchant marine more rapidly than other nations without subsidy?—A. I should hardly say that they had developed it more rapidly. Sweden certainly has not; Norway has. Norway has been doing a great tramp business, so that Norwegian steamers carry a very large share of our foreign business. They employ their vessels precisely as American vessels were used 40 or 50 years ago, in business all over the world, and have been very successful. The profits they have made have been very large.

Q. And yet they have no subsidies?—A. No subsidies. A very large part of the Norwegian steamers, however, are built in English and in Scotch shipyards.

Q. (By Mr. CONGER.) I would like to go back for a moment to the argument or claim of those who say that only on imports the Americans pay freight. Is it not a fact in the internal commerce of the country that the great majority of sales are made delivered; in other words, the manufacturer paying the freight?—A. That is done to some extent.

Q. That is quite a common custom?—A. I think it is.

Q. Do we understand in the exportation of goods the contrary is the custom?—A. I do not say that is the case. I say that you can not figure on crediting or debiting the United States with both the exports and the imports; you must choose one or the other, and the imports would perhaps seem the more natural choice.

Q. Would it not be a fairer way to say we should divide on a combination of the whole?—A. We have not been willing to divide. We have claimed it all heretofore. I do not know that it would matter much. I said that merely because I noticed in going over the statistics of our shipping business that through the whole series of years, even from the very first, we have carried a much larger proportion of our import business than our export business.

Q. Take the exportation of wheat, for instance. Do you know whether it is the custom for the exporters of this country in Chicago or in the Atlantic seacoast towns to sell the wheat in this country or sell it delivered in Liverpool?—A. It is a double transaction as a rule. I think a man buys in Chicago so many thousand bushels of wheat, provided it can be landed in London or Liverpool at a certain price.

Q. In other words, it is sold delivered?—A. It is frequently sold that way. Then there is a good deal of spot wheat purchased in Baltimore, Philadelphia, and New York, and the English purchaser makes his own trade in chartering vessels to carry it.

Q. That would apply principally to the portion of wheat carried in tramp steamers?—A. It is perhaps a larger proportion of that. The freight rate may and undoubtedly does enter into the price in these through bills of lading.

Q. (By Mr. KENNEDY.) If our merchant marine were on an equality with that of Great Britain would it not then be simply a matter of competition, and the one giving the best terms for both import and export would get the majority of both?—A. Probably, assuming the facilities were equal. We used to beat them in facilities, and I hope we should do so again.

Q. (By Mr. CLARKE.) Is not the argument for free ships equally an argument for free imports of other manufactures?—A. Not necessarily, for this reason: The free-ship idea has been to confine foreign-built vessels sailing under the American flag to the foreign trade. The introduction of free goods to this country means they are to be used in competition in this country itself. When a vessel is engaged in foreign voyages, whether American, English, Norwegian, or any other, she has to meet the world's conditions. Nothing that we can do can determine the results one way or the other—nothing we can do nationally. For that reason all must stand upon practically a common basis. If they can build their ships cheaper than we they have that much advantage over us; and the only way in which we can make headway is to get our ships as cheap as they do, and then the best man will win.

Q. (By Mr. LITCHMAN.) One question right in that connection. What would you think would be the effect of applying to our foreign commerce the same provision of the navigation laws that has given to us the exclusive control of our coastwise trade?—A. In what way do you mean? By not allowing any other vessels to come in?

Q. Not giving clearance to any other vessels.—A. I think it would lead to one of the worst commercial wars the world has ever seen, and that we should come out of it losing more than we could by any possibility gain.

Q. Has that been the effect in the coastwise trade?—No; that trade is our own. We are asking foreign nations to buy of us and would be, at the same time, by the plan suggested, throwing an obstacle in the way.

Q. (By Mr. FARQUHAR.) I presume you would open the lakes to the free trade so the Canadians could build for us?—A. For trade between Canada and the United States—not coastwise trade.

Q. Do you think it is a disadvantageous condition that the lake trade is in now, under present restrictions which we have there on Canadian shipbuilding and Canadian traffic? Do you think the Americans suffer from it much?—A. I do not think they suffer, but I think if the restrictions now existing were taken off that most of the Canadian vessels would be built in Cleveland and Detroit and not on the Canadian side.

Q. There would be no necessity for the present law if that would be the fact?—A. So long as there are restrictions on one side there are apt to be on the other.

Q. Could you find a shipowner or shipbuilder who would agree to open the whole of that trade to the Canadians or to foreign-built ships that enter the trade?—A. I did not know there was any proposal to do that. The proposition simply was for vessels in the foreign trade.

Q. That, of course, is foreign trade; no doubt about that.—A. If the vessels on the lakes were restricted to voyages between the United States and a foreign country, they would have a very limited field of operation. It would hardly pay any shipowner, as you must realize, to put money into a vessel of that kind. He would want a vessel on the lakes that he could employ between any of the lake ports. Most of the business on the lakes is the transportation of ore, wheat, and coal between Lake Superior and the lower lakes.

Q. Of course it is in the hands of Americans and they are American ships, and American money in the furnishing of them. It is a practical way of doing business and a very good law that shuts out the Canadian from cutting us on rates.—A. I have no fear of the Canadians cutting under us.

Q. These foreign ships that you would buy in Europe you would give full American registry to?—A. Yes.

Q. So they could go into the coastwise trade?—A. I have tried to make that point clear. I said simply engaged in foreign voyages.

Q. Are you sure any law could be made to keep the American ship out of the coastwise trade—under American registry?—A. If that is legally impossible, then Congress is attempting every year many much more difficult tasks. It would be just as easy to restrict a vessel of that class from entering into the coastwise trade as it now is to prevent a foreign vessel from entering it.

Q. (By Senator KYLE.) You might proceed now with the third division of your subject.—A. I wish to call the attention of this commission, as vice-chair-

man of the Boston Chamber of Commerce committee on reciprocal trade with Canada, to the necessity of formulating some trade treaty with Canada within a very short time if we are to maintain and increase the trade we have there. I think it is appreciated by very few that the trade which the United States has with Canada is the best trade relatively that we have with any foreign country. Man for man the Canadians are the largest purchasers that we have. We are living in an era of trade extension when we wish to obtain our markets all over the world wherever we can secure them; but it is too often overlooked that the markets of the United States—the markets of a great manufacturing people—are chiefly to be found among those who may be termed a corresponding people; that is, a people having essentially the same tastes and habits that we have, and—what is quite as essential—who possess the wealth enabling them to purchase the goods which we have for sale. There is no people on the face of the earth that is so nearly like ourselves as the Canadian people. In fact, the Canadians resemble those of us who live along the northern border quite as closely perhaps as the people along the northern border resemble those who live in the Gulf States. We are practically alike in our political, social, and industrial conditions.

The Canadians have recently found in the United States a market in which they can purchase to better advantage than elsewhere the goods that they need, that satisfy their habits and tastes; and what is more they have the money to pay for these.

We have frequently had it urged that in seeking to establish reciprocal trade relations we should turn to countries which are unlike ours, which produced goods that we do not produce, so that the exchange would not be of what might be termed equivalent, but an exchange of dissimilar commodities. That, it seems to me, is a mistake, for the business of a country such as ours must to a large extent be carried on with those countries that are producing much the same goods that we produce, only under different conditions.

Take for example our internal trade or interstate trade, such as that between the States of New York, Pennsylvania, Ohio, and Massachusetts. This is probably more than equal in volume to the entire export and import trade of the United States. Yet each of these 4 States, which is every 24 hours exchanging goods by train load after train load, is producing practically the same things that the others produce, only under those slight varying conditions which lead to the making of a better market in one place than another.

I had brought forcibly to my mind the difficulty in the way of selling goods in a country which does not produce what we do during the time that I was in the Pacific Mail service. A part of that time I was employed on the steamers between Panama and San Francisco, and once a month the steamer which left Panama stopped at the port of Manzanillo, on the Mexican coast, for the purpose of landing there goods intended for the city of Colima, which was located 70 or 80 miles back in the mountains, and to which these were carried on mule back. This was the only means of access to the outer world that the city of Colima possessed, and all the trade that it did with the outer world went through that channel. The goods were sent from New York, Liverpool, London, Southampton, and Hamburg, were landed at Aspinwall and carried across the isthmus to Panama, and once in a month were put on board the steamer which made this delivery. Now, I happened to be on the steamer that took that cargo up the coast on several different occasions, and as freight clerk I had to discharge it. Colima is a city of about 100,000 people—that is the number of the people living in the city and immediate suburbs, yet the total amount of goods from the outer world that this city needed once in a month would have just about filled one respectable freight car. That constituted the needs of its people.

Now, the American manufacturer might send a traveling man through Mexico to build up that class of trade, and yet if the latter made a most successful trip his employer could not possibly get half enough out of it to pay his "drummer's" traveling expenses. The need there is for teachers, missionaries of civilization, to bring the people into a condition to use American goods.

If you go to Canada and you find the conditions reversed—the market is already made—the people ready and willing to purchase of us, rather than of anyone else, even when there are obstacles in the way.

Last year they purchased of us on a per capita basis—calling the Canadian people 6,000,000, for that is what they claim—\$17.50 per capita. The United Kingdom, which is our next largest purchaser, took \$13.25. Germany took \$3.60, but I think in the Treasury records there is a mistake, because there is a great deal credited to the Netherlands and to Belgium—goods which enter at Rotterdam, Antwerp, and Amsterdam, and are carried from there to Germany; hence I venture to say that Germany purchases of us \$5 per capita rather than \$3.60. Argentina took \$5,

Mexico \$2.65, France \$2.15, Italy \$1.10, Japan \$0.70, Brazil \$0.60. The 6,000,000 people in Canada purchased of us last year more than the 60,000,000 people who live on the American Continent south of the Rio Grande.

What is more, the Canadians purchased of us the goods that we most wanted to sell—the goods that yielded the best profit. I wish, for the information of the commission, to go through a comparative classification which I have made of the classes of goods which we buy of them and the classes of goods which we sell to them. I have taken the larger items from the report of the Canadian minister of commerce, because our reports do not classify them in this way. Carriages, carts, and bicycles, we bought last year, in value, of Canada \$17,639 and sold \$1,825,407. In 1894—six years ago—our sales were only \$250,000, showing an increase of fivefold in that time. Breadstuffs and grain, we bought \$421,313 and sold \$7,866,831. Of these sales the larger part was indian corn, which we can grow to better advantage than the Canadians. Animals, we bought \$3,073,907 and sold \$548,083. These animals that we bought were of all sorts—horses, cattle, hogs, and sheep. Our sales were largely horses, and were sent mostly from Washington into British Columbia, where the agricultural conditions are not as good as ours. Fish, we bought \$3,641,373, of which \$1,280,000 were lobsters, which are drawing toward extinction in our country, and we sold \$484,545 worth of fish, which was to quite an extent oysters, which we can raise better than can the Canadians. Hooks, nets, and seines, we bought none and sold \$305,224. Silk and silk manufactures, we bought none and sold \$549,805. Cordage and twine, we bought \$26,109 and sold \$978,850. The larger part of this was binding twine, which we sold to farmers in Ontario and up in the Saskatchewan Valley. Manufactures of rubber and gutta-percha, we bought none and sold \$2,651,113. Glass, we bought none and sold \$535,000. Hay, we bought \$715,000 and sold \$88,000. Our purchases of hay last year were larger than on ordinary occasions. Last year was, as you may remember, in the northeastern part of the country, a very dry season. We ran short of hay and had to purchase it where we could get it. In 1899 we purchased \$118,000 worth, and in 1898 \$24,000 worth, and in 1896 \$1,640,000. Whenever the crop in hay is short in this country we cross the border to get it. Paper, we bought \$23,000 and sold \$1,043,000. Vegetables, we bought \$149,000 and sold \$329,925. Hides and skins, we bought \$1,396,635 and sold \$2,128,488. Provisions, we bought \$38,944 and sold \$1,797,078. Leather and manufactures of leather, we bought \$45,308 and sold \$1,610,090, of which \$529,281 were boots and shoes. Books, we bought \$52,400 and sold \$1,095,019. Cotton and manufactures of the same, we bought \$144,782 and sold of manufactured cotton \$1,509,313 and of raw cotton \$4,491,575. Our trade in cotton-manufactured goods has gradually fallen off, as the year before last we sold \$300,000 more than last year. The differential duty favoring England—which I shall explain to you in a minute or two—is telling materially on our Canadian sales of manufactured-cotton goods. Fruit, we bought \$256,433 and sold \$2,288,828. Our purchases were to a considerable extent apples, and our sales were largely subtropical fruits and fruits such as peaches and the like which we raise in the Middle and Northern States. Hats, caps, and bonnets, we bought none and sold \$844,548. Electrical apparatus, we bought none and sold \$847,000. Plants, we bought \$3,500 and sold \$317,000. Seeds, we bought \$61,500 and sold \$1,740,000. Drugs, dyes, and chemicals, we bought \$43,657 and sold \$2,144,533. Wood and manufactures of wood—this is where they get the advantage of us—we bought \$14,087,088 and sold \$4,806,547. Coal, we bought \$4,026,608 of bituminous coal and sold \$4,359,742 of bituminous coal and \$7,108,624 of anthracite coal. The trade in bituminous coal between Canada and the United States is about an even exchange. It is largely a question of geographical location. The Canadians have not developed coal mines to any extent in the interior regions. They have none until you get westward pretty well out to the Rocky Mountains, where they are opening some mines now; but they have very good bituminous coal deposits at the two extremes. We have no bituminous coal on the Atlantic or Pacific water front, but we have it very largely in the center of the country.

Q. (By Mr. CLARKE.) Is there not some on the Pacific?—A. Do you mean on Puget Sound?

Q. (By Senator KYLE.) There is some in Washington State.—A. I went 2 years ago on Senator Perkins's line of steamers to San Francisco from Seattle, and on the trip I asked the engineer, "What coal are you using?" He said, "From Nanaimo." I said, "How is that? Don't you use the Puget Sound coal?" He said, "Our company owns mines there, but it is not good steaming coal. It is shaly." I found that in San Francisco they much prefer coal from Sydney or from Nanaimo.

Q. In British Columbia?—A. Yes. Take it on the map here [indicating on

map]. We supply Canada with bituminous coal from a point about 150 miles west of Montreal. There the coal from Pennsylvania and Ohio begins to come in. From there we run nearly to the Rocky Mountains, supplying the interior with bituminous coal. The Canadians supply us to some extent at both ends. On the Pacific, as I have said, there is no good coal that can be obtained from domestic sources, so it is supplied from Canada or New South Wales, in Australia. In New England our bituminous coal comes chiefly from the mines in western Maryland and West Virginia. Now, the cost of mining coal at the pit's mouth is as high in Nova Scotia as in West Virginia, if not higher. The mining in West Virginia is largely carried on by negro laborers at a low scale of pay. The coal of Nova Scotia is mined by white people, who are paid a higher rate of wages. At the pit's mouth there is not much difference, though the difference is in favor of West Virginia and Maryland; but the railroad haul to get this latter coal to tide water involves an average expense of about \$1.25 a ton, and this is put on the price of the coal. The mines of Nova Scotia are practically on the water front. There is a haul to Louisburg in the winter time, but this is a trifling expense compared with the railroad expense in Maryland and West Virginia. We in New England are now paying for that railroad haul. It is a condition that can never be changed. You can not change it by protecting the business from the present time to the day of doom. There will always be that disadvantage against us. Our natural source of supply is in Nova Scotia, which is almost on our water front, with no greater water carriage than there is from the capes of the Chesapeake to Massachusetts Bay or the coast of Maine. This is a tolerably even exchange of equivalents. One country supplies the deficiencies in the center and the other at the extremes. When we put a duty on bituminous coal Canada puts it on, and when we take it off Canada takes it off.

Metals and metal manufactures is one of the most important items in our series exchange—the most important so far as our sales are concerned. We have been purchasing to quite a large extent the raw minerals of Canada. For example, we bought of gold quartz \$14,135,000. It enters in as an element of trade, but it is about as crude an element as you could possibly get. Copper ore, we bought \$1,387,000; silver ore, \$1,350,000; nickel, \$1,040,000; lead ore, \$621,280. A large part of this came down from the Kootenai district in Canada, and went to the great smelting centers of Montana, furnishing there the variations in ores needed to get the proper flux in smelting various forms of metals. We do not, on the other hand, sell to the Canadians ores or crude metals. We sold them our metal manufactures in the following order: Manufactures of copper, \$1,930,000; agricultural implements, \$1,905,000; machinery, \$4,821,000; miscellaneous iron and steel manufactures, \$16,476,000; making a total sale of manufactured metals last year of \$27,707,000. Now, when you take into account that no longer than 5 years ago instead of selling them over \$27,000,000 of this class of goods we sold them only \$6,650,000, you will see the enormous increase that has been made in the absorption by Canada of our metal-manufactured wares.

But to put the classification in a little different form. The Canadians classify their sales in foreign countries by the products of the mines, fisheries, forests, animals, agricultural products, and manufactured wares. Now, I will first take 4 years ago—1896—and then last year. In 1896 we bought of Canada, products of the mines, \$7,438,000, and sold \$9,222,000; fisheries, \$3,302,000, and sold \$332,000; forests, \$13,528,000, and sold \$2,732,000; animals, \$3,341,000, and sold \$2,308,000; agricultural products, \$3,233,000, and sold \$10,124,000; manufactures, \$2,531,000, and sold \$28,184,000; that is, our total purchases of them in these lines were \$34,373,000 in 1896, and we sold them \$52,392,000. Last year, 1900, the Canadians sold us of the products of their mines \$14,135,000 worth of gold quartz, and a total of mine products amounting to \$23,700,000, and we sold them of the products of our mines \$11,600,000; of fish products, we bought \$3,689,000 and sold \$484,000; of products of the forests, we bought \$12,805,000 and sold \$5,200,000; animals, we bought \$5,326,000 and sold \$3,420,000; agricultural products, we bought \$2,041,000 and sold \$19,080,000; manufactures, we bought \$4,857,000 and sold \$61,362,000. In other words, we sold to the people of Canada of our manufactured wares more than \$10 per capita. We sold in Canada last year nearly as much of our manufactures as we sold of these to the entire world in 1870, and about one-sixth as much as we sold to the entire world last year.

I have emphasized this point because our people seem to overlook the existence of this enormous trade, one that is closely connected with us—on our very border. They do not realize that this trade gives employment to every department of American industry, from the time of taking the materials from the mines and the fields, and, while they are carried in their half-finished condition, through factories and workshops, into the stores, up to the time that they are transferred, in a fin-

ished state, ready for consumption, into Canadian hands. This is a class of business that needs to be encouraged, because it gives employment all along the industrial line, and gives a profit all along the same line. This trade is infinitely better than that which consists in digging the same amounts in value from the earth, or reaping it in the field and sending to foreign markets for sale in crude forms, for the reason that the manufactured commodity represents vastly more employment to American labor and larger returns to American capital.

Now, these Canadian trade conditions are eminently satisfactory, but the difficulty is they are not likely to continue so, unless we are prepared to do something toward meeting Canadian wishes in the way of giving her a market for what she has to sell.

Q. (By Mr. FARQUHAR.) If you would touch on the British differential now.—A. I am getting to that. The Canadians, about 4 years ago, proposed by act of Parliament to grant to any other country that would give to Canadian products what Canada considered equivalent tariff conditions a concession of 12½ per cent in the then duty, this to be increased the next year to 25 per cent. At the time there was no country prepared to take advantage of this offer except Great Britain, for Great Britain charges practically no duty on any Canadian product, except possibly Canadian whisky. For a time, in consequence of treaties with England, Belgium and Germany received this benefit until these treaties were denounced, as it is termed. Since then the English have enjoyed it without rivalry. Lately the differential has been increased to 33½ per cent, so that American goods entering Canada pay 50 per cent higher duty than is paid by corresponding English goods. Still, in spite of this differential against us (which, as Canada's duties average about 30 per cent, would amount on a shipment of \$100 to a benefit in favor of England of \$10, or in many instances the equivalent of a large profit on the sale), in spite of this difference American manufactures have entered Canada and in very many departments of trade have driven out the English manufactures. In cotton manufactures the latter have been able to lessen our sales, but in little else. That is partly due to the fact that it is easier for the Canadian to get to the American market than to the English market. Orders can be transmitted in 24 hours and executed in 48 or 56 hours, and again, if there is any question about the goods whether or not of the kind ordered, the differences can be easily settled. Again, we manufacture goods more to the Canadian tastes than do the English. The Canadians are more nearly like ourselves, though they would deny it, than they are like the English and they favor our styles more generally than they do the English. These are factors in our favor; and yet a short time ago very few people would have believed that American manufacturers could go into a neutral market and compete with and defeat the English on such grounds as these. We now enter an English colony; we go there at a disadvantage, and yet we undersell England in that market. I think there has never been a more wonderful exhibition of the ability of the American manufacturer to make fine qualities of goods at low prices and his ability to sell these in foreign countries than has been afforded by this experience of the last 2 or 3 years in Canada. It shows that we are above all competitors and that there is no country in the world that can compete with the American manufacturer and the American working man, without regard to tariff.

Q. (By Mr. LITCHMAN.) Have you gone far enough to learn how much of that trade has been retained by selling at a price less for the same kind of goods than they have been sold for in the American market?—A. I dare say that is done. All nations do that every day. I do not think they are discriminating any more in Canada than in Germany, France, or any other country. No matter what conditions of tariff you have, that is a method of trade—of making slaughter sales in the foreign markets—that the manufacturers of all countries employ.

Q. You are not like some economists who use that as an argument to take the tariff off?—A. No. Whether it is on or off trade of this kind will go on much the same. The future difficulty that we have to face is this: We have made great trade gains; but the Canadians are naturally dissatisfied. They sell us their crude commodities and that is all, and they do not sell a great deal of these, relatively speaking. They have a tremendous market in England which they have built up. Their sales in England last year amounted to \$107,000,000 in value, and in the future it will increase greatly on that.

A few years ago we were blind enough to believe that Canada had no market other than that of the United States, and that our proper diplomatic course was to close that market and thus force the Canadians down on their knees to beg to be taken as States into the American Union. We never made a more fatal diplomatic error. We raised that class of resentment which we would have felt ourselves if the same policy had been practiced against us. The Canadians are an Anglo-Saxon

people and you can not drive an Anglo-Saxon people, though you may coax them. The result was that we built up for Canada a new market. Instead of the transportation lines running north and south between their country and ours as they should, we forced Canada into building the Canadian Pacific Railroad, thus paralleling our railway systems. We forced Sir John Macdonald to adopt his "national" policy and to endeavor to build up manufacturing industries in Canada. We forced the Canadians to look across the Atlantic to England to get there the market which we refused them. Now they are independent of us so far as the market is concerned. They do not sell us enough to make it a vital question whether they do business with us or not. We are the petitioners. We see in Canada our best market; Canada sees nothing here that is seriously necessary to her welfare. The tendency has been and is to drive Canada away from us. Thus, in the future, if 33½ per cent differential is not enough, it will be raised to 50 per cent or 75 per cent, or it will be swept away by the federated empire of England and her colonial dependencies, a change which is by no means unlikely. In the transformations now taking place the old English free-trade system may go by the board, and England and her colonies find their advantage in trading between themselves and in supplying each other's needs. This change may not be so far off unless we intervene; and, looking to our own interests, we are compelled by the necessities of the case to intervene. It is not altogether our Canadian market that is in peril. Of our enormous exports, more than half are sold to England and England's dependencies and colonies. We can not afford to lose this English market.

If we can make a treaty with the Canadians which is satisfactory to them, and which gives to them something of a market here, we shall have a clutch on them which they will not care to break; and whatever may happen in other respects, this would be of distinct advantage to us.

Now what are the obstacles? There are three conditions which we have to meet if we are going to make a trade treaty with Canada. We must make concessions in the duties on fish, lumber, and coal. So far as agricultural products are concerned—potatoes and eggs and goods of that kind—it is a relatively small matter. As we are now selling to the Canadians \$19,000,000 worth of our agricultural products, it would seem to be rather discourteous to grumble because they sell farm products to the value of 2 or 3 million dollars to us. But on the larger items we must do something.

The coal interests of Maryland and West Virginia are exceedingly strong, and they naturally object to anything threatening their New England market.

As to the fish business, I have been a fisherman myself—a fisherman by descent, at least. We have the Gloucester fisheries held up before us as the "nursery of the Navy." What are you going to do, it is asked, to get the sailors to man our warships unless you protect the fishing industry in Gloucester? Now, I have had a strong interest in the fishing industry as long as it was American, but it has ceased to be an American industry. There is American capital invested in it and there are certain American officers employed on the fishing vessels. One of the members of your commission has lived there, and he will correct me if he thinks I am wrong. But the larger part of those engaged in the catching of fish are from Nova Scotia, New Brunswick, and Portugal. They are not American citizens. Some of the Portuguese will possibly become so, but those from the Provinces come there during the fishing season, and after this is over they go back home. Each year there is printed a list of the unfortunates who have lost their lives by various disasters during the year—a most pathetic list and often a large one. Last year, out of some 50 or 60 men whose lives were lost—it may have been 3, but I am inclined to believe it was but 2 who were Americans, and these 2 were captains of vessels; the rest were foreigners. That indicates how little of an American industry it is when compared with what it once was.

When we had our war with Spain, the United States Government, having a notion that this was truth and not mere tradition, sent down two battleships or cruisers to Gloucester to exploit that nursery of the Navy idea and get as many men as possible. These stayed there nearly all the time of the war, and I think they enlisted a little over 300 men—that is about half as many as would be necessary to man one battleship. Boston is not a nursery of the Navy and never claimed to be, but we enlisted some 1,700 men during the same time. So I say this is fiction. Yet, when this matter is brought up in Congress you will hear any amount of eloquence about these poor men giving their lives to hard service, who must be looked upon to defend the honor of the flag on the seas if ever the occasion calls for it. The American does not like this fishing business. It is too hard a business for him. He can find better pay on shore and be with his family.

The lumber interest, of course, is different. When our committee appeared

before the Anglo-American Commission, we were told that the lumber interest was one of the strongest in opposition to any change of this kind; and there again the reason is geographic to quite an extent. The market for lumber is largely in the New England and Middle States. It is a long haul from Minnesota and Wisconsin, and it is a short haul from Canada. The hard-pine lumber that comes in from the southern tier of States is also affected by its distance—a disqualification which can never be overcome by anything except a remaking of the world.

What I desire, gentlemen, to impress upon your minds as representing the chamber of commerce, is that our interests in New England largely turn us toward our northern neighbor. We look upon Canada as fairly tributary to our market; we believe that the border line is largely an artificial one, and that as we are, to quite an extent, cut off from the West, we should have the right, as far as possible, to exploit the country to the north and east of us. If Canada is ever to be made a part of the United States it must be by drawing the Canadians to us with the strongest possible bands of trade.

Q. (By Mr. CLARKE.) Do you know of any willingness on the part of the government in Canada to negotiate a treaty?—A. I am inclined to believe that there would be no difficulty in making a treaty on the ground of equivalent concessions, without regard to the special products.

Q. Is it not within your knowledge that special efforts have been made several times in recent years to come to a basis of agreement and a common understanding, and that the rock upon which they split every time has been the classification of articles?—A. Well, I know the rock they split upon very largely was the lumber interest. That was one part of the classification, no doubt. I had that statement, in effect, from Mr. Dingley, and I suppose that he knew. He was a member of the commission.

Q. (By Mr. LITCHMAN.) In what section of the country did that manifest itself most strongly?—A. The most prominent opponent was the distinguished Congressman from Minnesota, Mr. Tawney.

Q. Did it affect the lumber interests in Michigan?—A. Oh, no; Michigan is no longer the center of the lumber industry.

Q. (By Mr. CLARKE.) Is not the manufacturing industry in Canada generally opposed to a reciprocity treaty?—A. I dare say it is. It is also opposed to a differential tariff with England, but this does not seem to make any difference in the policy of the Government, however.

Q. Is it your plea that this differential of theirs stands in the way of a reciprocity treaty?—A. I do not think so. I think very likely it was initiated for the purpose of forcing something of the kind. I think it has now obtained such headway that it is working out its results on its own grounds.

Q. If Great Britain puts an export duty on bituminous coal, do you think there would be any import of that coal to this country?—A. Imports from where?

Q. From Wales?—A. No; there never has been for years; there would not be under any circumstances.

Q. You think it would be, then, about an even exchange so far as coal is concerned?—A. Between the United States and Canada, yes.

Q. And to the accommodation of the people in the extremes of the continent?—A. Yes, I think so; I think there would be an increase of trade on both sides.

Q. Is it your opinion that this country should make overtures to Canada for reciprocity?—A. I think it would be desirable. I think we have more to gain than Canada has.

Q. (By Mr. FARQUHAR.) Is it not a pity to disturb the present balance of trade which we have with Canada?—A. Well, this is one of those arrangements which should be made while we have the opportunity. You know the story of the Sibylline books, offered to one who would not take them when he could, and on each subsequent occasion the number was reduced and the price increased. It may be that way with us.

(Testimony closed.)

WASHINGTON, D. C., May 14, 1901.

TESTIMONY OF MR. WILLIAM NICHOLSON,

Manager Central Railway Clearing House, Buffalo, N. Y.

The commission met at 11.02 a. m., Chairman Kyle presiding. At that time Mr. William Nicholson, Manager of the Central Railway Clearing House, Buffalo, N. Y., appeared as a witness, and being duly sworn, testified as follows:

Q. (By Senator KYLE.) You may state your name, address, and business to the

stenographer, please.—A. William Nicholson, Manager of the Central Railway Clearing House, Buffalo, N. Y.

Q. Please tell the commission something about the organization of this clearing house, the purpose of its inception, its aims, and its methods.

The WITNESS. (Reading):

"CENTRAL RAILWAY CLEARING HOUSE.

"The clearing-house principle was made applicable to the through freight traffic accounting of the New York Central and Hudson River Railroad Company, its leased and operated lines, at the instance of Mr. John Carstensen, comptroller.

"As a natural sequence, a clearing house was established at Buffalo, N. Y. (the geographical center of the system), for the purpose of handling certain details of through freight accounts for the allied roads terminating at the Niagara frontier. Its advent was publicly announced, and its authority set forth by the executive departments in the following circular:

"[New York Central and Hudson River Railroad Company, Lake Shore and Michigan Southern Railway Company, Michigan Central Railroad Company, New York, Chicago and St. Louis Railroad Company, West Shore Railroad, Pittsburgh and Lake Erie Railroad Company.]

"FEBRUARY 10, 1899.

"JOINT NOTICE.

"Mr. William Nicholson is hereby appointed manager of the 'Buffalo Railway Clearing House,' to be established April 1, proximo, and to have charge of all accounts and statistics pertaining to through freight business passing over the above roads, now covered by through, joint, or fast freight line billing.

"S. R. CALLAWAY,

"*Prest. N. Y. C. and H. R. R. R. and leased lines.*

"W. H. NEWMAN,

"*Prest. L. S. and M. S. Ry. Co.*

"H. B. LEDYARD,

"*Prest. M. C. R. R.*

"W. H. CANNIFF,

"*Prest. N. Y. C. and St. L. R. R. Co.*

"J. D. LAYNG,

"*Vice-Prest. W. S. R. R.*

"J. M. SCHOONMAKER,

"*V. P. and G. M. P. and L. E. R. R. Co.*

"On February 21, 1899, a meeting of the chief accounting officers and auditors of freight accounts of the system roads was held in New York City, when the pursuing organization was effected.

"Name.—The Buffalo Railway Clearing House.

"Location.—Buffalo, N. Y.

"Membership.—New York Central and Hudson River Railroad Company, West Shore Railroad, Lake Shore and Michigan Southern Railway Company, Michigan Central Railroad Company, New York, Chicago and St. Louis Railroad Company, Pittsburgh and Lake Erie Railroad Company.

"Management.—The affairs of the clearing house to be under the control of a manager.

"Duties.—The clearance of freight-revenue balances accruing between the clearing-house roads, on all interline, joint, and fast freight line traffic passing through Buffalo or crossing the Niagara River at Black Rock and Suspension Bridge, billed on a through waybill; and to keep the accounts of the New York Central and West Shore fast freight lines.

"The complete and proper revision of all billing.

"The compiling and furnishing to the accounting departments of the roads members of the clearing house with all statistics, statements of earnings, etc., required by them from time to time, and the furnishing to other roads not members of the clearing house such information and statements as formerly required from the New York Central and West Shore fast freight lines.

"The checking and recording for the roads members of the clearing house, and the New York Central and West Shore fast freight lines, of all joint or fast freight line claims.

The keeping, under the supervision of the manager, of complete records of clearing house and fast freight line business.

"All freight agents of companies members of the clearing house to be considered

as agents of the clearing house, and to respect and comply with all orders of the manager thereof consistent with the accounting regulations of the clearing-house roads.

"Clearing-house traffic, other than fast freight line, to be waybilled exclusively without divisions of earnings on a special clearing-house waybill, to be used by all roads for business within the clearing-house territory.

"The clearing house to use, whenever practicable, the standard blanks of the Association of American Railway Accounting Officers.

"On April 7, 1899, another meeting was held in New York City for the purpose of electing an executive committee, to have supervision over the clearing house and to act upon questions affecting its management and development, resulting in the election as such committee of Messrs. John Carstensen, comptroller New York Central and Hudson River Railroad, chairman; R. H. Hill, auditor Lake Shore and Michigan Southern Railway; A. J. Burt, auditor Michigan Central Railroad; J. P. Curry, auditor New York, Chicago and St. Louis Railroad; C. H. Bronson, auditor Pittsburgh and Lake Erie Railroad.

"Its duties to be as follows:

"(a) To act on all questions affecting the conduct of the affairs of the clearing house as constituted or as it may be enlarged from time to time.

"(b) In conjunction with the manager, to decide all matters relating to expenses and the division of same as between roads in interest.

"(c) To act on all applications for increased membership.

"(d) To hold meetings upon call of the chairman or upon the request of any 3 members.

"It will thus be seen that the clearing house began its career with a charter membership of 6 roads, viz, New York Central and Hudson River Railroad, West Shore Railroad, Lake Shore and Michigan Southern Railway, Michigan Central Railroad, New York, Chicago and St. Louis Railroad, Pittsburgh and Lake Erie Railroad.

"The membership of the Michigan Central Railroad was discontinued at a meeting of the executive committee held in New York City on November 8, 1899, same to be effective December 1, 1899, thus reducing the clearing-house membership to the 5 other roads named above, the New York Central and Hudson River Railroad resuming junction settlements with the Michigan Central Railroad at the Niagara frontier under the same arrangement as obtained prior to the establishment of the clearing house. No further change in membership occurred until May 1, 1900, when the Cleveland, Cincinnati, Chicago and St. Louis Railway, and the Lake Erie and Western Railroad were admitted to membership.

"In view of the fact that these companies and the Pittsburgh and Lake Erie Railroad Company have no termini in Buffalo, together with reasons of a local character, the executive committee at a meeting held March 12, 1901, changed the name of the Buffalo Railway Clearing House to that of the 'Central Railway Clearing House.'

"As already stated, the initial province of the clearing house was to control the accounting of revenue on traffic passing the Niagara frontier. This it has satisfactorily accomplished, and the results have been promptly furnished to the accounting officers of the roads, in accordance with their varied requirements necessitated by a dissimilarity of accounts, and in time for inclusion in their monthly records.

"From time to time the duties of the clearing house have been largely increased, to the extent that at present it accounts for the revenue on traffic—

"(a) Interchanged between the New York Central and Hudson River Railroad, West Shore Railroad, Rome, Watertown and Ogdensburg Railroad, Pennsylvania Division of the New York Central and Hudson River Railroad, Monawk and Malone Railway, Wallkill Valley Railroad, Beech Creek Railroad, and Lake Shore and Michigan Southern Railway, New York, Chicago and St. Louis Railroad, Cleveland, Cincinnati, Chicago and St. Louis Railway, Lake Erie and Western Railroad, and Pittsburgh and Lake Erie Railroad, passing the Niagara frontier.

"(b) Between the Lake Shore and Michigan Southern Railway and Cleveland, Cincinnati, Chicago and St. Louis Railway.

"(c) Between the Lake Shore and Michigan Southern Railway and Pittsburg and Lake Erie Railroad.

"(d) Between the Lake Shore and Michigan Southern Railway and Lake Erie and Western Railroad.

"(e) Between the New York, Chicago and St. Louis Railroad and Cleveland, Cincinnati, Chicago and St. Louis Railway.

"(f) Between the New York, Chicago and St. Louis Railroad and Lake Erie and Western Railroad.

"(g) Between the Boston and Albany Railroad, Boston and Maine Railroad, New York Central and Hudson River Railroad, West Shore Railroad, Rome, Watertown and Ogdensburg Railroad, Pennsylvania Division of the New York Central and Hudson River Railroad, Mohawk and Malone Railway, Wallkill Valley Railroad,

Beech Creek Railroad, Lake Shore and Michigan Southern Railway, and all Pacific coast roads where transcontinental tariffs apply.

"As regards the latter class, viz, transcontinental traffic between the Atlantic and Pacific coast points, the clearing house also acts for the Boston and Albany Railroad and Boston and Maine Railroad companies in the matter of accounts, the agents of these companies reporting to and being subject to the rules of the clearing house.

"The revenue on traffic between transcontinental tariff points on the Pacific coast and those within clearing-house territory east of the Niagara River (including those on the Boston and Albany and Boston and Maine railroads), via the Michigan Central Railroad, is also taken care of in the clearing house, but the proportion of such traffic to and from local stations situate on the lines of the Michigan Central Railroad Company is accounted for by that company direct.

"Prior to the organization of the clearing house practically all business interchanged between the roads was settled for by the agents at junction points. The clearing-house territory, so far as accounting interests are concerned, is practically one railroad. The clearing house has no intermediate junction settlements whatever.

"The system in vogue does more than the modern audit-office plan in the way of economical, expeditious, and simple settlement. Take, for example, a shipment from Boston to East St. Louis. The old junction-settlement plan would require the stopping of the waybill at Albany, East Buffalo, and Cleveland for junction settlement between the roads handling the shipment. Under the modern audit office settlement plan it would be necessary for the auditor of the Cleveland, Cincinnati, Chicago and St. Louis Railway to render complete detail as to abstracts, division sheets, summaries, etc., to the Lake Shore and Michigan Southern Railway, New York Central and Hudson River Railroad, and Boston and Albany Railroad. With the clearing-house plan the waybill would be reported (forwarded) by the agent at Boston and (received) by the agent at East St. Louis direct to the clearing house, where same would be accounted for to roads in interest. At the end of each month the proper officer would be notified by it of the net debit or credit balance affecting the other roads for all waybills so handled in a given month.

"The old method provided that each individual waybill should be divided and settled between the roads, while now all waybills in a month between given points, taking given subdivisions, are brought to a total, which is subdivided. Considering the large volume of business handled by the clearing-house roads, the possibility of delivering shipments to consignees on proper rates or collecting proper charges is wonderfully increased, inasmuch as shipments moving over the clearing-house territory or to the Pacific coast beyond are waybilled through without any division of revenue being shown on the waybills, and as no junction settlements between agents are made, consequently no amounts are shown on the waybills as advance charges.

"It is therefore possible for agents to correct the waybills when delivery of freight is made to basis of proper through rates, inasmuch as there are no advances paid connecting railroads, which in case of error would compel them to secure authority to change before final settlement with consignees.

"It is assumed that the clearing house has done more than any other agency to provide for the delivery of shipments to consignees on proper net charges. The clearing house nullifies the multiplied settlements of the railroads, expedites the movements, and, so far as the public is concerned, minimizes the collection of overcharges, simplifies the accounting, and concentrates the preparation of statistics and other information for railroads in interest.

"The clearing-house system of accounting is based upon daily forwarded abstracts, daily received abstracts, and monthly balance sheets, with the necessary auxiliary forms, corrections, etc., as per sample forms herewith submitted.

"Estimated railroad balances are drawn for weekly, between the financial offices on figures furnished by the clearing house. A final net balance is drawn for at the end of each month. All moneys collected by the agents are remitted to the treasurers of the roads direct, no remittances account of revenue accruing for freight transportation being sent to the clearing house.

"The general supervision of the affairs of the clearing house is handled by the manager and his chief clerk. The work is divided into 11 departments, each in charge of a head clerk, as follows:

"ACCOUNTING DEPARTMENT.

"Consists of 9 clerks and takes care of the general accounts of the clearing house, as well as maintaining separate sets of general books for each of the New York Central and West Shore fast freight lines, viz, the Red Line Transit Company, White Line Central Transit Company, Great Central Route 'Blue Line,' Canada Southern Line, North Shore Despatch, West Shore Line, Nickel Plate Line.

"The cashier handles the receipts and disbursements account of the general expenses for the clearing house as well as for the fast freight lines specified above.

"APPORTIONMENT DEPARTMENT.

"Has 22 clerks. This department handles completed reports when received from the abstract department; stamps same with percentage stamp, showing proper percentages to be applied between points shown thereon. These items, shown in blocks, are drawn off on apportionment sheets, grouped as per stations from and to. At the close of business each month these sheets are footed, summaries balanced with abstract department, and revenue apportioned among all roads interested, on the basis agreed to and published by the traffic officials of the roads.

"Interline audit office settlement" accounts for all our 9 roads, in connection with the 49 roads west of the clearing-house territory, are handled by this department.

"STATISTICAL DEPARTMENT.

"Compiles road statistics and those required by the several fast freight lines. Makes classifications of commodities hauled, on forms set forth by the Interstate Commerce Commission; prepares special statistics of tonnage for the various freight-traffic officials, and furnishes Western freight agents and others with daily statements of billing covering their various territories. This department has a force of 23 clerks.

"ABSTRACT DEPARTMENT.

"Conducts the checking and auditing of forwarded and received abstracts, summaries, etc., notifying agents of various changes made in same. This department necessitates the employment of 37 clerks.

"REVISION DEPARTMENT.

"With a force of 37 clerks revises the waybills, issues corrections, files tissues, etc."

"CLAIM DEPARTMENT.

"Handles fast freight line over and under charge accounts; checks various claims for the fast freight lines; checks joint and interline claims for the claim agents of the roads members of the clearing house, the one check of the clearing house answering for the several checks under the old system, when the claims were sent from one road to another to be handled by each claim agent and checked by each freight accountant.

"This department handles all final balance sheets of the agents of the roads members of the clearing house, and prepares each day for the trunk line association a report of all east-bound waybills passing the Niagara frontier, this report being accompanied by a copy of each waybill. This work is conducted with a force of 52 clerks.

"DAILY EARNINGS DEPARTMENT.

"This department compiles for the 9 roads in the clearing house statements of daily earnings on all business interchanged, together with earnings on audit office settlement business, in connection with the several transcontinental routes, furnishing daily statements to the Boston and Albany Railroad, and the Boston and Maine Railroad on audit-settlement business. The weekly balances between the road members of the clearing house are estimated in this department, which consists of 13 clerks.

"MAILING DEPARTMENT.

"Employs 10 clerks. Collects outgoing and opens incoming mail. Strips interline and fast freight line tissue copies of waybills and distributes same to accounting officials, commercial and fast freight line agents; sorts claims and vouchers; has charge of all matter forwarded and received by express, sorts reports for various other departments, and performs general messenger service for the clearing house.

"BINDERY.

"This department has 1 employee, who binds abstract books, volumes of tissue copies of waybills, records of apportionment, as well as sundry volumes of records used in the clearing house.

"STATIONERY.

"Has 2 clerks, who handle and distribute the supplies of books and stationery and fill the requisitions of agents for blank forms, etc.

"TELEGRAPH.

"This department has 1 operator, who handles all telegraphic communications forwarded and received by the clearing house.

"The clearing house has a total force of 220 employees, divided as follows:

Manager	1
Chief clerk	1
Private secretary	1
Cashier	1
General bookkeeper	1
Head clerks	7
Stenographers	7
Telegraph operator	1
Binder	1
Stationer	1
Clerks	198
Total	220

"The total number of clerks employed on what may be termed actual clearing-house work is 158.

"The average clerical salary paid (exclusive of superintendence) is \$44.94.

"The Central Railway Clearing House has long since passed through the crucial part of its existence, and notwithstanding a new system of accounting, unfamiliar alike to agents as well as to others in the clearing house, it has been, from accounting, traffic, and other standpoints, a success from the date of inception.

"A partial idea of the enormity of its business, from the date of its organization to the present, can be gained from the following statistics to May 1, 1901:

Revenue cleared between membership roads	\$33,997,541.91
Total number of tons forwarded and received from stations on all roads, divided into 60 commodity classes	9,626,994
Total number of waybills revised and filed in revision department ..	2,860,987
Total number of waybill copies handled and distributed	14,300,198
Total amount increased revenue, account revision department	\$164,454.22
Total number of waybills abstracted for trunk-line commissioners on traffic moving east bound from the Niagara frontier, showing number, date, station from and to, weight in pounds, extended and footed	1,532,986
Total number of claims received from all sources and checked	114,264
Total number of letters written	129,878
Total number of telegrams forwarded and received	31,590
Total number pieces of mail handled	1,467,466
Total mileage included in clearing-house territory	11,257
Total number stations reporting to the clearing house	2,241
Total number agent's requisitions for supplies filled by stationery department	14,508
Total number of books bound in binding department 17,680, divided as follows:	
Abstract books	13,520
Volumes of tissue waybills	1,898
Records of apportionment	676
Sundry volumes	1,586

"Monthly meetings for consultation in regard to details are held in the office of the manager, and are attended by the auditors of freight accounts of the roads members of the clearing house.

"The clearing house is a progressive step in railway accounting. It is a move in the direction of economy, and when more thorough billing is established, more roads admitted, and when a universal system of freight accounting is adopted by the auditors of the roads the greater success of the clearing house will be assured. Toward the adoption of a uniform system of freight accounting the clearing house has already become an important factor.

"Prior to its establishment agents were obliged to report all waybills forwarded and received on each road in the territory now covered by the clearing house. By

the clearing-house method a daily forwarded and received report now takes the place of the six or eight formerly used.

"Its methods represent the most pronounced concentration of through freight accounting.

"At the recent railway congress in Paris Commissioner Knapp, Chairman of the Interstate Commerce Commission, announced that he favored a clearing-house system for all American railroads.

"The late George R. Blanchard, trunk line commissioner, who was also a delegate to the congress, fully agreed with Commissioner Knapp, and for proof referred to 'The great success of the railway clearing house at Buffalo, N. Y.'

"As regards the clearing house from a traffic standpoint, one of the most prominent railway traffic officials of the United States has written of it as follows:

" 'By the arrangement of through billing with settlements through the clearing house at Buffalo, every agent on the Pacific coast terminals of the Northern Pacific, Great Northern, Union Pacific, Santa Fe, and Southern Pacific, including their intermediate lines and connections through the gateways of St. Paul, Omaha, Kansas City, etc., are through billing and soliciting agents for every Eastern road that is a party to this arrangement; likewise the agents of the Eastern roads are correspondingly agents for the Western roads.

" 'It is our experience that no arrangement of accounting between connecting roads is so satisfactory and produces such good results as that of through billing with audit settlement. The work of the clearing house in that connection has been marvelous. It simplifies accounts, increases our traffic, disposes quickly and correctly of many errors in billing, cements and brings together in closer relation the various roads with each other, and, in fact, is one of the great modern improvements for the settlement of interchange traffic. Certainly no more correct, simple, or beneficial method can be adopted for promoting interchange business, as well as simplifying the auditing thereof.'

"The clearing house is not an institution or organization, strictly speaking, but is merely a branch of the auditing departments of the individual railways represented in its membership, the manager being subject, more or less, to the instructions of the chief accounting officials of each road in interest."

Q. (By Mr. RIPLEY.) You have referred several times to the fast freight line. Will you explain what those are, and what the tendency is in development of those fast freight lines at the present time—the relations that they bear to accounting?—A. The fast freight line was started in the days when one road was afraid to let its cars go on the tracks of another, when they transferred freight and made the settlements on the revenue thereof at junction points. In order to obviate the delays caused by that method of procedure, various lines were organized, such as the Blue, the Red, and the White lines, for the purpose of allowing the cars to go through, we will say, from New York to Chicago or St. Louis. A special waybill was prepared to meet the accounting requirements, and all read Blue or Red or White line, as the case might be, but in the waybills the division of revenue among the railroads was shown on each single shipment at the bottom of the bill, and when the first junction point was met the agent of the other road paid in cash to the agent of the initial road the revenue due him. He billed that car out, and when it came to the next road that man collected his share with the other fellow's charges shown as back charges, and so on.

Q. At the time these fast freight lines were introduced were the through rates made at a different figure from the combination rates such as had been charged before? In other words, were the rates accorded to these freight lines somewhat less than the rates charged on the preceding system?—A. No; I think they were based on the sum of the locals, there not being any competition at that time to amount to anything.

Q. (By Mr. FARQUHAR.) What was the relation of the fast freight lines then to the railroads?—A. The fast freight lines were nothing more or less than a branch of the traffic department of these combined railroads.

Q. The ownership of the lines being in the roads themselves?—A. Yes.

Q. I notice your mention of the fast freight lines of the Vanderbilt system. You omitted the Merchants' Despatch?—A. Yes.

Q. Is their relation to the roads somewhat different than the other fast freights?—A. Yes.

Q. A separate corporation?—A. Yes; it is a corporation.

Q. Not under the ownership of any road or any other system?—A. I think its stock is owned chiefly by the New York Central interests. Other lines are cooperative, the expense of agents and management and things of that kind being paid on the basis of earnings by the roads interested.

Q. Does the Despatch own its own cars?—A. Yes.

Q. And then it pays mileage for hauling?—A. No.

Q. Has it equal privileges with the other fast freight lines owned immediately by

the roads in respect to the right of way, etc.?—A. It has equal privileges as regards transportation, and it covers all territory which the other lines may cover individually. That is to say, the Red line is confined to the Lake Shore, the Blue line to the Michigan Central. The M. T. D. Company uses both lines.

Q. (By Mr. CLARKE.) Is the National Despatch of the same character as the Merchants' Despatch?—A. No, sir; I do not think it is.

Q. Is it a private corporation?—A. I do not think so. I am not familiar with the National Despatch. There are about 15 or more fast freight lines, I think, running over the New York Central.

Q. In the case of these private car lines, the railroad companies contract to pay mileage to them, do they not?—A. Yes.

Q. (By Mr. RIPLEY.) Do you audit accounts for separate parties, such as private shippers, who own lines of cars?—A. We have one or two private-car shippers, but they are being taken out of the freight lines as fast as possible.

Q. You are at liberty to name these?—A. I could not name them; I do not know them; I know the fact they are there; that is all.

Q. Have you any reason to suppose that the rates made—mileage rates, the cargo charge—made to any of these fast freight lines, or for shippers who own cars—is different from the rates charged to others?—A. No; I do not think there is any difference.

Q. Is that the same situation that has always prevailed?—A. Yes; the rate for mileage is the same for all, regardless of the ownership.

Q. But suppose that instead of charging by the hundred pounds shippers are able to control a line of cars, is it your impression that the charge, we will say, for hauling a carload of freight from Chicago to New York would be the same, whether it went in cars of the company or in cars owned by private individuals?—A. It would be the same.

Q. What is the system of division of earnings as applied between these different lines? Is it on the basis of straight mileage?—A. It is on a basis of mileage; yes.

Q. Is it not, however, different from that in the case of short lines, of branch lines, which are leased or are operating separately, and which are tributary to the more important lines? Can you illustrate the system?—A. It often happens that on a through line some railroads only have a small section of mileage, and to equalize expense of putting on locomotives and pulling the train a short distance they are given what we call constructive mileage, i. e., additional miles.

Q. In case of systems of greater length, we will say in case of the Rome, Watertown and Ogdensburg, and roads of that kind, there will be no constructive mileage—that is, that merely applies to short branch lines?—A. Constructive mileage is a very exceptional thing. The distance is generally limited.

Q. It is then an accepted principle in the distribution of earnings that distance should be the controlling factor?—A. It is.

Q. Are the tariffs as a whole on the systems of which you speak made up on the basis of distance? That is to say, is the long and short haul principle applied in general?—A. It is applied in general, and sometimes with the addition of an arbitrary charge for physical disabilities of switching and delivering—Philadelphia, for instance. It is understood by the Interstate Commerce Commission and all concerned.

Q. Do you have any general agreement with relation to the other trunk lines, such as the Pennsylvania, as to the distribution of earnings in interchange of traffic, that the policy of the Pennsylvania and the New York Central, and the Vanderbilt system shall be the same? Do you each pursue a distinct policy of your own in the matter of constructive mileage and of prorating, division, etc.?—A. That would be an individual matter between the companies.

Q. (By Mr. FARQUHAR.) Would it not be a matter on the first way bill?—A. Before the first through bill would be issued that would all be agreed with, consulted more or less in the matters of accounting to make it uniform to the shipping interests, you know; but that is strictly a matter of individual right.

Q. It is simply a matter of mutual agreement, without any competition, or any friction?—A. No; competition has nothing to do with it.

Q. A fair division?—A. Yes.

Q. (By Mr. RIPLEY.) Does the Trunk Line Association have any jurisdiction in such matters?—A. I could not say. This I know, that the roads all report east-bound tonnage to the commissioners, so they know what is going on—see the billing for themselves.

Q. In a number of cases I see that you speak of east-bound traffic?—A. Yes.

Q. Is there any difference between east and west bound traffic which makes it simpler to clear the account, in one case over the other?—A. No, excepting in regard to reporting this traffic to the Trunk Line Commission, that is all.

Q. Well, the Trunk Line Association has to do specifically with east-bound business?—A. Yes.

Q. And it has no jurisdiction over west bound?—A. I think not.

Q. In what respect does the east-bound business differ from the Western so that the roads can cooperate, perhaps, in making up rates and can divide earnings on east-bound traffic, while they can not do the same on business west?—A. Well, I can not see any difference between the east and west movement on that. I referred to our having to report only east-bound traffic to the Trunk Line Commissioners, and handling east-bound transcontinental traffic for the roads in interest. The auditors in the West on the transcontinental traffic, for instance, make up their received side of the account.

Q. Does the Central Traffic Association, of Chicago, have to do with business originating in the West and destined East? What are the functions of that Central Traffic Association as against the Trunk Line Association in New York, of which Mr. Goddard was formerly commissioner?—A. I understand that it is similar in character. I do not have any business with them to amount to anything, except getting tariffs and instructions to check revenues.

Q. Suppose that a line, in order to secure business, agrees to cart the goods for no charge—in other words, agrees to include cartage in its rate—who would know about it in the auditing and the clearing account?—A. I would not know anything about it, because the bill would read from the originating station, and might not show any such expense.

Q. How would the accounts as between the different roads be settled? That is sometimes done in order to secure business, is it not?—A. That would be done, I presume, by voucher.

Q. The statement has been made to the commission a number of times that that is done at times in order to secure business. Is that of as much frequency, as far as you know, at the present time, as it was formerly?—A. I do not think it is.

Q. What reason have you for supposing it is of less frequency?—A. I see that a great many of our bills carry legitimate advances on them for cartage of that kind, and there seems to be no question about the collecting of the revenue at the other end of the line, but I would not know that fact if the charges were left off the waybills.

Q. Suppose that two lines are interchanging traffic, and that the Eastern trunk line accept the regular published tariff rate, would it be possible for the traffic to originate and be carried on agreement by the shipping agent that the Western line would shrink its percentage? Or is it done, as far as you know? What I want to bring out is, how do you effect your clearing between roads in the case where the Western line has agreed to shrink its proportion?—A. That would not go into the clearing house you see. I only divide the waybills. In a case of that kind the waybills would be made to read correctly. Any shrinkage would be taken care of in some other channel.

Q. Would such shrinkage show as a matter of record at all?—A. Yes; I think it would.

Q. Is that system, so far as your experience goes, common at the present time?—A. I do not know of any of it at the present time.

Q. It need not necessarily come to your knowledge?—A. No; it need not.

Q. Does the matter of classification embarrass a clearing house at all—the system at present in force of several different classifications in different parts of the country?—A. It involves a great deal of labor in billing.

Q. Will you explain how you overcome the difficulty? For instance, are all shipments into the Southern territory from the Official territory on the Official Classification or the Southern?—A. Both.

Q. Are there special rules often made by the different railroads in interest?—A. As to certain commodities?

Q. As to which classification shall apply. For instance, from New York to Nashville, which classification applies?—A. Well, we would take the Official Classification in that case. The great bulk of the clearing-house traffic is on the Official Classification. Our traffic west of Chicago bears a small percentage to the total this side.

Q. Does any way seem clear to you for obviating this difficulty of different classifications for different parts of the country?—A. No; that has been argued with traffic officials between the East and West for years. It has never been done.

Q. What are some of the objections from a practical standpoint that stand in the way?—A. Well, in certain sections of the country, where a large class of particular freight is moved, it would be to the advantage to have a lower classification, of course, than would be prevailing in the East. That traffic would be distributed all over the different roads to the East.

Q. In your typewritten statement you referred in one place to 60 commodity classes?—A. Yes.

Q. Are there more than that at the present time, or does that vary from one time to another?—A. I think you will find that the Interstate Commerce Classification has about 40, beginning with the products of the forests, etc.

Q. Does the commodity system embarrass you at all in the making of rates? How do you keep account of it?—A. It does not bother the billing agents at all, because it is local at their station. We have to be on the lookout for commodity tariffs, which are printed and filed with the Interstate Commerce Commission.

Q. And they must, of course, be filed nearly at the same time?—A. Yes.

Q. Are there more of those commodity rates on west-bound traffic than east-bound traffic?—A. I do not know; could not state that.

Q. You simply deal with them?—A. Just as an accounting matter; that is all; the why and wherefore I do not know.

Q. You refer in several places to the new system of accounting in force on railroads, and again to the desirability of uniformity in accounting. Will you specify to the commission what some of the differences in accounting are, so far as it affects our interests here?—A. As regards general accounts of the railways, the Interstate Commerce Commission has mapped out the line for the exhibits of the operation of the companies, but below that comes the various traffic accounts which lead up to those figures. Some roads have a daily forwarded and a daily received freight report; others have weekly forwarded and weekly received reports. Some have daily forwarded and monthly received reports; some have monthly forwarded reports and monthly received reports. Nearly all railroads report corrected figures to the auditors, while others report the original figures. These are the things we have to contend with. In other words, the clearing house has to take care of 12 different systems of accounting, and make its record fit the ideas of the individual companies, so far as its accounting method is concerned.

Q. Has the Interstate Commerce Commission through its statistician been effective toward securing greater uniform accounts than previously?—A. It certainly has.

Q. Is there anything further it could do under the present law, or is it desirable from a railroad-accountant point of view, that they should take the initiative any further?—A. The Interstate Commerce Commission is no doubt at work developing these lines.

Q. Are you called upon to report to them as a distinct organization?—A. No.

Q. Have you been in the accounting and auditing department of any of the individual roads before you went to the Clearing-House Association?—A. Yes. I have been in the passenger department of the Erie, the freight department of the New York Central, the accounting department of the New York Central, and was auditor for fifteen years of the Fall Brook Railway.

Q. Do you know how far reports to the Interstate Commerce Commission respecting income, etc., are made full and complete?—A. I think they are made full and complete. They have to follow the schedule as required.

Q. The statement has been made before this commission that the income accounts are more strictly adhered to with firms than are the operating accounts. I wondered if you had any experience in that line?—A. No; I have not.

Q. Will you speak of the nature of the transcontinental business? You have to deal with it in a peculiar way respecting mileage and prorating, etc. What are the peculiarities of that business?—A. The peculiarity of it is that it is covered by these various classifications which govern freight from the point of origin to destination. The accounting part of it is satisfactory, so far as that goes. It is only in the revising of the waybills that we are inconvenienced.

Q. What is the difference between the Transcontinental Classification and the Official, for instance, in a general way? What were the reasons which led to the promulgation of distinct Transcontinental Classification?—A. Well, that is a traffic matter I am not familiar with. I could not answer that intelligently.

Q. You keep the statistics of these different roads respecting tonnage earnings, etc.?—A. Yes.

Q. Will you make a statement respecting the amount of tonnage and earnings the last few years? How do they compare with those of 4 or 5 or 6 years ago?—A. That would be rather difficult for me to do, on account of the clearing house having no data to compare with.

Q. Can you compare the tonnage and the clearings this year with last year?—A. Yes. There has been a general increase, a gradual development month by month.

Q. Even over the last year?—A. Yes.

Q. Do you ascribe that in any way to increased charges upon freight, or merely to the greater volume of earnings, or to maintenance of rates more strictly than before?—A. I ascribe it to maintenance of rates and the general prosperity of the country. There is more tonnage in every direction.

Q. Why do you say that rates have been better maintained?—A. Because I have heard nothing of any rates being cut.

Q. Do you hear of them?—A. Just in a general way.

Q. Do the railroads themselves, as far as you know, desire that rates should be maintained in their own interest? That is, have they made an organized attempt to get rid of cutting—to do away with it?—A. They certainly have; yes.

Q. Do they seem able to cope with that difficulty themselves, with no intervention on the part of the Interstate Commerce Commission or anybody?—A. I think they do. The community of interest of railroads is the greatest factor I know of in respect of maintaining rates.

Q. On the Vanderbilt system what is the proportion of east and west bound business? Is it nearly equal?—A. I can not say positively about that.

Q. Are the railroads attempting to increase the carrying and earnings within the last few years? That is, to get greater service out of each car?—A. I think they are.

Q. Can you show the way in which it is greater in this direction?—A. On account of demurrage charges being applied to stations holding cars at different times.

Q. Those are being enforced?—A. They are moving the cars quicker, turning them faster than they ever did before.

Q. The clearing house contributes to that end?—A. Yes; because the cars are moved quicker under that system; no holding cars for waybill at junctions. After the cars get to destination it is fair to presume they will get back quicker.

Q. What is likely to be the effect on the clearing-house association of the tendency of the roads toward consolidation—toward community of interest? Is it likely to lead to the establishment, in your judgment, of a universal clearing house?—A. A universal clearing house for American railways would be stupendous. I do not think it could be accomplished on account of the immense territory involved. The clearing house in England takes care of a territory about equal in size to New York State, requiring a clerical force of thousands, so I am informed.

Q. Are there any clearing houses in Europe—on the Continent?—A. I am not aware of any, except 1 in Ireland.

Q. That clears for all roads in Ireland?—A. I could not say positively. I imagine so.

Q. Coming back once more to the matter of fast-freight lines, are they gradually passing out of use? Is there a disposition on the part of the railroads, now that they have these great organized systems, to do away with them?—A. I think the tendency is in that direction, for some years ago we had 8 managers for 8 different lines, which are now under the management of 1. They are consolidating the lines, more or less.

Q. Is the number of these fast-freight lines operating over the Vanderbilt system greater or less than those operating over the Pennsylvania and the other trunk lines?—A. They are more numerous.

Q. Why should that be?—A. So far as I am informed, the Pennsylvania line handle all their through traffic east and west by way of the Star Union line, or the Empire line.

Q. What are these lines? Are they distinct corporations, or merely trade-marks for routes?—A. I am inclined to the opinion that they are trade-marks for securing freight. The Pennsylvania adopts the system of settling at all junction points where anyone enters the territory.

Q. You mean settling by cash?—A. Yes; either by cash or balance agreed on by the two agents, and then remitted by the treasurer.

Q. Is the Union Freight Line, operating over the Pennsylvania Railroad, a distinct corporation?—A. I think not.

Q. It has its own soliciting agents, however, does it not, with offices distinct?—A. I think it has. I am not sure of that; we have on our lines.

Q. Do all of your lines, for instance, have different offices? Do they solicit freight in the name of the lines rather than in the name of the company?—A. Yes.

Q. Do you keep them distinct—in all your accounts do you debit and credit to the account of the Blue, White, or Red Line, as the case may be?—A. They maintain separate accounts, ledgers, journals, cash books in each line; yes.

Q. And also in the case of the Merchants' Despatch Line, to which reference has been made?—A. Not the M. D. T.; no, sir. They are kept in New York.

Q. You have nothing to do with that in particular?—A. Only the revising of their billing; that is all.

Q. Have you anything to say respecting the desirability of a uniform bill of lading for the country as a whole? Testimony has been offered here at various times as to the inconvenience of having bills of lading different in different parts of the country?—A. I think a movement has been started for uniform bills of lading, uniform freight and expense bills, all over the United States. There is no reason why they should not be uniform. The Association of Accounting Officers has adopted a standard waybill which is now used by 160 railroads.

Q. Those are mostly in the trunk-line territory?—A. All over; everywhere.

Q. Are they used as a general thing in the South, do you know?—A. Yes. I am speaking of waybills—I do not know about bills of lading.

Q. What does the waybill specify respecting liability?—A. Nothing at all, except the published instructions required to be noted on them.

Q. (By Mr. RIPLEY.) Does the waybill limit the railroad as to liability?—A. No.

Q. Does the waybill as a contract in any way commit the railroad in its liability?—A. No; not as I can say. It is nothing more than an account—a bill.

Q. Not until the bill of lading is signed?—A. The bill of lading is the contract; yes.

Q. Why did the Michigan Central withdraw from the clearing-house association? You referred in your statement to that fact.—A. The Michigan Central had a weekly system of accounts; another reason was, I presume, that they preferred to handle their own accounts. They found more or less fault with the clearing-house method, claiming it to be more expensive. In consequence thereof, they were requested by the executive committee to withdraw their membership.

Q. Does the clearing-house system, then, enable each road in interest to arrive at a statement of the amount of the total business done by its competitors?—A. No; that information is never given.

Q. It is not published in any way, of course?—A. No. The auditor of the Lake Shore Railroad finds any information that is required to see that his revenue is properly accounted for, but as regards the Michigan Central he would have nothing to say.

Q. There is, then, a possible objection to this system in this way, as evidenced by the action of the Michigan Central. Has this clearing house taken any steps to obviate that objection; that is, to keep the accounts of each road peculiar to itself?—A. The accounts of each road are kept by themselves. We are not allowed to give, nor never have given, information of one road for the benefit of another. We have strictly adhered to that rule, because the manager is nothing more than an accounting official of each individual road, and has to protect the interest of each road against the others. The traffic manager of one road can not tell him to do anything unless the traffic managers of the other roads give their consent. This method has led to the enlargement of the scope of the clearing house.

Q. Of course, in the case of these roads you have an advantage, do you not, owing to the fact that they are all controlled by the same parties. Would there not be more or less difficulty if systems not controlled by the same interests were to become members?—A. I do not think that that would make any difference. I do not see why it should. There was some talk once of having the Delaware, Lackawanna and Western and other outside roads admitted.

Q. (By Mr. FAIRHUR.) You said, Mr. Nicholson, that this system of yours has abolished the old system of the settlement of agents at the junction points?—A. Yes.

Q. Do your waybills carry on them now the pro rate of all the rates—for instance, a transcontinental bill?—A. No; they do not.

Q. Do not all the fast-freight lines carry the pro rate on their bill?—A. Yes.

Q. As a matter of settlement for the fast freight, then, they have got to still hold the pro rate?—A. No; I can explain that to you better this way. The fast-freight bill can begin on a road outside of the clearing house and end on one outside its territory. Therefore it is necessary for us to show the proportion up to the entering junction and from the delivery junction at both ends of the clearing-house territory, there being in the line roads which are not in the clearing house.

Q. Now, this is a simplification entirely for the Vanderbilt system of keeping accounts?—A. Yes.

Q. Its merits are simply the fact that it is a systematic and a correct way of keeping accounts and a quick way of disposing of overcharges and other common differences that happen in transportation?—A. Yes.

Q. That is, you reach a quicker result through this, and at the same time you can present to the head of the Vanderbilt system the entire tonnage and the proportion of earnings and everything else?—A. Yes.

Q. How often—day by day or week by week or month by month?—A. We furnish earnings to the various departments every day and some statistics every day of certain classes of freight that this or that traffic manager may require—anything of that kind.

Q. So that it presents to the central office in New York City the earning ability of every single part of the road?—A. Yes, so far as clearing-house traffic is concerned.

Q. You have said nothing at all of the so-called Vanderbilt roads west of Chicago. Does your clearing house in Buffalo take in the clearings west of Chicago?—A. No; I can explain it to you in this way: East of Chicago we take care of everything, and the auditors of the roads west of Chicago take care of the West. The accounts are based on a received basis both ways; the auditors report the freight

they receive west, and we report east of Chicago all freight received and we strike a balance on the plan of the association of accounting offices.

Q. You make no account of a bill originating east here and passing through west on the Chicago and Northwestern—your account does not take in this matter west of Chicago?—A. No.

Q. So that practically your clearing house is for the eastern business?—A. Yes.

Q. And not for Chicago and the western through business?—A. That is it exactly.

Q. (By Mr. RIPLEY.) Are your books open to the inspection of the Interstate Commerce Commission?—A. I do not know that that question has ever come up.

Q. Suppose that the Interstate Commerce Commission were given authority to examine the books of railroad companies and to audit from an examination of the books of the clearing house. It could arrive at some information respecting the earnings of each of the systems and each part of this system, could it not?—A. It could on freight; yes. We publish no reports of any kind. Our figures are all incorporated in the auditors' books of the various companies and they publish them, of course. They incorporate our figures with theirs. The clearing house is merely a branch of the auditing department.

Q. Have you any criticism to make in any detail upon the system of accounting prescribed by the Interstate Commerce Commission, or is that fully in accord with the forms adopted by the association of railway accountants?—A. It is fully in accord with the association, except in minor details.

Q. There is complete harmony of action, then, as between the Interstate Commerce Commission and these railroad officials in that respect?—A. Perfect harmony exists between them. They are conferring with the executive committee of the association all the time.

Q. (By Mr. FARQUHAR.) Suppose that there was a shrinkage on the part of your waybills—say, east of Chicago for west bound freight. You would not have any knowledge of this by the waybill, whether there was a shrinkage or not?—A. That is right.

Q. Well, do you think there is such a custom at all? Say a bill with a proper pro rate is carried right to Chicago, and after that there is a shrinkage on the Wisconsin Central, for instance. Do you think it is good railroading? Is it done at all, or has it ever been done in your knowledge as a railroad man?—A. A shrinkage on the Wisconsin Central?

Q. Yes; in freight on the delivery back of Chicago, for instance, to any point.—A. It was done years ago in a similar case. I can not remember the road.

Q. Can you now, under modern railroad accounting, independent of the system of the clearing house? Is there not a possibility of a rate being made out on one-third or one-fourth of the whole business without the knowledge of the party who contracts for five-sixths of it?—A. No; I do not see how that would be possible without their knowledge.

Q. (By Mr. RIPLEY.) It might be done, however, with the acquiescence of the party controlling the five-sixths, might it not?—A. Anything might be done.

Q. (By Mr. FARQUHAR.) But as a railroad man practically, why should not the rebate be taken out of the whole business, all parties equally suffering, if there was a rebate made at the end?—A. Well, it would be probably handled there through a voucher. The billing would not be changed on account of the reduction of the tariff, the agents reporting it and the competitors seeing the waybill properly made out and collected, would not be able to get on to the fact the same as they would if it were published on the face of the waybill.

Q. It could not be very well done? It would be a very exceptional thing in a great business such as you control there, with 220 clerks, for instance?—A. To do it on a waybill?

Q. Yes.—A. I know we allow nothing to get by unless it is on the published tariffs of the traffic department. We are watched very closely on that, because we are not one road, but two or more, and the traffic managers watch at both ends. All we do is to follow instructions as regards the billing.

Q. In other words, you are strictly a clearing house, without the initiation of any changes or discriminations of any kind whatever?—A. Yes; that is it.

Q. (By Mr. CLARKE.) Has the establishment of the clearing house had the effect of simplifying the work of auditing at the several headquarters of the railroad?—A. Very much. We give the auditors a debit and credit balance affecting every agent on his system on the 15th of the month—that is, the first month after the account is closed. We use the whole system of the clearing house as one railroad.

Q. So far, then, as the expense of the clerical force is concerned, is it an economy to the several companies?—A. It certainly is; yes. The proportion I would not know, because I do not know the figures.

Q. Would there be any advantage in incorporating the passenger accounting in your clearing house?—A. That has been talked of, but I can not see personally where anything would be gained by it, the passenger business being all prepaid—that is,

you buy a ticket which carries you to your destination. Ninety-four per cent of the freight is collected at the other end.

Q. This is simply a clearing house of accounts, and not of cars, I suppose.—A. No; we have nothing to do with the cars, other than as they may affect our distinct fast freight line accounts. The practice of remitting mileage to the lines is being discontinued as far as possible, so that the car accountants of the different roads can handle that themselves. The clearing house has no interest in that.

Q. (By Mr. RIPLEY.) Mr. Blanchard has testified publicly that these fast freight lines were very expensive to the railroads and that they were desirous of getting rid of them. Do you know any way in which they operate to the disadvantage of the lines? What would be the advantage to the railroads in getting rid once and for all of these fast-freight lines?—A. The traffic officials look upon the line as a sort of trade-mark and consider that a great many shippers who send freight over the Red line do it because it is the Red line. They do not know what railroads it runs over at all. The Merchants' Despatch the same way. But in the western country the other side of Chicago the fast freight line is practically unknown. Business across the continent from that gateway has been billed for years on the road bill. It costs to operate a fast freight line from 2.5 to 6.6 per cent.

Q. You mean administration expenses?—A. Agencies, printing, etc., general expense.

Q. A part of those expenses, of course, would have to be borne by the roads themselves?—A. Yes. The lines are cooperative, and each line pays on the basis of its earnings its amount of expenses.

Q. Is the general opinion of railroad managers that it would be to the interest of the roads themselves to have these fast freight lines abolished?—A. From a traffic standpoint they want them maintained; from an accounting standpoint it would be an excellent thing for us and an economy if they were abolished.

Q. It would save money to the roads?—A. It would save money in the accounting department. Whether we would lose in the soliciting of freight is for the traffic officials to say.

Q. (By Mr. FARQUHAR.) If they were entirely abolished you would lose the entire power of the solicitation of freight that there is now in the competition between lines?—A. I presume that is so.

Q. Is it not a fact, too, that Western merchants especially patronize the Red or the White or the Blue line simply because they have had good service for a great many years; better service than even the roads could give them?—A. Well, it is the roads that have given it, you know, and it is the roads that have to give it in the end. Of course, preference is given to them, on account of their being fast freight lines. That is true.

Q. There is no question at all about the character of service about the fast freight lines anywhere, is there?—A. No.

Q. Then it is the best that can be found on the American railroads, and the customers are willing to pay for it?—A. Into that comparison also enters special trains, like our special horse trains, for instance, or the live-stock trains. I am of the opinion that those trains surpass the fast freights in speed. I will not say that, positively, but I am pretty sure that is so.

Q. (By Mr. RIPLEY.) You gave the impression at the outset that these fast freight lines originated because of the disjointed condition of the railway systems?—A. Yes.

Q. Now that the railroads have come together, is there the same justification for them from the railroad manager's standpoint as there was formerly?—A. Only from the soliciting side; from the accounting side there is not.

Q. (By Mr. FARQUHAR.) You used the word "trade-mark." It is trade holding, is it not?—A. Yes.

Q. These fast freight lines have thoroughly done their business and they hold their business?—A. And they had the fortune of starting in at a time when the traffic was pretty poor.

Q. And they have always had the advantage of taking up their waybills when the road could not make them themselves?—A. Yes.

Q. They had to take division sheets and make them up in the early days?—A. Yes.

Q. (By Mr. RIPLEY.) Is all this true of the lines like the Merchants' Despatch and the Blue, Red, and White lines? That is to say, do the railroads regard the dispatch lines with real favor?—A. Oh, yes; there is no discrimination. It is merely a branch of their traffic and operating departments. There is no favor, and the mileage is the same for each car whether it is their car, yours, or mine.

(Testimony closed.)

WASHINGTON, D. C., May 11, 1901.

TESTIMONY OF MR. ISAAC LEOPOLD RICE,*President Consolidated Rubber Tire Company, 100 Broadway, New York.*

The commission met at 10.06 a. m., Vice-Chairman Phillips presiding. At 2.50 p. m. Mr. Isaac Leopold Rice appeared as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. RIPLEY.) Will you state your full name, occupation, and address?—A. My name is Isaac Leopold Rice.

Q. And occupation?—A. My occupation is difficult to define. I am president of a number of companies engaged in developing inventions, such as the Electric Boat Company, which includes the Holland submarine boat. I suppose you have heard of the Consolidated Equipment Company, which produces electricity for lighting trains from the motion of the wheels? I am also president of the Consolidated Rubber Tire Company, and I am vice-president of the Casein Company of America, which is developing a new raw material in milk which is entering largely into industries now, such as the paint industry, paper sizing, glue, sugar of milk, and other cognate industries. All of these are based on patents granted by the United States Government.

USUAL MODE OF CAPITALIZING COMPANIES BASED ON PATENTS.

Q. In the organization of companies based upon patents, what is your practice respecting capitalization?—A. Well, the usual practice is this: The working capital is provided by the preferred stock, which is paid for in cash, and by means of which the patents are developed. The patents themselves are valued in common stock.

Q. Do you mean that the preferred stock is equal to the actual value of the tangible, physical plant, machinery, building, supplies, and so forth?—A. Well, in new inventions, as a rule, they have no tangible plant. That all has to be provided out of the capital which is subscribed. Take, for instance, the electric-vehicle industry. I am the father of that industry in the United States. I secured a lot of cash in that industry, about \$12,000,000, when practically there was not a plant in existence, simply for the purpose of developing the business. Take the Electric Storage Battery Company. I am founder of that industry in the United States, and we started with the mere patents; the money first has to be raised to develop the industry.

MODE OF PROMOTION—STOCKS NOT LISTED.

Q. What is the usual process of promotion in case of companies of that kind? Is the money usually advanced by an underwriting syndicate of bankers?—A. Well, in my case I have no syndicate, but I have a number of friends who have confidence in my judgment, and if I tell them that it is a good thing they will subscribe the money. I usually head the list by the largest subscription, very much the largest. My friends follow with whatever may be necessary to continue the business; it may be \$1,000,000, or, as it was in the vehicle business, \$12,000,000; it depends on the amount actually required to develop it.

Q. Are most of those companies of which you speak owned broadly throughout the country, or are they owned by a few people?—A. Owned broadly.

Q. They are, therefore, listed on the exchange?—A. No; they are not listed on the exchange, but are dealt in without being listed. I myself am not what is called a promoter at all. I take these things with the intention of developing the industry, and the people aid as they please with their stock subscriptions. I never have anything to do with manipulating the stock or anything of that kind. I have never done that; it is not in my line at all; people buy and sell the stocks according to the value that they believe them to have.

STOCK IS ISSUED IN PROPORTION TO ESTIMATED VALUE OF THE PATENT.

Q. In the case of such companies, at the outset, is the stock usually issued at a considerable discount?—A. No; we can not issue at a discount. The law does not allow that. It is all issued at par.

Q. What law do you refer to? In what States are most of these companies organized?—A. In the State of New Jersey.

Q. Does the law of the State of New Jersey at the present time require that the stock shall not be issued at a discount?—A. Oh, yes; that is positive.

Q. Do you mean, then, that the stock is issued only to such an amount as will probably make it equal to par selling value?—A. The valuation is fixed, although nobody can tell absolutely, but of course if a valuation were to be extravagant it would give the business a black eye to start with. If I value a patent at \$5,000,000 it means that I take it for granted that the patent will pay interest on \$5,000,000.

Q. That is the rule by which you determine value?—A. Yes; that is the way by which patent values are determined. It is like a mine. You buy a mine; you do not know what is in it; you think there is a great deal in it; you have to capitalize it at something, and you capitalize it at whatever your valuation is, provided you act in good faith.

THE WORKING CAPITAL IS SECURED BY ISSUING PREFERRED STOCK.

Q. (By Mr. PHILLIPS.) Does that value include the working capital?—A. Not always; the working capital is often represented by preferred stock, which represents actual cash.

Q. (By Mr. RIPLEY.) Is that at all different from the practice prevailing some years ago by which working capital was obtained from banks by loans?—A. Well, I have a holy horror of debts, loans, bonds, and everything of that kind. I believe people who go into a venture of this kind should risk their money. They know they risk it, and I do not go to widows and orphans for money of that kind; but unless people risked their money we should still be cave dwellers. The only thing that makes progress in the world is that people are willing to risk money for new inventions.

Q. Do you find any disinclination on the part of capital under those circumstances to buy preferred stock which is not a lien on the property?—A. Well, there is no disinclination among some people. The people who want Government bonds and securities of that kind would not, of course, risk their money. Other people would rather go to the stock exchange and buy stock on the market and gamble, rather than risk their money on valuable inventions that are going to be a benefit to the country. Most of these inventions I speak of have been of very great value.

ORGANIZATION AND CAPITALIZATION OF THE CONSOLIDATED RUBBER TIRE COMPANY.

Q. Do you have a practice of setting aside certain amounts for depreciation?—A. Yes.

Q. Will you state what that practice is? To make this a little more specific, will you make a statement respecting the Consolidated Rubber Tire Company, as to the actual amount of its capital and the circumstances under which that issue was made?—A. I was not the organizer of the Rubber Tire Company. I was asked to take the presidency of it after it was organized.

Q. You are, however, informed of its present condition?—A. Yes. The theory there was different from that of the ordinary newly patented article, because at that time this particular rubber tire, called the Kelly or the Grant tire, was very largely developed; in fact, at the time its patents had just been sustained it was in use all over the world, as it still is. It was not the case of my other companies, where the investors were taking something that had no real existence at the time and developing it into something commercially valuable, but it was taking something already commercially very valuable and which had a fixed value on account of its earning capacity.

Q. Can you state to us the manner in which that company was organized and what the issues of stock were?—A. There were issues of four millions of preferred stock and four millions of common stock. In other words, the patents were appraised—not only the patents, but the business, the earnings, the assets, and all these together were appraised as being worth \$8,000,000.

Q. Was that company formed from the consolidation of a number of other companies?—A. Not exactly.

Q. It had grown as a unit?—A. It was in this way: The patent of this company had been sustained, and the result was that a large number of other companies went out of business, and practically this company fell heir to all their business. But it was not a consolidation in the sense of a trust at all, and there are to-day numerous concerns in the rubber-tire field. The question with us is whether the patent, which has been sustained in one court, will be sustained in the other courts where suits are now pending. In that case we shall probably be the only tire manufacturers in the market, and of course the patent will then be extremely valuable.

Q. Does your charter permit you to enlarge your capital as such decisions of the courts shall seem to warrant?—A. No; we can not increase the valuation; that we can not do.

Q. You would have to secure a new charter in order to do that?—A. No; we would not do that. We would not increase the capitalization.

LOW QUOTATIONS OF STOCK DUE TO LITIGATION OVER PATENTS.

Q. What is the quotation of the stock of this company at the present time?—A. At the present time it is very low, because our patents have been assailed. At present the preferred stock is quoted in the neighborhood of 30, although we paid 6 per cent dividend on it all last year; and the common stock is quoted in the neighborhood of 5, although at the time the company was organized we showed a basis of 6 per cent on preferred and 4 per cent on common stock.

Q. Have you paid anything on common stock?—A. No; we never did, because shortly after we came into control of this property the patents were disputed, and notwithstanding the fact they had been sustained in one jurisdiction, the result was we found a falling off in our earnings. Patent business, you must recollect, is a very hazardous business. I have received a memorandum to-day showing 673,856 patents, the last number in the Patent Office, and I venture to say out of that total an estimate of 10,000 patents as the number that have made any money for the inventors is pretty large.

Q. Do you recognize any danger to your company financially, or any difficulty in its control, by reason of this very low quotation of stock?—A. Well, even if anybody bought the control, it would not change the situation of the company.

Q. It might, however, affect the management of the company, might it not?—A. Oh, yes.

Q. Have you any information respecting the merits of a large capitalization, with a consequently low quotation for the securities, as compared with a small capitalization and higher quotations?—A. There is no doubt that we could not have sold that stock if people had imagined there would be such a great decline in the quotations. That is one of the risks of buying any stock.

Q. These quotations which you have named are less than the ones at which the issue was made?—A. Far less. At the time the issue was made the preferred stock was quoted in the neighborhood of par, and the common stock in the neighborhood of 50.

Q. You ascribe this decline to litigation over patents?—A. Absolutely to that.

DEPRECIATION ACCOUNT—THE CONSOLIDATED RUBBER COMPANY ENDEAVORS TO SECURE A MONOPOLY.

Q. Will you state what your policy respecting depreciation is?—A. We have a regular depreciation account.

Q. This product is not in any sense a monopoly as we understand the term?—A. Well, it is not our fault that it is not a monopoly. We hope it is. We went into this and paid an enormous price for these patents on the understanding that it was a monopoly, the patents having been sustained by the United States courts.

Q. (By Mr. C. J. HARRIS.) Do you manufacture anything else, or simply control the patents?—A. Oh, yes; we control a plant which manufactures rubber tires for the purpose of this business. This plant is at Akron, Ohio. Then, we have a large number of licensees who simply pay us a royalty, for this tire is known all over the world; people pay a royalty even for the use of the name all over the continent of Europe, in Australia, and almost everywhere. Now, to take the other side of it. I know monopoly has a dreadful sound, but the invention of this carriage tire has been a benefit to the world. It has stimulated the carriage industry enormously.

THE PUBLIC POLICY OF GRANTING MONOPOLIES UPON INVENTIONS.

Q. (By Mr. FARQUHAR.) Do you intend to explain now this tire in its universality?—A. Well, what I intend to do is to give you an idea of the hazardous nature of the patent business. When you speak, for instance, of a monopoly many people think it a wrongful thing—although this species of monopoly is guaranteed by the United States Constitution. But if such monopolies were not granted the country would be many millions of dollars out of pocket. Moreover, the hazard of invention of that kind is great. Here is an illustration. Here is a brief on this patent suit where we have shown this method. (Referring to paper.) Here is a number of people who want a rubber tire; they find they need it. Suddenly a man discovers the thing. Here it is, then. It is a new invention of great value. Then the moment that is done everybody makes the same thing—either claims it was not patentable, that any mechanic could have found it, or makes it a little different in a curlcyne and claims it does not infringe. Now look at the styles here—all styles of carriage before the Grant patent. You find practically every single tire on the market copying the Grant patent. That is the history of all patents. First, the difficulty of making a successful invention—the enormous difficulty of making something that is really successful—and, then, after that everybody thinks he has a perfect right to

sell it if he can; and therefore, as I say, although patents have a monopoly to a certain extent, if they did not have at least the hope of protection nobody would invent.

RAW MATERIAL—EXPORT OF INDIA RUBBER FROM PARÁ AND MANÁOS.

Q. (By Mr. RIPLEY.) Do you experience any difficulty in getting a supply of rubber by reason of the existence of any of the rubber companies which are now operating in the United States?—A. Not so far.

Q. The raw material, then, is apparently free to all who wish to use it?—A. As far as we know to-day it is. Whether that will ever be cornered is something I can not tell. I have here a table of the export of rubber from Pará and Manáos. It is a very large output. I do not think anybody is likely to corner it, but such a thing is possible.

Q. What proportion of the total output of rubber of those South American countries is taken by the United States?—A. That is stated here. Out of 61,022,585 pounds the United States takes 27,413,469 pounds. Of course, outside of the Pará there is African rubber, Guatemala rubber, Colombia rubber; but for tires a very fine quality of rubber is required and that mostly comes from Pará.

Exports of india rubber from Pará and Mandos during the year 1900.

Exporters.	To United States.	To Europe.	Total exported.	Stock Dec. 31.	Grand total.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounas.</i>
Cmok, Prusse & Co., representing Reimers & Co., New York and Boston; Heilbut, Symons & Co., London and Liverpool.....	6,269,378	10,381,272	16,650,650	319,607	16,970,317
Ad. H. Alden.....	8,224,794	2,958,798	11,183,592	460,781	11,644,383
Frank Da Costa & Co.....	4,119,311	2,806,244	6,925,555	132,276	7,057,831
The Sears Pará Rubber Co.....	4,801,438	.....	4,801,438	187,391	4,988,829
Witt & Co.....	1,920,764	1,611,726	3,532,490	44,092	3,576,582
Rud. Zietz.....	604,867	2,610,319	3,215,186	68,343	3,283,529
Marius & Levy.....	38,938	2,116,129	2,155,067	.....	2,155,067
Denis Crouan & Co.....	299,230	1,147,937	1,447,167	8,814	1,455,981
Comptoir C. Française.....	78,850	1,293,990	1,372,840	74,956	1,447,796
J. H. Andresen (succ.).....	.....	984,574	984,574	13,228	997,802
Singlehurst, Brocklehurst & Co.....	337,388	489,941	827,329	30,865	858,194
B. A. Antunes & Co.....	83,246	363,364	446,610	.....	446,610
R. Suarez & Co.....	28,169	397,159	415,268	.....	415,268
Kahn & Polack.....	.....	341,321	341,321	.....	341,321
H. A. Astlett.....	299,795	34,897	334,692	4,409	339,101
Kanthack & Co.....	62,399	204,175	326,574	.....	326,574
Luiz Schill & Sobinhos.....	.....	312,747	312,747	2,205	314,952
Pires Teixeira & Co.....	56,808	.....	56,808	.....	56,808
From Iguitos direct.....	.....	2,024,074	2,024,074	.....	2,024,074
Sundry small shippers.....	188,154	1,430,968	1,619,122	24,252	1,643,374
Stock in first hands.....	.....	.....	.....	865,964	865,964
Stock in transit for New York.....	.....	.....	.....	315,258	315,258
	27,413,469	21,556,635	58,970,104	2,052,481	61,022,585

RECAPITULATION OF EXPORTS.

Year.	To United States.	To Europe.	Total exported.	Stock Dec. 31.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
1900.....	27,413,469	21,556,635	58,970,104	2,052,481
1899.....	30,596,123	25,486,854	56,082,977	1,986,343
1898.....	21,671,801	26,628,790	48,300,591	2,945,346
1897.....	25,612,369	24,057,665	49,670,034	2,078,372
1896.....	19,941,596	27,681,888	47,623,484	2,341,284
1895.....	24,804,854	26,983,759	45,788,613	1,514,920
1894.....	28,082,396	19,869,306	42,951,692	1,866,991

AMOUNT OF STOCK ISSUED A MATTER OF INDIFFERENCE.

Q. Have you any criticism to make upon the policy adopted in capitalizing most of the great industrial combinations at the present time, on the basis of your experience?—A. Well, on this question of capitalization, as long as the capitalization is in

stock, not in bonds, I really do not see that it makes a great deal of difference. Supposing you issue \$16,000,000 of stock, we will say; it sells at \$10 a share; you have really issued 160,000 shares of stock worth \$1,600,000. Supposing you reduce the capitalization \$10 a share, and you still have 160,000 shares worth \$1,600,000. As long as there is not question of public policy, as long as there is no question of transportation involving protection against excessive rates, or something of that kind, I never could see what difference it made how much stock there was.

BONDED INDEBTEDNESS IS GENERALLY UNDESIRABLE.

Q. In discussing as we were the basis of capitalization, your remarks are particularly applicable to industrial companies and not to railroads?—A. Yes.

Q. You do not regard bonds as favorable to the interest of the company or the investor?—A. I think a debt is always a burden, and the dangers of trouble and panics and upheavals are very much less if the bonded indebtedness of railroads or industrial companies is small.

ACCOUNTS SHOULD BE PUBLISHED AS SOON AS COMPANIES ARE ON AN EARNING BASIS.

Q. What have you to say respecting publicity of accounts in the case of companies such as those you have mentioned, in which the general public invest; do you accept any responsibility to make public reports?—A. My principle has always been that as soon as the company is on an earning basis, when it has passed the development stage, it should furnish accounts to the public. As long as the company is struggling in the development stage, then, to publish the accounts would be misleading for this reason: If you are building a house and you are laying the foundation, you have not anything to show for the house. If anybody goes to see the building and finds nothing; he thinks you have nothing and he is misled; but after it is finished you have your house and he can see it. In the same way you take a company in the early stage of development, with the vast amount of money required to develop it, and if you would simply give the cost of this development to the public and to the stockholders, they would all be panic stricken, because they can not see what is coming. These are development periods and they are known to be such, and stockholders put their money in for that purpose. But when the period is reached that you are on an earning basis—in other words, when you have become commercial—then I think it is your duty to inform the stockholders.

MAKING PUBLIC THE COSTS OF PROMOTION.

Q. Does the law of any of the States, so far as you know, require a statement respecting the costs of promotion in the first instance of these companies?—A. Not to my knowledge; I have only experience with corporations organized in the State of New Jersey.

Q. Would you advocate the insertion in all cases in companies' statements of the cost of promotion—that is, promoters' profits and fees incidental to organization, cost of underwriting, etc.?—A. Why, that is a new question; I do not know how to answer that exactly. You see the cost of promotion is a very indefinite thing. For instance, some people who obtain stock by reason of promotion receive it not only for the promotion, but for all the services to be rendered for a long time thereafter. It is a little bit difficult.

Q. In the case of this Consolidated Rubber Tire Company, was any stock issued for payment for promotion?—A. No; no stock can be issued for payment for promotion. The law does not allow that.

Q. Are stockholders generally entitled to a statement respecting the cost of promotion?—A. As I say, it is a very difficult thing to say. For instance, a man has a patent and he goes to you and says, "Will you furnish me money to develop this patent? I have capitalized this patent; I think it is worth so much. Now, if you will furnish me the money I will give you an interest with me." Now, he may give you much or a little. It depends on the quality of the patent, and on the difficulty of raising the money, and the risk involved, and a great many other things. If he has an article that is already on the market and which is paying a large profit, the probability is he will give you a very limited amount. If, on the other hand, he has something from which he anticipates a great fortune and which requires a great deal of capital, and a great deal of work, he is likely to give up more of his interest. It is one of those things that is impossible to figure and you never could get it truthfully, because few people would be honest enough to say, "I have divided the interest I have in this property in such and such a way," and in the great majority of instances one would never be able to find out how it was divided.

THE WITNESS'S FORMER CONNECTION WITH RAILROADS, ESPECIALLY WITH THE READING.

Q. Will you state to the commission for the purpose of the record your connection with railroads in the past?—A. Well, I was identified more particularly with what is now called the Southern Railroad. I was director in the Richmond and Danville, the Richmond Terminal, East Tennessee and Georgia, Virginia Midland, and Georgia companies.

Q. Were you not also identified with the Philadelphia and Reading Railroad Company in some way?—A. Yes; I was the foreign representative of the Philadelphia and Reading Railroad Company in Europe for the purpose of raising money for its needs, and also for introducing anthracite coal into Europe.

Q. Will you speak respecting your connection with the Philadelphia and Reading Railroad and the events of the years prior to 1893?—A. My connection with the Philadelphia and Reading Railroad arose out of the fact that I was invited to join a syndicate to purchase the control of the Philadelphia and Reading Railroad. This syndicate was formed at the instance of Mr. Franklin B. Gowen, who had been president of that company, but while it was being formed Mr. Gowen committed suicide here in Washington. The burden of carrying it on was then left with me, and I became chairman. We purchased a very large amount of the stock, a great deal more than a majority, and although the company was at that time controlled by a voting trust and the stock had no voting power, nevertheless the control drifted into our hands through a friendly feeling all around. Mr. Corbin, who was then president, resigned, and Mr. McLeod was made president. I found after I became familiar with the affairs that it would be advisable to reduce the road's indebtedness in the form in which it then existed—largely in the form of income bonds—by converting those income bonds into stock. I prepared the plan for the organization of a new company, which I called the Reading Company, which was to own both the Philadelphia and Reading Railroad Company and the Philadelphia and Reading Coal and Iron Company, and the holders of the income bonds who had shares of the Philadelphia and Reading Railroad Company were to receive shares in this Reading Company for their interests, and in this way we would eliminate the bonds. This plan received the approval of all the leading banking houses, and I may say that it is the plan substantially under which the present Reading Company was organized. I went with it to Europe in 1891 to see the European holders there; but during my absence Mr. McLeod thought it advisable to pay the interest on the income bonds, and of course when the interest was paid on the income bonds the income-bond holders were no longer willing to take stock for their holdings, and the plan then had to be abandoned, and I came back.

Q. May I ask you incidentally whether the interest on those bonds was earned?—A. It was not actually earned, as was subsequently proved, although it was shown to be earned on the books.

ENDEAVOR OF CERTAIN ROADS TO FORM AN ANTHRACITE-COAL COMBINATION.

After I came back from Europe I was asked to assist to bring about what was then called the anthracite-coal combination, and I was instrumental in making that combination by securing, through negotiations, the adherence of the New Jersey Central, Mr. McLeod in the meantime having secured the adherence of the Lehigh Valley; so the Philadelphia and Reading Railroad took control practically, although somewhat indirectly, of the New Jersey Central and also of the Lehigh Valley. This increased the coal holdings of the Philadelphia and Reading Railroad enormously, and required a great deal more additional money; so Mr. McLeod asked me to go to Europe again as foreign representative of the Reading Railroad and raise the necessary money there. This I did. I went to Europe and raised \$13,000,000 to be paid in cash, of which \$5,500,000 was to be paid in on the 1st of February, 1893, and the balance on options, but the understanding was that these options would be exercised as they came along. Much to my astonishment and amazement, after the bankers had paid \$5,500,000 cash on the 1st of February, the railroad was put into the hands of a receiver on the 20th of February; whereupon I returned from Europe and sent in my resignation. I then had some litigation respecting the matter, to have the thing investigated by the United States circuit court.

Q. (By Mr. PHILLIPS.) Was that money raised on bonds or on stock?—A. That was raised entirely on bonds.

Q. Were those bonds good?—A. They were good and they eventually proved good, because the bankers who had advanced the money finally obtained their money back with interest.

Q. The attempt was definitely made, then, in 1892, to effect a combination of all the anthracite roads?—A. Not all; no. The Pennsylvania was not supposed to come in,

nor the Erie, nor the New York, Ontario and Western, nor the Delaware and Hudson, nor the Delaware and Lackawanna, but it was believed that these companies would act in harmony with the Philadelphia and Reading.

Q. Have you any knowledge of a tendency toward consolidation of these anthracite-coal roads at the present time?—A. No; never heard of it beyond the fact that the Reading again acquired control of the Jersey Central through purchase of stock, but at one time previous to my experience with it, under Mr. Gowen's administration, it had done the same thing.

Q. It is not the first time?—A. This is the third time the Reading has control of the Jersey Central.

THE ANTHRACITE-COAL COMBINATION FAILED CHIEFLY BECAUSE IT RAISED PRICES.

Q. What has been the reason for the failure to absorb that road in the two prior instances?—A. In the first instance the Reading had borrowed money on the Jersey Central stock and was not able to retain it when the loans were called. In the second instance control was by means of a lease which was considered contrary to the laws of New Jersey, and was judicially dissolved. But the main reason why the combination failed was that there was not an understanding of the first principles of an operation of that kind, namely, that it must reduce prices and not increase them. The anthracite-coal combination was killed because prices were immediately put up. If they had acted on the contrary idea and relied upon their economies, withdrawal of concessions to agents, etc.—if they had given the public the benefit of that and had maintained the old prices, they would have made, in my estimation, very considerable profit, and there would have been no outcry against the combination.

Q. Mr. McLeod has testified before this commission that it was his intention to effect such economies as should be reflected in lower prices. Do we understand that you criticize the policy in that it did not so reduce the prices?—A. He did not do it, no matter what his intention was. Mr. McLeod's trouble was that he was carried away by the desire to control a great deal more than he could control. He acquired the Boston and Maine and the New York and New England, and that really brought on the ruin of the company.

CONSOLIDATION OF THE ANTHRACITE-COAL ROADS UNDESIRABLE AND PRACTICALLY IMPOSSIBLE.

Q. Do you see any advantages at the present time in the consolidation of the 6 or 7 roads which are now concerned in the anthracite-coal business—an advantage either to the investors or to the consumers, or both?—A. I think a combination of that kind would be very unwise.

Q. Speaking from your experience and what you knew from the inside history of previous attempts?—A. Very unwise.

Q. What dangers might threaten the investors or consumer?—A. I do not know how it would affect the consumer, because he is always protected to a very large extent by the competition of bituminous coal. I am speaking now, of course, of the consumer for industrial purposes, and unless the consumption for industrial purposes continues there will not be any profit in the business. So, although the consumer might, for a short time, as he was at that period, be discommoded, yet in the long run he will get his rights. The attempts to organize all these various interests under one head would be impracticable, and I do not see to what advantage it would lead.

THE PROPER VALUATION OF COAL LANDS AS A BASIS FOR CAPITALIZATION.

Q. Do you understand that at the present time the capitalization of many of these roads includes the entire value of the coal which is in the ground? I refer particularly to the Philadelphia and Reading Railroad.—A. No. I have calculated that the coal in the ground of the Philadelphia and Reading Railroad at that time was presumed to be about 5,000,000,000 tons. Now, if you put that at \$4 a ton selling price, it would be \$20,000,000,000. I am sure that was not included in the calculation. You have only to mention the figures to see how utterly impossible it would be.

Q. What is the basis upon which that road, as a typical coal road, is capitalized?—A. Now, mind you, the value of coal in the ground, as a general gross proposition, is very different from the net value. In the first place, you can only mine as much as the public will demand; in the meantime your interest goes on or your dividends go on. In the second place, you have to be sure that you can market it at prices which will be profitable. Now, we know that for long periods the marketing of

anthracite coal was unprofitable, so the only criterion you have of values of that character, very much like any other mine or like patents, is what people will pay for them. You send an appraiser around and he will say this land is worth so much. In other words, it is like a New York lot. A New York lot on Fifth avenue is based on the price people will pay for it. Just now they pay a great deal more for it than they did a few years ago, and perhaps in a few years they will pay a great deal less. It is an indefinite method, but it is the only way in which you can appraise things of that kind.

THE VALUE OF RAILROADS FLUCTUATES BUT THEIR CAPITALIZATION REMAINS UNCHANGED.

Q. Mr. Schwab made the statement this morning that the basis of the capitalization of the United States Steel Corporation was, in a measure, determined by the amount of ore in the ground. As I understand you, you criticize that policy as applied to coal?—A. In a measure it is correct. You pay a great deal more for land that has coal in it than land that has not; and what that measure is, how much you will allow for it, is largely a matter of popular sentiment prevailing at the time. You can not state a fixed price, for Mr. Gowen paid \$30,000,000 or \$40,000,000 for these lands, and I am sure they could be sold to-day for a very much higher price.

Q. In other words, the capitalization of those roads to-day is actually reflected in the amount of value which they possess?—A. Yes.

Q. The two are equal?—A. Equal, no; the value may be a great deal more or a great deal less than the capitalization. You see, values change. The capitalization remains the same, but values change. You take, for instance, the Atchison road. A few years ago it was bankrupt; now it is earning a large amount of money. It is substantially the same roadbed, practically the same rolling stock, but its value is quite different. The question of value, you know, is one of the most difficult in the whole range of political economy.

THE DANGER TO RAILROADS OF REGARDING LOANS TO OTHER ROADS AS ASSETS.

Q. Were the accounts of those coal roads accurately kept as between the mining companies and the transportation companies, so as to show the state of the business at the time that you knew it?—A. The accounts were accurately kept, but here is the difficulty which brought a great many railroads to grief. A railroad, for instance, buys up another road or leases it; that becomes a part of its system. The main line, perhaps—like the Pennsylvania Railroad—is some 400 miles long, and the whole system may be 7,000 or 8,000 miles. Now, the rest was brought in in some way; either leased or direct control purchased, or traffic arrangements made by which the traffic is controlled, etc. There are various ways. Now, the way a good many railroads were ruined was this: They acquired a piece of property—a railroad—and they found that it needed money to be developed, so they would loan money to that railroad, which was leased or controlled. Of course, the loan would stand on the books as an asset, and possibly as a surplus. Now, as time went on they would continue to loan this railroad and other railroads and so on, until, perhaps, they would have \$30,000,000 or \$40,000,000 loaned out to branch and leased lines of that character, and those amounts would stand on the books as surplus; but if they called on those railroads to pay up they could not do so. Now, if a panic came on or anything which prevented the railroads from borrowing money on the securities issued to them by these leased or controlled roads for these advances, then the railroad that had advanced money would go into default.

THE PHILADELPHIA AND READING RAILROAD COUNTED AS ASSETS PROFITS WHICH NEVER EXISTED.

In the case of the Philadelphia and Reading Railroad the situation was not only that it had leased roads of that character, but it also owned all the stock of the coal company. Now, the coal company of course was supposed to pay its regular rate of freight, and was charged with it on the books, but when the time came to settle in cash the Coal and Iron Company did not have all of the required cash. Those freights still stood on the books as earning, but the railroad required cash to meet its own demands. It could not realize on that asset standing on its books as an account receivable, and when the Coal and Iron Company was not able to pay, the railroad was not able to pay its charges. But all the time the official statement showed the freight as earnings.

Q. In other words, the coal was mined and the loss really fell upon the railroad, although originally incurred by the mining company?—A. Well, the mining company

paid the railroad company freight—at least was supposed to pay all the freight—and was charged on its books with it. It is like this: I have a right pocket and a left pocket, pocket A and pocket B. Now, there is no money in pocket B at all, and pocket B owes a lot of money to pocket A. Now, when I make my statement I refer to pocket A—that is my principal pocket—as making great earnings, but when it comes down to paying from pocket B there is nothing in pocket B; so a large part of the earnings of pocket A never existed in fact. They existed legally, you might say, but when pocket A did not earn enough to get along without pocket B's paying up, then the thing was exposed and there is a default. While the earnings were there on paper, they were not there in cash. The Coal and Iron Company failed to pay because it could not market its coal at a price that would yield enough profit to pay all the freight; then the trouble began.

MODE OF BOOKKEEPING AS BETWEEN RAILROADS AND THEIR SUBSIDIARY CORPORATIONS.

Q. Then the subsidiary corporations often made it possible to make fictitious returns and earnings?—A. Not exactly fictitious—I do not care to call them fictitious; it may have been the regular rate charged to everybody else—but misleading returns and earnings.

Q. Do you understand that any change in this method of accounting has taken place since 1893 as between the railroads and their subsidiary mining corporations?—A. I have had no experience. I knew those railroads at that time but I have had no experience since; but I imagine from the general credit which the railroads enjoy to-day compared to the credit which they enjoyed at that time that they must have improved.

A DANGEROUS PRINCIPLE TO CONVERT STOCKS INTO BONDS.

Q. Do you see any danger from the standpoint of general railroad finance in these various consolidations which have either taken place or are projected, by means of which one road acquires the stock of another and deposits it, issuing thereupon collateral trust bonds or other securities of that kind?—A. There is in principle always a danger to convert a stock, which has no liability except for bookkeeping purposes, into a charge. Of course, as long as things are well and companies grow, they pay the interest and it is all right; but if for any reason there should be a setback to the prosperity of the country and the interest is not earned, then we get back to a chaotic state of affairs such as existed 7 or 8 years ago.

Q. Do you understand that to be the system on which the absorption of the Chicago, Burlington and Quincy is projected, and by which the Central Railroad of New Jersey was purchased by the Philadelphia and Reading?—A. Yes; that is the system. Now, of course, in matters of business principle it is not proper to go too far. There may be saving circumstances which may make this a good operation, but that of course I do not know, as I am not sufficiently familiar with the details. Speaking generally, it is a mistake to convert stocks into bonds; it ought to be the other way. My tendency has always been the contrary—to convert bonds into stock.

IMPROVEMENT IN RAILROAD ADMINISTRATION—UNITED STATES RAILS THE BEST IN THE WORLD.

Q. Have you any reason to suppose that the financial administration of railroads is somewhat better to-day than it was in 1893, when you were particularly concerned with them?—A. I believe so; for one reason, on account of the great shake-up in 1893. Generally, you know, there is a reform after events of that character—such a large number of railroads went into the hands of receivers. But outside of that, through these reorganizations an enormous quantity of new money has gone into railroads and improved them materially. Take, for instance, the old Richmond Terminal, which is now the Southern Railroad. It was composed of a great number of small roads very indifferently constructed. A large amount of assessments was levied, and the combination of all these roads under the head of one railroad, the Southern Railroad, has produced a great change in the physical condition of those roads. Therefore, they can be operated very much cheaper and yield a profit where previously they would not. The same thing is true all over the country. I remember farther back, in 1886, the condition of most of the Southwestern roads particularly was wretched. I investigated one road, and I wrote that it was not any rougher than the Atlantic in an ordinary gale. That was about the condition. Take this same road, which is now the St. Louis and Southwestern; it is a fine road. Of course the stockholders have had to contribute. Enormous amounts of money were raised by assessments, and the result is that the condition of the railroads in the United States is the best in the world, where it used to be the worst.

Q. You spoke of having examined the roads abroad?—A. Everybody admits—I was in England last year—that the English roads are far outdistanced, although 10 or 15 years ago all we hoped for was to come up to the English standard.

PROPOSED BILL TO ENABLE THE INTERSTATE COMMERCE COMMISSION TO PROTECT RAILROAD INVESTORS.

Q. Does the law of the United States at the present time sufficiently safeguard the investor in the matter of railroad finance?—A. I do not think the law safeguards him at all, except the common law against fraud and larceny; I do not know whether there is any other law.

Q. Have you any suggestions to make respecting the enlargement of the powers of the Interstate Commerce Commission, or by any other means providing for such protection?—A. At the time when I investigated the affairs of the Reading Railroad—I made this investigation for the trustee of the bonds in 1893—I became very much interested in the subject from a good many points of view. I then drafted a bill, which was introduced in Congress by Mr. Strans, of New York, in the House, and by Mr. Cullom in the Senate, for extending the powers of the Interstate Commerce Commission to prevent frauds on stockholders; and among the provisions of the bill the one I relied on more than any other was an examination of railroads based on the method of examining banks—that is, that there should be a regular United States examination. There were other provisions about receiverships which I felt ought to be remedied. For instance, the old method always was that when the president had bad luck—to put it in a mild form—had bad luck so that the road went into the hands of a receiver, he was immediately appointed a receiver, on the ground that he was most familiar with the road. My ground was that if his familiarity brought on ruin, it was the best thing to have some other party who was not so familiar. There were various other provisions embodied in the bill at the time, and it was favorably considered among the members of the railroad committee, but action was postponed until it was too late, so nothing came of it.

ADVANTAGES OF A SYSTEMATIC GOVERNMENT INSPECTION OF RAILROAD ACCOUNTS.

Q. You regard as feasible, then, a systematic inspection of railroad accounts?—A. Just as easy as inspection of banks; there is no difference.

Q. You say that in the light of experience as a practical railroad financier?—A. The management is supposed to give the stockholders all the facts. All the railroad reports go into great detail. Why not have the reports examined by a United States examiner to see that they are correct? It is only carrying out what the management proposes to do anyhow.

Q. At the time of which you spoke, were these full and complete railroad reports accurate in the bookkeeping so as to show the state of the earnings?—A. They were accurate, but when you come to the question of the solvency of the debtors, how could you tell that from figures? If the Philadelphia and Reading Railroad advanced to the Atlantic City system \$1,000,000, it appeared on its books as an advance, as an asset of \$1,000,000 under an advance to a leased line. The reports will be correct as to figures. If the Philadelphia and Reading Railroad Company inserted among its earnings so much freight earned from the Philadelphia and Reading Coal and Iron Company, it would be correct as to figures, but yet extremely misleading as to facts.

Q. You would then have your examination cover not merely the correctness and verification of balances, but also include an actual examination of all securities owned by the road, and an examination as to the facts?—A. Yes; whether or not these various credits, these various advances, have any substantial value.

Q. Do you recognize any disadvantages in a systematic inspection, owing to the fact that it reveals the inner policy of the company, and might sometimes embarrass the management in carrying out incomplete projects?—A. Does it not reveal the inner policy of banks? We are supposed to have trustworthy men for examiners who will not reveal what is not proper to reveal.

INTERSTATE COMMERCE COMMISSION THE PROPER DEPOSITORY OF THIS POWER.

Q. Do you believe that the Interstate Commerce Commission, as independently organized, may safely be intrusted with power to conduct such a systematic examination?—A. That is where it should be intrusted.

Q. (By Mr. PHILLIPS.) Do you think that the decision of the Interstate Commerce Commission in any given case should be binding until it is reviewed by a higher court?—A. That is a very difficult legal question. I should not like to give an opinion on that.

Q. Is not the difficulty now in getting at a conclusion from the courts that it is so very tedious?—A. That is something concerning which I have not studied sufficiently to be able to give you any information.

THE ATTEMPT TO SECURE CONTROL OF THE NORTHERN PACIFIC RAILROAD.

Q. (By Mr. RIPLEY.) Have you followed at all closely the recent attempts to secure control of the Northern Pacific Railroad?—A. Of course I read a great deal about it in the papers.

Q. Are you an attorney?—A. Oh, yes; years ago I used to be an instructor in the Columbia Law School.

Q. The statement was made in the press that suit would be brought for an injunction to compel a settlement on a basis of 150 with those who had sold the stock short. Have you seen a statement of that and the grounds for it?—A. Yes. The ground for the injunction was that where there is an impossibility of performing a contract it can not be enforced. It is an old principle of the common law where there is an actual physical impossibility of performance.

Q. Have you any knowledge of a corner of this particular character at any previous time?—A. No; that is entirely novel.

Q. You have no further information than what is stated in the press respecting this?—A. No; I have not.

DIFFICULTIES IN THE WAY OF EXPORTING COAL AND THE QUESTION OF A SHIP SUBSIDY.

Q. You stated that you went abroad in the interest of the exportation of hard coal to Europe?—A. Yes; that was part of my mission.

Q. Have you any statement to make respecting that?—A. I thought that would be the best way of solving the difficulties of marketing anthracite coal in sufficient quantities, and I found there was a very large field; but the difficulty was entirely with the shipper. In other words, you sent out your load and there was no return freight compatible with profit—insufficient quantities, I mean, to insure a profit on the transaction. That was the whole trouble.

Q. The entire difficulty, then, in establishing a large export trade in coal is the difficulty of securing the return freight?—A. Yes.

Q. Have you any proposition to make respecting that?—A. You mean ship subsidy? Q. Yes, or otherwise.—A. While I am not an expert on that question, I know that a ship subsidy would have been very valuable for the export trade of our coal, because it would have given us a chance to send the coal over and rely on enough assistance from the subsidy to get back. That industry would be created immediately, I think.

UNDESIRABILITY OF LEGISLATION PROHIBITING RAILROADS FROM LEASING OR CONTROLLING OTHER ROADS.

Q. (By Mr. STIMSON.) Would you take a general position in favor of legislation against the control of stock of one railroad by another?—A. I think that would be a great mistake. I will just make a comparison. Take the Southern road, with which I am familiar. Formerly there was a lot of disjointed roads, very slow time, very poor cars, and very unsatisfactory in every respect. They came into this one system, the Southern road, and now you see fast service, excellent track, everything in the interest of the public. Of course, it is a very serious question how far that should go, but I do not think we need be afraid that it will go too far. You see now this very matter that you brought up, this question of the control of the Northern Pacific. The railroads of this country will not come into a single band; that is certain. There are too many people with their own ambitions to allow any single interest to obtain control of all. But how far it can go with profit to the country, and where it should stop, of course is a question very difficult to answer; but I am perfectly satisfied that it would be a mistake to prevent a railroad from controlling and leasing others that connect with it.

EXTENT TO WHICH THE RAILROADS CONTROL COAL LANDS AND THE MINING OF COAL.

Q. In my practice I had a client come to me with a large tract of bituminous coal lands for sale, and I was told by a great many people that they had to be sold to some of these combinations.—A. The quantity of bituminous coal land is so enormous that they really have relatively little market value. The anthracite lands are very difficult to buy. There are relatively few of the old individual holders left,

and if they had to sell them they would sell only to the railroad companies. It is not worth while to anybody else to buy.

Q. They can sell only to railroad companies?—A. Well, of course, a great many of the old large miners exist, the very large miners like Cox Brothers, but to go in and mine a small property, with the expense of mining and the railroad freight added, is not a thing that people would care to venture in very much. Those who have the business and experience will stay, but new people are not tempted.

Q. Do the railroad companies in general make any effort so to control the situation that coal can not be mined except in such lands as they choose to secure the lease off?—A. Well, there is what they call an understanding. They have always had an apportionment among the railroads that each company should carry so much. I do not know whether it is in effect now, but it was for years. This is necessary; otherwise the coal lands would be depleted at ruinous prices. The trouble is there is not enough demand. If there were enough demand for anthracite coal to take everything that is marketed there would be no trouble. Now, if export trade could be established, that would increase the demand and everybody could mine all he would like. As it is to-day the demand is quite restricted, relatively speaking.

POSSIBILITIES FOR ANTHRACITE COAL IN THE FOREIGN MARKET.

Q. Is there any market in England for anthracite?—A. Oh, I think there would be a large market in England, France, Germany, and Italy.

Q. They have no objections to it?—A. On the contrary, they favor it; they like it.

(Testimony closed.)

WASHINGTON, D. C., May 20, 1901.

TESTIMONY OF MR. WILLIAM R. WHEELER,

Representing Pacific Coast Jobbers' Association.

The special subcommittee met at 8.45 a. m., Mr. A. L. Harris presiding. At that time Mr. William R. Wheeler, of San Francisco, Cal., a wholesale hardware merchant, was introduced as a witness and, being duly sworn, testified as follows:

Q. (By Mr. RIPLEY.) Mr. Wheeler, will you state your full name, your occupation, your address, and any other details about your representative position?—A. William R. Wheeler; wholesale hardware; address, 1215 Jones street, San Francisco. We have houses also in Sacramento and Los Angeles, so far as our business is concerned.

Q. What is your relation to the board of trade, and do you represent any commercial organization?—A. Yes; so far as the board of trade is concerned, my house is a member of it, as are all other wholesale houses. The board of trade in San Francisco, however, I would remark incidentally, is not of the same general character as boards of trade in general. It is merely an association of wholesale merchants who use it almost solely, in fact solely without any qualification, for the purpose of economizing the settlement of bankrupt estates. We employ two lawyers in the board of trade and have a legal department that handles all bankrupt estates, and by the concentration of the work into one set of hands and the joining of issues on the part of all the merchants in the case more is saved in the administration of the estate for the creditors than would otherwise be secured.

Q. Are you not here in some representative capacity before the Interstate Commerce Commission?—A. Yes; we have on the Pacific coast an organization known as the Pacific Coast Jobbers and Manufacturers' Association, which has a membership in all the Pacific coast cities from Washington and Puget Sound to Santiago.

Q. Will you state the railroad situation so far as California is concerned, and particularly the nature of the case now being prosecuted here before the Interstate Commerce Commission? Of what do the merchants complain in this case or in general in other ways?—A. The transcontinental railroads, in establishing their tariffs after the completion of the first transcontinental railway, and the same remark applies that I am about to make to all subsequent transcontinental railways as they were completed, found themselves face to face with the competition of the sea carrier between New York and San Francisco, and other Pacific coast termini of the roads serving San Francisco and other roads. How to meet this competition was a problem which presented itself to them. In order to do business between Atlantic seaboard cities and Pacific seaboard cities they were obliged to make rates to meet this sea competition after making due allowance for extra time in transit, marine insurance, liability to salt-water damage, and general inconvenience occasioned by

¹ See also testimony of Mr. J. C. Stubbs following.

the uncertainties of marine navigation or marine transportation. In meeting this competition from New York the railroads incurred the displeasure of certain inland cities. The roads serving the Middle West immediately insisted upon applying like sea competitive rates between Chicago and other Middle West cities and the Pacific coast, thus bringing about what are known as postage-stamp rates. They were careful, however, to confine the postage-stamp rates to their Eastern termini in permitting rates to be postage stamped west of the Missouri River.

Q. You may explain exactly what you mean by postage-stamp rates. Do you mean that the rate is the same, irrespective of distance, anywhere east of the Mississippi River?—A. Yes. The term "postage-stamp rates" takes its origin from the letter-carrying system of the Government. The purpose of this policy on the part of the Western roads was to bring business as near to their Eastern termini as possible—to bring the origin of business as near the Eastern termini as possible, thus securing to themselves the greatest possible amount of revenue out of the business. In the establishment of these sea competitive rates the transcontinental railways took due recognition of values, density, liability to damage, etc., when goods were shipped by sea, and made a tariff which practically confined sea competitive rates to the competition as it existed. It was the constant aim and effort of the transcontinental railways to control, and thereby minimize as far as possible, the competition of the sea carriers. In these efforts they were successful to such an extent that the merchants of San Francisco, to break the monopoly then existing, organized a steamship line on the Pacific to be run in connection with the Panama Railroad and its steamship line on the Atlantic, thus creating a through route from New York to San Francisco. The merchants of San Francisco, furthermore, subsidized, or encouraged by guaranties, the establishment of a rival line of clipper ships around Cape Horn. These actions brought about a violent competition between the railroads and the sea carriers and a bitter rate war ensued. In this rate war, as in all war measures, whether commercial or international, all recognized rational measures or systems previously established were broken down, and rates generally flattened out between the Atlantic and the Pacific—or between the territory east of the Missouri River and the Pacific coast cities—to such a degree as to show little or no difference between carload and less than carload lots, so as to maintain no difference between carload and less than carload rates, and to ignore values and proper elements which had heretofore entered into the establishment of sea competitive rates. This rate war continued, according to the best of my recollection, during 1893 and 1894, when the steamship line was abandoned and the Panama Railroad Company renewed its relations with the Pacific Mail Steamship Company. The conditions existing before the freight war, however, were not restored, so far as freight tariffs were concerned. Rates were advanced to some extent, but carload differentials existing before the freight war were not restored. During the period when these unnatural conditions prevailed the Middle West jobber was enabled to go into Pacific coast territory and secure an abnormally large share of business. In fact, he was making such inroads upon the business of the Pacific coast jobbers that the latter's share of profits upon investments was entirely inadequate.

As the freight-tariff conditions were particularly burdensome with regard to hardware and iron and steel products, the jobbing trade of the Pacific coast, through its organization, the Pacific Coast Hardware and Metal Association, entered a protest against the prevailing transcontinental freight tariff and recommended certain changes therein, all of which were based upon the precedents established by the transcontinental tariffs in effect before the freight war before mentioned. After several hearings which were granted to the Pacific coast hardware trade, at which were representatives of the Middle West hardware trade as well as the trade bodies, the transcontinental railroads, at a meeting held in May, 1898, at Milwaukee, issued a tariff, which, while it only in a measure restored the conditions existing before the freight war, was more generally satisfactory to their Pacific coast patrons. The Middle West jobber, having been educated by the abnormally low rates and the elimination of carload differentials consequent upon the freight war to look upon the Pacific coast as a part of his territory, immediately protested against the Milwaukee tariff. In fact, the Middle West jobber was claiming as a right what had been granted to him by the railroads as a war expedient.

The continued efforts of the Middle West jobber to tear down the Milwaukee tariff were successful in the case of the Great Northern and the Northern Pacific railways, those roads issuing a supplementary tariff, effective May 1, 1899, reducing carload differentials and ignoring in a large measure the elementary basis of a sea competitive tariff, but applying thereto sea competitive rates. This was followed by a vigorous protest from the Pacific coast jobbers. The delegation waited upon the tariff officials of said roads at St. Paul May 23 and 24, 1899. At this meeting a large representation from the Middle West was present. The Pacific coast delegation presented their argument and were replied to by the Middle West. As the Pacific coast people had anticipated, the traffic officials of these Northern railways declined

to recede from the position they had taken. This led the Middle West people to look for like action on the part of the roads leading into California, the tariffs up to this time having been very generally identical as to Pacific coast points. The California roads, however, paid no attention to the action of their Northern neighbors, but continued the operation of the Milwaukee tariff.

Failing to secure a departure therefrom by moral suasion or force of example of the Northern roads, the Middle West jobbers, through the St. Louis traffic bureau, began suit against the transcontinental railways to enforce the desired reformatations in the transcontinental freight tariff. Their complaint involves 3 issues:

First. They declare that rates should be graded; that is, that a lower rate should exist from St. Louis than from Chicago, and a lower rate from Chicago than from New York.

Second. That carload differentials should be minimized, or that there should be a very material reduction in carload differentials from those shown in the Milwaukee tariff.

Third. That blanket descriptions should be adopted. By blanket descriptions I mean that a variety of articles widely diverse in value, density, and liability to damage should be permitted to be packed into a case and a common rate applied to all, said rate being not in excess of sea competitive rates generally.

Q. The whole contest, then, is one between the Middle West and the Pacific coast jobbers?—A. Yes.

Q. Who can decide that controversy as a matter of fact to-day? That is to say, who can determine which of those two sets of jobbers shall do the business?—A. The Supreme Court of the United States.

Q. But until a decision by that court, does the power to make this adjustment rest absolutely with the railroads by their adjustment of rates?—A. It does; yes.

Q. Do you appreciate that in pushing a case before the Interstate Commerce Commission you may have to repeat it or carry it to the Supreme Court?—A. We do; yes.

Q. Would your organization, and do you think the merchants of California in general would, welcome an enlargement of the powers of the Interstate Commerce Commission?—A. They would.

Q. And that they would be willing to trust the issue to them?—A. Yes. I feel that the Interstate Commerce Commission—and in saying this I believe that I pretty generally reflect the sentiment of all with whom I have conversed upon the subject—should be given the power to enforce its rulings; not that the railroads should not have the right of appeal therefrom, but I would put the burden upon the railroads and not upon the Interstate Commerce Commission. As the law is to-day constituted, as I understand it, the Interstate Commerce Commission is obliged to go into the courts to enforce its own rulings. Now, it appears to me that their rulings would be, or should be, self-operative; that their rulings must be respected the same as a court's rulings; and if the railroads object to the rulings they should go into the courts and appeal therefrom, and not force the Interstate Commerce Commission to go into the courts to enforce its decisions.

Q. The railroads have maintained at times that there was an adequate protection for shippers because the interest of the railroads and the shippers was the same; that is to say, that rates properly adjusted would produce the maximum volume of business. From what you say I should judge that it is not always true that the interest of all the shippers is identical?—A. No.

Q. And that a railroad may practically put business into the hands of one part of the country as against another?—A. That is just it.

Q. By the adjustment of its rates?—A. I do not believe generally in destroying the geographical advantage of any city. It is that geographical advantage that builds the city up, to begin with, or that causes its foundation. It matters not whether it is actually a hamlet, a town, or a city. Every one of those owes its existence to some geographical advantage with relation to the surrounding country. It may be a hamlet that is located in the middle of a little productive valley—at a crossroads perhaps. It serves a certain radius. Or it may be a city like San Francisco, at the gateway, as we are pleased to term it, of the Pacific coast. The people who pioneered San Francisco did not go there because of the beauty of its location or because the climate was particularly attractive. They went because of its commercial possibilities. They recognized it as the entrepôt to the Pacific coast, and the wisdom of their action has been demonstrated. That was when goods moved by sea entirely. San Francisco became the gateway to the entire Pacific coast. Goods were distributed up the rivers or redistributed from San Francisco up the coast and down the coast and back into the interior by team, and finally local railways were built, which in turn became distributive agents, and in the course of time, as I have already said, the transcontinental railway was built.

Now, in San Francisco we believe that sea competitive rates should be confined to the points where the sea competition exists; and as I interpret the interstate-commerce law as a layman, it is very plain upon that point. The fourth section states

that no waiver of the long-and-short-haul clause may be made where circumstances are similar. It is the dissimilarity of circumstances that permits a waiver of the long-and-short-haul clause, and the dissimilarity of circumstances is that between San Francisco and New York exists God's highway, which any ship carrying the flag of this country may use as a free right of way there. It is a small investment to build a ship, comparatively speaking. That vessel can load at New York the product of the factories on the Atlantic seaboard and of the Middle West to be hauled to New York from Chicago. There they find water competition around to San Francisco. They do not find it at Chicago. The railroads, if they would carry business between the Atlantic seaboard and the Pacific seaboard, must meet this water rate. Chicago and St. Louis, ignoring the basis of this rate, say: "Here we are nearer San Francisco than you are there in New York. We are a shorter distance than you are; therefore we should have a lower rate than New York has."

Q. Which they do not have at the present time?—A. At the present time they have a postage-stamp rate. The railroads in a spirit of compromise, so to speak, while they say to Chicago that "Logically your rates should be higher than New York's to San Francisco; while you claim it should be lower, we claim it should be higher. You claim it should be lower by the share of the rate from New York to Chicago that should be cut out of the transcontinental rate in establishing the Chicago rate, giving you the benefit of your contiguity to San Francisco as against New York. We claim that at New York the basis of the rate is the sea competition, which is forced upon us, and that you should first pay the rate to New York, where you can avail yourself of that sea competition, which would increase your rate at Chicago over that of New York by this same cost between Chicago and New York." One wants it higher and the other wants it lower, so to speak, and they compromise by making it the same, or, in other words, extending the postage-stamp rate.

Q. As far as St. Paul?—A. As far as St. Paul and St. Louis and Minneapolis and Omaha and St. Joseph. Now, in the Denver decision, which in my opinion is one of the best decisions that the commission has ever rendered, they call attention to the inconsistency of applying sea competitive rates to points not possessed of sea competition; and while they specifically state that that is not an issue before them, they do state that the railroads having granted Chicago, St. Louis, and Kansas City sea competitive rates, or, in other words, that the railroads having departed from the sea, that the sea competitive rates to the coast must be consistent in their very inconsistency and not draw the line at the Missouri River, but must give Denver, Colo., the same sea competitive rate, and they must give it to Salt Lake; whereas the railroads have been drawing the line at the river, thus making the rate higher from Denver to San Francisco, and even from Salt Lake to San Francisco, than it was from Chicago or St. Louis or New York to San Francisco. That was all done in a self-serving spirit, as I have said before. The railroads terminating at the Missouri River wanted to create business at their eastern termini, and in that way maximize their net earnings.

Q. What now is the actual competition that exists? In other words, what goods go by water at the present time, and are there any goods which would not go by water under any other conditions?—A. There is a large volume of business going by water at the present time. That volume is increasing, and it consists of particularly heavy goods—hardware, groceries, and all commodities whose value is not excessively high.

Q. Does structural iron go that way?—A. Yes; structural iron. I am not in the structural-iron business, I would say, and I can not state that of my own personal knowledge; but I know of iron analogous to structural iron which does come there. I should say that there is no reason why it should not go by water. Anything wherein the value or liability to damage is not great can go by sea. Understand this, that in shipping by sea the value cuts a very considerable figure. In the first place, with a sailing vessel it means a matter of 4 months longer than by rail. Now, those goods are bought and paid for at the point of origin and that amount of capital is lying idle when it goes on a long voyage like that, and the interest has to be considered upon that amount of money as against the rail haul, which is shorter. In other words, you have to add to your actual sea freight the interest on the money for the longer time that the goods are in transit over what they are by rail. You have to add to your sea rate the marine insurance which does not obtain when shipped by rail. You have to add to your sea rate the liability to salt-water damage, which does not obtain when shipping by rail. Then you have got to add to your sea rate a certain percentage to offset the general convenience of bringing by rail over bringing by sea, getting your orders quickly. It is not a matter of putting this rate against that rate when you come to shipping by sea. That is what we demand the railroads should take into consideration and what the Middle West have requested them to ignore.

Q. To pass over that, what is the opinion of the California merchants respecting the consolidation of the Union Pacific and Southern Pacific railroads? Do they

regard it with favor or otherwise? Do they predict any effect upon rates or upon business in general?—A. I believe that the establishment of ocean-to-ocean railroad lines under one control, and it seems to me very evident that that is coming, and in the very near future, would be a good thing for the Pacific coast for this reason: If, for example, the Santa Fe Railroad was controlled or owned by or consolidated with the Pennsylvania system, thus forming an ocean-to-ocean road, then that line would confine its sea competitive rates between points where sea competition exists in order that they might not break up their intermediate and local hauls where they are removed from that sea competition.

Q. Do you mean, in other words, that they would get the long haul from New York to San Francisco on certain commodities instead of having it from Chicago?—A. Yes; not that they want the long haul at the lower rate or even the same rate as against Chicago, but they recognize the inconsistency of their position; they acknowledge that they are making this sea competitive rate apply from Chicago simply from a self-serving interest, and that it is inconsistent. They could afford to assume the consistent position, having a through line from ocean to ocean, and confine their sea competitive rates between the points where sea competition exists, and it would not be to their interest to give Chicago the benefit or arbitrary advantage of sea competitive rates. In other words, to make that clear, a Chicago railroad or a railroad whose eastern terminus is in Chicago wants to have all the goods it can originate in Chicago and build up the manufacturing of Chicago, draw it away from the Atlantic seaboard. Therefore, they give the Chicago manufacturer the benefit of the Atlantic seaboard manufacturer's geographical position. The Atlantic seaboard manufacturer has a natural advantage, which the Chicago manufacturer has not, to offset this relation, and the Chicago manufacturer has an advantage which the Atlantic manufacturer has not with reference to the Mississippi Valley territory. But the Chicago man, having already built up his business in the territory which is naturally his, wants to go farther and reach into the other fellow's territory out on the Pacific coast; and while he has not the geographical position which entitles him to it, it is arbitrarily bestowed upon him by the railroads serving Chicago, because the railroads serving Chicago say, "We have not any place in New York; we do not serve the man at New York; we can not get his haul, or if we do we only get a part of it; we have to pro rate with this other road; therefore we are not interested in building up New York. We are interested in building up Chicago." And if that same road had a line leading from New York to the Pacific coast then it would say, "Let each place stand upon its own bottom and for the trade that is tributary to it and not force the combination of trade to get territory to which that trade does not belong."

Q. (By Mr. RIPLEY.) That same argument, then, would make the people of the Pacific coast rather complacent over the union of the Great Northern and the Northern Pacific with the Chicago, Burlington and Quincy?—A. The Great Northern and Northern Pacific union with the Chicago, Burlington and Quincy, of course, gives those two roads the Burlington's own entrance into Chicago, St. Louis, Omaha, and Kansas City, as the Burlington serves all those cities. I do not know that it would make any material difference to us. Personally I would be glad to see those roads get control of a road leading to the Atlantic seaboard, because, on the theory that I have stated here, I believe it will work out our salvation. I do not want it to stop with the Burlington. It merely gives them a station. St. Paul and Duluth remaining their eastern termini, it increases their terminal points in the east by the addition of the Burlington's terminal points, that is all. Having acquired the Burlington, the next step will be, I believe, from the signs of the time, the acquisition by them of the Erie or some other trunk line, just as I believe that the Vanderbilt lines really in fact do control to-day an ocean-to-ocean line.

Q. You refer to the Union Pacific?—A. The Union Pacific and the Northwestern. The Union Pacific controlling the Southern Pacific, and the Vanderbilts controlling the Union Pacific and having the Northwestern, would give them an ocean-to-ocean line.

Q. Would the construction of an independent line by the Burlington to the Pacific coast have any bearing on this general situation? The project has been mentioned, and is, in fact, said to be at the bottom of this opposition of the Union Pacific to this union of the Chicago, Burlington and Quincy and the Great Northern and the Northern Pacific.—A. I have heard that so stated, and I think there is considerable reason to believe that it might be so. I do not know anything about it authoritatively. But, of course, the more railroads we have into that section of the country the more the country is developed and opened up. I am always pleased to see railroads constructed into territories, because the general effect is the opening up of the country. But, so far as freight rates are concerned, I sometimes think that it simply means one more road to divide up with. Therefore they say, "Boys, let us get together and pass them up a little. We can not afford to carry as cheaply as we did before. There is one more road to divide with."

Q. Do the merchants complain any more of commercial discriminations, rebates—any of those practices that usually prevail during rate wars? Do they exist at the present time, so far as you know, to any considerable extent?—A. In a rate war there is no occasion for rebates. They simply “sock” the rates right down so that they can not make any rebates; but it is when the war is off and rates are supposed to be maintained that the rebates come in, the secret rebates. We are opposed to rebates out there. I do not believe there is a shipper on the Pacific coast but that has at some time or other received rebates.

Q. They have been prevalent in the past, then?—A. They have been prevalent in the past. At the same time the thinking ones among the merchants were making every effort to prevent them. It was urged that the Canadian Pacific, which was carrying business into San Francisco by its line via Vancouver steamships down to San Francisco, thus making rather a roundabout line, by its claim of a 10 per cent differential—its enforcement, in fact, of a 10 per cent differential below those of the direct all-rail lines—was causing the all-rail lines to secretly cut. That was the excuse that was given us by the all-rail lines, and with that information before us, we got together in San Francisco and pledged ourselves not to ship by the Canadian Pacific. The people in the hardware and metal trade I refer to. You take away the iron and steel and grocery transportation and you take away the prop which doth sustain the house, so to speak. There was a publication extant showing the efforts of the San Francisco merchants. It all comes in as a part of the proceedings at the conference or at least the arbitration as between the transcontinental American railways and the Canadian Pacific at Chicago, which shows the attitude of the San Francisco merchants in that case. It is a matter of record.

We stuck by that agreement and did not ship by way of the Canadian Pacific road. It was merely a matter of the different people in the same line of business agreeing not to ship by that road. The result is that the Canadian Pacific is to-day out of business in San Francisco practically. They have a tariff, but of course they realize it is natural that they can not expect to carry business to San Francisco at the same rate the other lines do. It is out of their territory just as much as Victoria and Vancouver in British Columbia are out of the Southern Pacific's territory. Now, there was considerable self-sacrifice about that action, because it is pretty hard for a man to give up or pay 10 per cent or 11 per cent more on his freight when you reverse the basis. But it was done to prevent this rate cutting. The American railroads had alleged that that was the occasion of it, that they were not going to see the Canadian Pacific get business by making public a tariff showing a 10 per cent differential, while the American roads had agreed among themselves to maintain certain tariffs. They were not going to see the Canadian Pacific get business; that was all. Now, we removed the alleged cause by the voluntary action in San Francisco, and since that time there has been a great deal less cutting of rates, at any rate. We would be very glad to see some arrangement made, whether it be by pooling or otherwise.

I believe in legalized pooling, something to establish the stability of rates, exactly the same as the Government postal service is stable by the use of postage stamps. We know that our competitor is not sending any more for his postage stamps than we send for ours, and we know that he can not send his 4-pound package through the mails any cheaper than we can send ours. That is satisfactory. It puts us on the same footing, where we want to be. The only reason why a good merchant seeks a rebate is to put himself on the level of his competitor. He says, “That fellow is getting it; I know he is, and I have got to get it if I am going to stay here in business.” Now, if he knows that the other fellow is not getting it, the good merchant is not going to waste any time around the railroad office asking for rebates.

Q. (By Mr. A. L. HARRIS.) Would the Canadian Pacific go into any arrangement of that kind to prevent rate cutting?—A. Well, it was the Canadian Pacific's attitude that was the alleged cause at one time of rate cutting. The Canadian Pacific claimed that it was what the railroads call a differential road, that it had physical disabilities to overcome; that the road was longer, and that there was a transfer from road to sea to get the goods from San Francisco, and that the merchant from San Francisco would not ship by that line unless there was some advantage in it. I do not believe in the differential principle. I think it is all wrong. I think that each tub should stand on its own bottom, take the consequences of its geographical location, and take the goods that its location calls for on an equal basis, and not try to step into the other fellow's territory on an unequal basis.

Q. (By Mr. RIPLEY.) You have spoken of legalized pooling. How far, in your judgment, will these railroad consolidations that have taken place, particularly in the Western territory, do away with the necessity for that?—A. Only to the extent that any agreement is more apt to be kept if there are few parties to it than if there are a great number. In other words, the fewer the parties to an agreement there are the more liable it is to be adhered to—the less chance there is of some one jumping over the traces.

Q. (By Mr. A. L. HARRIS.) Would it be possible, in your opinion, for the Interstate Commerce Commission to approve freight rates and then see that they are maintained, and thereby prevent discrimination and rebates?—A. I think it would; yes.

Q. You think that would be not only possible but desirable?—A. I think it would be not alone possible but desirable. I think that when legalized pooling was proposed it was with reference to just some such arrangement as that of which I spoke. I think that whatever pool the railroads might enter into it should be under the control and direction and the supervision of the Interstate Commerce Commission. That is what I mean by legalized pooling. That would be the proper body for it to come before.

Q. Have you any complaint to make in regard to change in classification and thereby change in rates?—A. We have complaints to make. There is no tariff that was ever constructed, no railroad tariff, that is consistent. There are inconsistencies in all tariffs, and it is only by continually calling the attention of the railroads to these inconsistencies that their correction is secured. In the meantime others creep in. Some new rate is put into effect which is in itself inconsistent. You have to look out for that, and the result is there is a constant revision of tariffs going on. These transcontinental railways have a freight bureau through which these revisions are made. They have an official located in San Francisco, with quite an office force, to handle all these revisions.

Q. What is his name?—A. Mr. R. H. Countiss.

Q. That is called the San Francisco Freight Bureau?—A. No; it is the Transcontinental Freight Bureau. The Transcontinental Freight Bureau is an organization of what is known as the transcontinental railroads; but the transcontinental railroads, strictly speaking, are not transcontinental railroads. That is the name that applies to all roads west of the Missouri River; they are what are known as the transcontinental railways. Some of those roads, like the Santa Fe, and the Rock Island, and the Burlington, reach east of the Missouri as far as Chicago, and the office that deals with roads that do not reach east of Chicago is called the Transcontinental Freight Bureau. That is called the Transcontinental Bureau, and R. H. Countiss, No. 49 Second street, San Francisco, is the agent. These roads, to get around the trans-Missouri decision, stipulate that this tariff which contains individual rates, rules, routes, and regulations of each company, respectively, is subject to change by each company without the consent of any other company whose name appears hereon.

Q. In your judgement, if each road were not allowed to take such independent action, such an agreement would have to be given validity to be enforceable in a court of law, would it not?—A. Yes; as in this case. That is a gentleman's agreement. They hedged it about carefully, it is true, in order to evade the law, and they can go and prove that there is no combination. It is particularly stipulated that there is not, but under all there is a gentleman's agreement. It is on honor, which is oftentimes more binding than in case of a legalized agreement.

Q. But if one of the roads be without honor there is no way to enforce it?—A. No.

Q. And, in your judgment, to make such a contract enforceable in a court of law and before the Interstate Commerce Commission would conduce to stability of rates and uniformity of records?—A. Yes; most assuredly.

Q. (By Mr. A. L. HARRIS.) Would it be possible to have a national classification of freights, or articles, rather, and thereby to some extent avoid the complication that we now have of different classification districts?—A. Well, classification is a matter which is generally regulated by the relative volume of traffic in certain commodities in the respective districts. For example, the railroad tariff through the South in the territory covered by the Southern classification pays particular attention to cotton and to iron and steel from Birmingham, Ala., and to coal from the same district, and perhaps to other particular commodities of that district. The Western classification is made with a view to the traffic familiar to the territory west of the Mississippi River. The Eastern, or Official classification, as it is known, is made with a view to meet the requirements of the territory north of the Ohio and east of the Mississippi River. I believe that a national classification could and should be made. That would not prevent these particular localities from making exceptions to the national classification to suit the particular staple commodities that they move in large quantities, bulk, and volume.

Q. (By Mr. RIPLEY.) In other words, you refer to making special commodity rates?—A. Special commodity rates, as are made in each of those locations I have mentioned. There are exceptions to the Southern classification; there are exceptions to the Western classification; there are exceptions to the official classification. There is not a railroad operating in the respective territories covered by those classifications that does not publish its commodity tariff, which of itself and by itself contains exceptions to the classification under which they are operating. Now, that is just as easily done under national classification, in my opinion, where

there are the individual roads, as it is under these three classifications that now cover the territory.

Q. What is the nature of this transcontinental tariff?—A. It is a commodity tariff.

Q. Does it relate entirely to commodities?—A. Entirely to commodities. (Producing paper.) Just look at that in the west-bound tariff. Here are the class rates. I was going over to the Interstate Commerce Commission and had some matters to refer to there to day. Those are supplements. Now, there are your class rates governed by the current Western classification, terminal class rates. There is all there is to it. That is all there is to the class tariff that is governed by the Western classification. If an article is in the third class from Missouri River points it takes the rate of ——. Now, here are all your exceptions to that.

Q. (By Mr. A. L. HARRIS.) The exceptions are larger than the classifications?—A. The exceptions are the whole thing. They are forced by the competition. They have got to break away from the Western classification and meet conditions as they find them. They do not make any classification here, and the result is they have to take into consideration all the elements I have described in meeting the sea competitive tariff.

Q. (By Mr. RIPLEY.) There is no disposition for the sea-carrying trade to get into line with the railroads, as in the coastwise trade of the Atlantic?—A. There was a disposition, and that is what caused the alarm that was felt. We did not want to see our advantage nullified by giving like advantages to points not possessed of the geographical position we have, but I do not think there is any movement of that sort on foot now. There is a line of vessels established now to San Francisco, very large vessels of 8,000 and 12,000 tons register, so I am informed. There are four of 8,000 tons and three of 12,000 tons, belonging to what is known as the American-Hawaiian line, which is composed of the old sailing vessel proprietors, a consolidation of the people who were formerly running sailing ships around to San Francisco. They will give us by steam a regular service, sailing on the 1st of each and every month for San Francisco from New York. They expect to make the voyage in 60 days to San Francisco. That gives them a cargo to San Francisco. From San Francisco they go down to Honolulu, where they are sure of a cargo of sugar at all times, and that they take to New York.

Q. Would such a line as that participate at all in the subsidy under the provisions of the subsidy bill introduced in the last Congress?—A. I must confess that I am not sufficiently familiar with that subsidy bill. There were several amendments offered to it, but I am rather obscure now as to just what that bill was. If you will pardon me, one thing more concerning this competition by sea between New York and San Francisco. It is going to be the most potent of any feature yet established. There are objections to sailing vessels; merchants had objections to shipping by sailing vessels which do not prevail with these steamers. The principal objections to shipping by sailing vessels was not the long time in transit, but it was the uncertainty when the ship would get in. Now, that vessel might be only 4 months. She might be, as was the average, 5 months, and she might be 6 or 8 months, or even a year. She might start around Cape Horn and meet adverse winds and really come to San Francisco by way of the Cape of Good Hope, and yet arrive in good order; but it would be past the season for the goods; that was the great objection. It was not the length of time, because that is merely a matter of calculation. A merchant can sit down and allow for the difference in time, if he is sure that his allowance is based upon safe premises. Now, these steam vessels, constituting a new element in competition, do away with that uncertainty because steam is sure. These vessels go through the Straits of Magellan and arrive in San Francisco even with greater regularity or nearer their schedule time than the rail freight arrives. It is merely a matter of figuring 40 days longer. The average time of rail freight is about 20 days from the Atlantic seaboard, and this is 60 days. The merchant allows 40 days longer, and his goods are there. The railroads will find it the most potent competitive element they have ever yet had to contend with. They are vessels of large carrying capacity and low consumption of coal. Their rates are to-day scarcely higher than the sail rates prevailing immediately before the establishment of this war.

Q. Can you specify what a few of those rates are?—A. I can give you the range of them. They run from 40 cents per 100 pounds up to about 65 cents, according to the class of goods.

Q. What would be the rate, all rail, on the bulk of that class of goods comprised there?—A. It would be from 60 cents to \$3. The rail carriers endeavor to make a very low freight rate upon what is known as "bottom freight;" that is, the freight that is taken in the lower hold, such as bar iron, steel, nails, barbed wire, steel plates, billets, etc. I simply wanted to bring that before you as one of the elements of competition that has not heretofore existed, and which is only just upon the threshold, so to speak, of the transportation structure.

Q. (By Mr. A. L. HARRIS.) State if you please what the feeling of the Pacific slope is in regard to the Nicaraguan Canal.—A. The feeling is favorable to it. At first blush it might seem strange that a man doing business in San Francisco would favor a proposition which is going to bring Chicago, St. Louis, and New York even into closer competition with him than they are to-day. I say "Chicago and St. Louis" on the hypothesis that they would avail themselves of the short rail haul to New Orleans or Galveston, and overcome in that way their physical disabilities toward the use of the canal to get up the coast to San Francisco. Furthermore, the canal is going to make a gateway to the Orient, in my opinion, and San Francisco is about the only gateway as it is to-day.

Following the line of the least resistance, merchandise leaving St. Louis would go down the river, or go down along the river by rail, to New Orleans—and the river is the controlling influence in that rail rate, which makes it a matter of indifference whether it is shipped by river or by rail—and would be loaded upon vessels at New Orleans or Galveston, taken through the Nicaraguan Canal, and cross the Pacific Ocean, whereas to-day it necessarily goes through San Francisco to go there. But I believe at least we have got to weigh these matters as to the advantages and disadvantages. I believe the advantages outweigh the disadvantages; that to San Francisco herself, speaking selfishly, it would be a disadvantage; but we would have an open highway for common communication with the Atlantic seaboard—with all Europe as well—for our products, and quick transportation for our products; and, as in all cases, the water would be the controlling factor in the rail rates on such goods as are perishable, and that is what we produce in California pretty largely.

So far as our fruits are concerned, they are all perishable. Oranges, for instance, could be shipped by the Nicaragua Canal and through to New York by vessels. The fruits could be put into refrigerator vessels, the same as they are brought to New York to-day from South American ports, as I understand it, and it would minimize the freight rates upon those California products and therefore, in my opinion, increase the consumption and open up new markets, the reflected benefit going eventually to San Francisco. The more money that can be placed in the hands of the producer in California, the better it is for the State. There will be more money left in his hands if the freight rates on his products are reduced, because the market at this, that, or the other point would remain practically the same, regardless of the fluctuation in freight rates, if that market is controlled by foreign or other competition.

Q. (By Mr. RIPLEY.) So that every reduction of the freight rate would mean so much more for the producer?—A. Yes, as a general proposition. Sometimes not in the case of articles controlled by combinations—they take up the slack, as I say, and put that in their pockets. That is done sometimes.

As to the Oriental trade, perhaps I have covered one feature of that in the remarks I have just made about the Nicaragua Canal; but I believe in general that there is a great future for the United States in the Orient. The Chinese, who are a very conservative race, are just learning to use American flour as a substitute for rice. They are a very imitative people, and it is a case of follow the leader with them after the influential leaders, so to speak, have instituted a reformation; and instead of our shipping our wheat, as we are now and have been doing, to Liverpool, there to be ground into flour and distributed, we are and we will be in the future turning that wheat into flour and shipping it to the Orient, thus getting the benefit of the manufacturing process at home and improving our own market and industrial condition to that extent. It necessarily follows that the market for flour must be more profitable than the market for wheat; otherwise it would not be turned into flour and shipped to the Orient. It seems to me that there is an almost unlimited demand over there for flour. That is indicated by Mr. James J. Hill's preparations. I do not agree with him in his railroad theories at all times, but I think he is a man of a great deal of discernment. He has been building very large vessels, you know, to run to the Orient, anticipating an immense flour trade over there, and we have already got a good deal of that trade. Ships leave San Francisco loaded down with flour. We have something like 12 vessels a month, I think, that leave San Francisco for the Orient, whereas we used to have a few years ago only 2 or 3.

Q. There are some of those going with supplies to the Philippines, are there not?—A. I am referring to the Orient particularly. The Philippine business as yet has not opened up to a very great extent. There are a great number of transports going to the Philippines which are loaded with Government supplies, but there have not been what you might call any established trade relations with the Philippines as yet because of the generally unsatisfactory conditions, commercially speaking, there. No merchant likes to sell goods in a country where there is a war going on, and the cautious merchant does not do so unless he gets his money at home for it. He does not send a man to exploit trade until things are settled.

I think that with the settlement of our troubles over there that a great many San Francisco houses will exploit that trade, and see what can be done. Like all Spanish

countries, however, and a great many other foreign countries, the people have first to be educated up to using our products and using our utensils. That, I believe, will be accomplished really by the army we have over there. The natives see what the advantages are of American manufactures, American utensils, American products, both food and otherwise. Acquiring a taste for them and imitating the Americans there already in official life and in the army, the people begin to use what we have to sell. It really pioneers trade much more quickly than would be possible if we never had a war and sent over somebody to try and do business with those people. There would be no use in doing that.

Q. (By Mr. A. L. HARRIS.) Will our producers and manufacturers be compelled, to some extent, at least, to gratify the taste of the foreigner in extending the foreign trade?—A. Yes; I think that is something that our manufacturers should observe in their manufactures and our producers in their methods of packing and putting goods up for market. They should cater to the foreign people. That is one of the purposes of the Pacific Commercial Museum recently organized.

Q. (By Mr. RIPLEY.) Is that an adjunct of the Philadelphia Museum?—A. It is suggested by the Philadelphia Museum, and the Philadelphia Museum has been very courteous to us. Dr. Wilson and Mr. Harper have been out there. I enjoyed a very pleasant half day the other day with Dr. Wilson. Last Friday, before coming over here, he took me all through and explained all about the place. We have organized this museum on lines similar to theirs, and they have very generously and graciously offered us a large supply of duplicate samples. The gathering of these samples enables us to see what the tastes of these particular foreign markets are, and while in California we are not as yet much of a manufacturing community, at the same time in the putting up of our products and of such manufactures as we do put out we can cater to the tastes as exemplified by the exhibits and the information we receive. Incidentally, I believe that is the secret of the decadence of British trade and the advancement of German trade abroad. The British, with characteristic conservatism and bulldog tenacity, have insisted on the buyer taking what they gave him, but the Germans have gone around and said, "What do you want?"

Q. What do you manufacture in San Francisco? What local manufactures are springing up?—A. We manufacture clothing, boots and shoes, cigars, shot, cartridges, lead pipe, sheet lead, mining and milling machinery, harvesting machinery, agricultural implements, wagons and carriages. We roll bar iron and steel, manufacture tacks, wire, wire cables and rope and some nails. Manufacturing in the iron and steel lines is not in a very healthy condition out there.

Q. Are you hampered by the expensiveness of fuel?—A. We have been, but I believe that question is being solved in a large measure by the development of electrical power, and also cheap fuel obtained from the oil wells which are being developed all over the State. These are making oil cheap, and it is now being put into all the factories and furnaces, which reduces the cost of fuel very materially, it being estimated, I believe, that in heating or in steam-producing units $3\frac{1}{2}$ barrels of petroleum are equal to one ton of coal.

Q. Is the petroleum brought north in pipe lines?—A. No; not yet. We think it will be. It is brought to the sea coast in pipe lines in Southern California, some 80 miles down to the coast.

Q. (By Mr. A. L. HARRIS.) Do you consider that field almost inexhaustible?—A. Yes; it is.

Q. It covers a good deal of territory?—A. Yes; and the development is constantly going on.

Q. With that prospect in view, it will overcome the disabilities under which you labor now, in regard to manufacturing as far as fuel is concerned?—A. Yes; and where power is required, the electricity will do that for us. These two elements have both been simultaneously developed, you might say—almost simultaneously, the electrical power having antedated the other a year or two. The electrical power is being generated by the waters of the Sierra Nevada Mountains, and then conveyed by wire down into the valleys below, and is in that way produced at a very low cost. We can not afford to produce electricity by the use of coal or by the use of oil even, but producing by natural power and with the improvements made in saving loss in transmission, I think it is going to be a very important factor in running the small factories—in clothing factories, running the sewing machines, and in boot and shoe factories; also in machine shops for running the lathes and running individual machines.

Q. Have you any coal suitable for commercial and steam purposes within the Northwest territory?—A. Yes; there is very good steam coal about Seattle, in the Cascade Mountains, up in that neighborhood.

Q. Do the railroads use that at all?—A. Yes; the Southern Pacific gets its principal coal supply back of Tacoma, at a place they call Carbonado. They have colliers running regularly between Tacoma and San Francisco and Los Angeles, carrying coal for the roads.

Q. What effect, if any, is anticipated on the Pacific coast by the recent consolidation of all the iron and steel industries into the United States Steel Corporation?—A. That is a problem that I am not prepared to answer yet. We are all at sea; we do not know. I have asked that same question, I presume, of at least 20 gentlemen far more competent to answer it than I, and they did not attempt to reply. They are people I have met since I have been East—men that are right in touch with it.

Q. I referred particularly, of course, to the problem as it is presented on the Pacific coast. You have no local manufactures of sufficient importance to be really threatened to be absorbed by them. You have stated that the manufactures of that class are in a rather unhealthy condition.—A. Yes; because we have not the raw material at hand, and we have not had cheap fuel. If you remember, I stated that there were some nails manufactured there. The reason for qualifying that statement was that we used to manufacture a good many nails there. The California Wire Works manufactured nails. The Washington Woven Wire Manufacturing Company bought out the California, and in turn were bought out and became a part of the American Steel and Wire Company. Now they are closed up. The owners can produce cheaper in the East.

Q. It is shut down now?—A. The nail factory was shut down by the American Steel and Wire Company. That is about the only industry we have to be affected by the consolidation. The effect is about all done. I do not know that they have reduced their factory force, but they have put them into other work. They are now producing wire rope, and that is used in street railroads, mining, and hoisting, in the rigging of ships. While there are other companies that are more profitable, they have simply closed up the nail part of their plant.

Q. (By Mr. A. L. HARRIS.) You did not mention in your line of productions sugar refining, did you?—A. No; I did not. I did not mention flour, nor did I mention fruit canning. Those omissions were intentional, and perhaps I should have mentioned them. I look upon fruit canning as much manufacturing as flour making. You are putting fruit into merchantable shape the same as you are putting wheat into merchantable shape in the other way—into shape for consumption. You are also putting raw sugar into merchantable shape. All those things we manufacture there. Of course, our fruit-canning industry is large, as is our wine-making industry.

Q. If you have time, I wish you would touch upon those industries, at least briefly.—A. Well, I do not know that there is very much to say. I also failed to mention that we have woolen mills.

Q. (By Mr. RIPLEY.) Woolen mills?—A. Yes.

Q. For the consumption of the California product?—A. The California product, and they bring in wools from Nevada, of course, and the surrounding Pacific coast region.

Q. Any from Australia?—A. I can not tell. I am not sufficiently familiar with that business to know whether they do or not. I have talked some with wool men, and I know that they used to bring some Australian wool in. Whether they do to-day I could not say.

Q. As to the fruit canning, that industry, of course, is a large one out there?—A. That is one of our principal interests. That has a short season. It necessarily lasts only during the time that the fruit is in condition to be canned; but from an industrial standpoint it is fortunately at a time when the labor of girls and boys can be obtained. It is vacation time for them, and particularly in the country it is nothing unusual to see a whole family working in a cannery in the summer time. There are also canneries in San Francisco, the fruit being shipped down the river and brought round the bay to that city. The wineries are distributed pretty generally throughout the vine-growing districts. I think they are on a better foundation now than they have been before, and I understand the business is fairly profitable. It has not been so until recent years.

Q. (By Mr. A. L. HARRIS.) Is the recent reciprocity treaty with France in regard to the reduction of the duty on wine giving your people any concern?—A. Yes, I think it is; considerable. I think they protested very vigorously to our delegation in Congress.

Q. (By Mr. RIPLEY.) Does any considerable quantity of wine go to France to be reshipped to this country again?—A. A great deal, so I am informed. Understand me that I am not here as an expert on these things, because they are entirely foreign to my business, and this information is only what one who makes an attempt to keep in touch with the times and observes as he goes along picks up. Therefore, you can take it for what it is worth. I am informed that there is a great deal of wine shipped to France; a surprisingly large quantity of it.

Q. Have you a large raisin industry?—A. Yes.

Q. Have you any knowledge of the cooperative distribution of the raisin crop?—A. Yes; I think there is some such arrangement, as I understand it from the newspaper reports, as I get them. There is some such arrangement on the raisins as there is on prunes, that instead of the farmers all competing with one another to a ruinous

extent, they have pooled their issues and made one central agency for the marketing of their product. That is about what it amounts to, as I understand it.

Q. Has that been satisfactory?—A. Well, I might answer a good deal like Josh Whitcomb. Perhaps you remember in the play where his friend in New York, whom he was visiting, was inquiring about how the old folks of his boyhood were, and what had become of them, and he asked him after Simpson. Josh says, "Dead."

"Dead?"

"Yes."

"What was the complaint?"

"No complaint; everybody satisfied."

So, when you ask me if it is satisfactory, I say I have heard no complaints; I do not know. [Laughter.]

Q. Products like that which go abroad go by water, I suppose, or do they go across the country by rail?—A. They go across the country by rail.

Q. Do they have special export rates?—A. The canned goods for export are sent around from San Francisco in clipper sailing vessels to England. Raisins are, I believe, shipped in the same manner to a considerable extent. I do not know just how much of a foreign market there is for raisins; I am not informed as to that; I never have heard it emphasized. The canned-goods business has a very good foreign market. I know that there is a foreign market for canned goods. I could not say as to raisins; possibly there is not as good a foreign market for raisins, owing to the fact that they would compete with the Malaga raisins when they get into European ground. But there is a very good Eastern market here, coming overland by rail, because the raisin-growing sections are along the line of railroads, and it is easy to load them into the cars, the railroads making a rate which recognizes what might be done if they were shipped to San Francisco and loaded into vessels.

Q. Do you happen to know anything about the refrigerator companies that operate in the fruit business?—A. I only know that Armour & Company operate a line of refrigerator cars and also the E. T. Earl Company, and that recently the E. T. Earl Company sold their refrigerator cars to the Armour people. That, I believe, is the present status of the car business. Armour, I believe, is at the present time owner of the refrigerator cars, as I understand it. I think the Santa Fe line has a few refrigerator cars of its own.

Q. Have you ever heard that charges for the use of those cars were excessive?—A. I have heard such complaint made; yes.

Q. Have you any knowledge concerning it?—A. No; I have not. I would not be prepared to say and I would not be qualified to say whether they are excessive or not because I really know nothing directly about it. I think from what I can learn from conversations with railroad men that the time is not far distant when the railroads will own and control their own refrigerators and do away with these private lines, and their proposition seems to be the source of a good deal of friction.

Q. There has been apparently a good deal of complaint on the part of the people of California of unjust charges by the railroads in absolute figures and also the participation in local politics by the railroads to a remarkable degree. Is that political influence on the increase or decrease so far as you know?—A. As you gentlemen are aware, we have a new administration in San Francisco in railroad matters, and when I refer to railroad matters I speak exclusively of the Southern Pacific, it being the only road we had to do with until the advent of the Santa Fe, which is of a recent date. The Southern Pacific is in politics. I might say that there has not been an office within the gift of the people or subject to the appointment of the governor or the mayors of the various cities or any other officials that they have not reached out and tried to grab. They state, however, that under the present administration, which is that of Mr. Hayes, such things will not be. Time alone will prove the sincerity of that statement. We shall have to wait until Mr. Hayes has been a little longer in office to give him a chance to demonstrate its truth.

Q. (By Mr. A. L. HARRIS.) Now, I wish you would state in a general way what the industrial condition of California is. I might widen that a little by asking about the industrial condition of the Pacific slope at the present time, and your hopes and prospects.—A. I think the condition is generally good, and we feel encouraged by the attention that was drawn to our resources and possibilities incidentally by the Spanish-American war. The transportation of troops through San Francisco has been in itself an education to the individual members of these regiments, the individual soldiers. The volunteers I refer to particularly. They have returned to their homes and exploited perhaps the advantages as they saw them of the coast. There have been a great many thousand men, as you know, who have passed through in that way. Furthermore, the constant advertising the coast has received in the press reports of the movement of troops through San Francisco and the advertising we have got from the fact that we have built some battle ships that have made a pretty good record in this war, all serve to attract attention to the place and to bring it to the minds of people who really did not before apparently realize that there

was such a place as the Pacific coast. It has taught them that there is such a place. It has interested them in it, and this has been shown this past winter in the tourist travel out there. There has been a greater tourist travel than was ever known before, and I find on inquiry in the East that it has not been at the expense of Florida, because Florida has had a greater tourist travel than ever known before. The increased volume of travel to the coast, I believe, has been due to two reasons: First, the times have been pretty generally good throughout the country, the people could afford to travel; and, secondly, that their attention has been attracted to the coast by the amount of advertising it has received incidental to the Spanish-American war. All of that is a good thing for us. It attracts, it brings people who go back and talk about the country, and a percentage of them in time make investments there, or stay there to live.

Furthermore, under the present administration of the Southern Pacific Company, that company has made an effort to bring in colonists. They have made so-called colonist rates under which, for \$25, a man can go from the Missouri River to any point in California. There is no round-trip ticket sold; it is simply one fare for one way. That is why it is called a colonist rate. Neither does that rate prevail east-bound, as I understand it, from California. That has brought in a very large number of people, I understand. Of course, a great many simply avail themselves of the rate to come out and see the country. But it does good. It is a broad policy for the railroad to pursue.

Q. (By Mr. A. L. HARRIS.) Has the presence of your Chinese population any effect, good or bad, on conditions?—A. The Chinese question is one which to-day is not a particularly live one with us. We anticipate no difficulty in securing the reenactment of the exclusion act, which I believe is about to expire.

Q. You deem that desirable?—A. Most assuredly; yes. The number of Chinese that are there now compared with the general population is not increasing. The Caucasians are not menaced by them. We have no desire to drive out those that are there, but simply to stop more from coming, and it would be unfortunate if the exclusion act were not reenacted.

Q. Do your Chinese usually stay about the cities, or do they go out into the country, into the forests, or upon the farms?—A. They used to enter all lines of employment when immigration was unrestricted. There was scarcely a vocation that they did not take up; but as the Caucasian population increases and the Chinese decreases—because a great many Chinese have made what to them is a competency and have returned to China—there is an actual falling off in the Chinese population, and I think the census returns show that. I am speaking now simply from an idea I have of it, from what I see and hear and read, and I am not speaking from any figures that I have before me. But I believe that the census returns will show that there has been a falling off of the Chinese population in California. I know they will show that in San Francisco.

Q. (By Mr. RIPLEY.) How about the Japanese? Do you receive them?—A. Yes. I do not regard the Japanese with the same disfavor that I do the Chinese; and the disfavor with which we regard the Chinese is altogether a commercial one, for the reason that the Chinaman is conservative, and continues to wear Chinese clothes and to eat Chinese food, all of which enables him to live in the Chinese fashion, herded together like so many cattle. That mode of life enables him to undersell and accept a lower wage than the American workman. Furthermore, his earnings are sent back religiously to China, taking that much money out of the country, and the merchandise to meet his wants and requirements is brought from China to a large extent. He is not commercially a contributor to the upbuilding of this country. The Japanese, on the other hand, immediately adopts European garb on arrival here. He has a certain pride in his appearance, and he adopts and uses American foods. He is evidently anxious to become an American, at least to adopt all of our customs and do, while he is with the Romans, as the Romans do, so to speak; and in that way he is a contributor. He is not as objectionable, at any rate, as the Chinaman, because he keeps his money here and uses his money here.

From the standpoint of labor I do not know enough about what the Japanese are to be qualified to state. I have heard some complaints from the labor organizations of Japanese labor, and that is all I know of it; but it stands to reason that they certainly can not, as I see, from the commercial standpoint, be as objectionable. From the commercial standpoint, in no single instance does the objection obtain to the Japanese that does to the Chinese.

Q. (By Mr. A. L. HARRIS.) The prosperity that you speak of that obtains at the present time applies to agriculture as well as to the other industries?—A. I think so. Generally speaking, the farmers are prosperous. Of course we are dependent in California very largely upon our rains. This particular year we have had very abundant rains and well distributed, and the prospects are very excellent in that respect. We have seasons of drought there, where there is a partial, and in many districts a total, destruction of crops—total failure of crops. Generally speaking, the conditions

are prosperous, I believe, as prosperous as they can be; at least as prosperous as they are in any district. There is always complaint everywhere, you know; always dissatisfaction, and discordant and dissatisfied elements in society.

Q. Is your State laboring under any disabilities of any kind that can be cured in any way by legislation? If that be so, we will be glad to have you state it. I ask concerning anything in addition, of course, to what you have already stated in regard to the interstate commerce law.—A. That is about the only thing that I would feel competent to speak of, and the one thing that I am informed upon. I believe there should be some legislation accomplished in that direction, but I do not know what else there is.

There is one thing that I do not know but that could probably be accomplished within the War Department, although I am not certain, and that is as to the present system of purchasing Government supplies with relation to the Army in the Philippines, where the most of our troops are to-day. The Government, as I understand it, has a system whereby clothing, for example, is purchased and stored in Philadelphia. Bids are called for for the delivery at Philadelphia of so many thousand yards of cloth, or so many suits, or so many pairs of trousers, or so many pairs of shoes, so many forage caps and campaign hats. Philadelphia is the clothing depot. Jeffersonville, Ind., on the other hand, is the depot where camp equipment is stored; field ranges and tents, and also wagons for transportation, I believe. Bids are called for to deliver at Jeffersonville so many hundred tents, so many hundred field ranges, or so many pots, kettles, and pans for use in camp. I understand that Jefferson Barracks, Mo., is the cavalry and artillery storage depot for saddles, harness, halters, and everything of that sort. Bids are advertised for for goods in that line to be delivered at Jefferson Barracks, and so on. I will not attempt to go on to enumerate all, but there are various specified depots for specified things.

Now, in the same ratio that the number of troops in the Philippines bears to the whole United States Army—in fact, you might double that ratio, because troops in the field will consume and use double the amount of stuff that is used or consumed at a post—in that same ratio are these same goods shipped right through San Francisco over to the Philippines from these depots, and the San Francisco bidder is barred from all opportunity of doing any business with Uncle Sam for supplying the Philippines, even though he is right at the gateway through which these supplies pass. We can not bid upon hardware to be delivered in Jeffersonville; we can not bid upon clothing and boots and shoes to be delivered at Philadelphia, nor upon saddlery to be delivered at Jefferson Barracks. But that is the quartermaster's rule. He says, "That is the way we do, gentlemen; that is all there is to it."

Q. Which virtually shuts out your country?—A. Virtually shuts out San Francisco competition; yes. Now, we do not ask for a monopoly of that business by any means. But let the Government call for bids for goods to the extent that the service in the Philippines, Honolulu, China, and the Pacific coast posts may demand, goods of all kinds for delivery in San Francisco. That gives us a chance to bid upon them. It does not bar the man in Chicago from bidding upon the goods to be delivered in San Francisco also; nor does it bar the man in Philadelphia from bidding upon goods to be delivered in San Francisco. But where we are it is like making water run up hill. We have got to send these goods from San Francisco first, overcoming our inherent manufacturing disadvantages which I have already described. Then we have to ship them back to Philadelphia and pay the freight on them to Philadelphia and all these other points that I have described. After all that has been done they come right back to our door again.

Q. That is not very good economy?—A. No, we can not do it; we can not serve the Government in that way. We could serve the Government if we could deliver those goods at the quartermaster's depot in San Francisco, if the Government could establish storehouses and carry stocks of all the military supplies of every nature whatsoever, commissary stores as well as quartermaster's supplies, in San Francisco, and that seems to me to be the sensible and rational thing to do. I mention that since you asked me about other legislation, not knowing whether it is within the province of the Secretary of War to so arrange that or whether it requires Congressional action. It seems to me, at any rate, it should be the subject of Congressional inquiry why one section of the United States is discriminated against, for, whatever the intention may be, it amounts to discrimination. I do not accuse the army authorities of doing it with the purpose of discriminating; but we look at the results and judge of the intents and purposes. That is something which I hope may come within the province of this commission to advise Congress of. We could not and did not expect to participate in the supplies furnished in Cuba or Porto Rico when the seat of operations was over on this side. We recognized that our geographical position would not admit of it, and we were not able to do it; but we certainly feel we should have a fair chance when it comes to shipping the goods through our doors to the Philippines.

(Testimony closed.)

Whereupon, at 11.15 a. m., the special subcommittee adjourned until May 20, 1901, at 10 o'clock a. m.

WASHINGTON, D. C., May 21, 1901.

TESTIMONY OF MR. J. C. STUBBS,*Third Vice-President of the Southern Pacific Company.*

The special subcommission met at 10 a. m., Mr. A. L. Harris presiding. At that time Mr. J. C. Stubbs, of San Francisco, Cal., third vice-president of the Southern Pacific Company, was introduced as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. A. L. HARRIS.) You may state your name, post-office address, and your occupation.—A. J. C. Stubbs; I live in San Francisco; I am at present third vice-president of the Southern Pacific Company.

Q. How long have you been connected with the Southern Pacific?—A. Since 1870. At one time it was the Central Pacific.

Q. You can give the relation between the two companies, past and present, giving the present territory covered by your company.—A. The Southern Pacific Company is a Kentucky corporation. Just what its chartered powers are I can not detail, but it has authority to own and operate railroads and to do sundry other things which railroad companies under ordinary charters can not do. It controls by ownership of a majority of the stock, as I understand it, the railroads which now form its two systems of roads, namely, the Atlantic system and the Pacific system, and there might be a subdivision of the latter under the title of the roads in Texas.

Q. (By Mr. DEFRAND.) What is the distinction between those Atlantic and Pacific systems?—A. (Producing map.) Originally the Atlantic system included all the lines east of El Paso, and all these roads were leased by the Southern Pacific, but the laws of Texas forbade the leasing of Texas roads, I believe, and make other requirements that necessitated the cancellation of the leases and the separate operation of Texas lines; so that the leases were canceled and the management was made to conform with the Texas law, since which time the Atlantic system as a term has been applied only to the lines east of the Texas and Louisiana State line. Lines within Texas have been comprehended in our phraseology under the term "Texas lines." The Pacific system embraces all the lines west of El Paso and west of Ogden and south of Portland. There is quite a number of roads that are embraced in those several systems. You can get a list of them from the annual report, whereas I would have to consult the report, perhaps, to name them.

Q. How long has it been since the Central Pacific was working in complete harmony with the Southern Pacific?—A. There never has been any other than a harmonious and cooperative relationship between them.

Q. Was that brought about by common ownership from the beginning?—A. By common control, not altogether by common ownership, I think. I think at one time the people who practically controlled the Southern Pacific Company did not control the Central Pacific as owners, that is, did not have within their control a majority of the stock of the Central Pacific.

Q. Just prior to the recent purchase or exchange of the stocks of the Central Pacific for those of the Southern Pacific, what was the formal relationship between the two companies?—A. The Southern Pacific Company leased the Central Pacific Company's roads.

Q. That was the case prior to the exchange?—A. Yes.

Q. How long since the prior lease was made?—A. I would not have it in my memory, but since about 1885, I think.

Q. And the present relationship between the two companies is what?—A. I can not tell you. It is a matter that I am not concerned in in my official duties, and I never have taken pains to inquire. There is a merger of interests there that I would have to coach myself on in order to explain, and I believe that you can get it from studying the annual reports better than I can tell you. I have no hesitation about giving you all I know about it, but it would not be satisfactory to you, and it would not be good testimony.

Q. (By Mr. A. L. HARRIS.) You may state, if you please, what the nature of the case is now pending before the Interstate Commerce Commission.—A. It is a long story to make it fully understood by laymen—those not interested—and I will perhaps have to be a little proxy in order to enable you to understand. In the first place, the fourth section of the interstate-commerce law impliedly recognizes that under a substantial difference in circumstances and conditions a higher rate for a shorter haul than that is contained within a longer haul may be justifiable, than for the same longer haul. The courts have decided in cases that involved that question, upholding or justifying the higher rate for the shorter haul, or, as it is popularly expressed, the lower rate for the longer haul. Usually, the Interstate Commerce

Commission limited the conditions and circumstances that would justify a lower rate for a longer haul to competition by foreign carriers or by sea carriers, which were not subject to the interstate-commerce law and not within the jurisdiction of the commission—that class of competition which they could not control and that class of carriers which was not subject to the interstate-commerce law as United States railroads are subject to it. The competition arising from such carriers they would construe as creating a sufficiency of difference in circumstances and conditions to justify a lower rate for the longer haul.

San Francisco, being a seaport, of course, had the advantage of sea competition as from New York and from all points in the East that were within reasonable reach of the sea-going or sea-transporting vessels by way of New York. As a result of that circumstance, the competition of the sea carriers between New York and San Francisco controls the rates; that is to say, the carriers can not get a compensatory rate, or what they may regard or can establish as a fully compensatory rate for their service from New York to San Francisco. All they can get is what the sea carrier will let them have; and the compensatory rate is that rate which will bear its full share or contribute its full share toward all expenses of transportation, including fixed charges such as interest and taxes and other expenses that do not change or fluctuate with the volume of traffic. The rates from New York to San Francisco being controlled by this competition, were not such rates—not compensatory rates in that sense—and the practice of the carriers between New York and San Francisco has been to meet sea competition just as far as it extended and no further. For example, taking the rate from New York to San Francisco as a basis, the rate from New York to an interior town in California would be as much higher than the rate from New York to San Francisco as would be made by adding the local rate from San Francisco back to the ultimate destination to the through rate from New York to San Francisco. It follows, we may say, practically, that the rates from New York to all points intermediate in the West have been higher than the rates from New York to San Francisco.

Q. How far back eastward does that go?—A. I can not tell you. It goes back until it runs into a reasonably compensatory rate there, wherever that may be.

Now then, there have interests grown up along the railroads and many a commercial community at intermediate points like Pittsburg and Chicago, and these railroads and these interests in the intermediate territory like Pittsburg, Chicago, St. Louis, St. Paul, etc., contend that they are entitled to a lower rate—for example, from Chicago to San Francisco—than is made from New York to San Francisco, notwithstanding the fact that New York is nearer San Francisco than Chicago is in point of cheapness of transportation, because these carriers by sea are the cheapest known carriers. But they claim that on account of their nearer proximity by rail the distance by rail should be the controlling factor in regulating rates, and therefore Chicago should take a lower rate to San Francisco than New York, no matter what the influences are upon the New York rate, or whether it is a compensatory rate or not. So certain merchants at Chicago and St. Louis have instituted a suit before the Interstate Commerce Commission to compel the graduation of these rates. The answer of the Southern Pacific and of the California merchants to their complaint is—

Q. (By Mr. A. L. HARRIS, interrupting.) Is that the only road that is involved in this controversy?—A. Oh, no; all the roads are involved—the Santa Fe and every other road that participates in the business. But the burden of the defense rests upon the Southern Pacific, because it is the most important interest and because it operates a through line from New York to San Francisco. It has no line to Chicago, while the other lines, like the Santa Fe, originate at Chicago. Their contention is that instead of Chicago having a higher rate to San Francisco than New York it should have a lower rate.

There is no more reason why there should be a lower rate from Chicago to San Francisco than there should be a lower rate from New York to Fresno, Cal. It is just changing it around. The one is an intermediate shipping point and the other is an intermediate receiving point, and the law should operate both ways. Everybody that is interested in a business over here justifies the higher rate to the intermediate point on the West coast, but because of the magnitude of the interests at Chicago and St. Louis and the tremendous pressure of commercial and political interests behind these roads, they want an exception made of the interior shipping point. We think the interior shipping point should be treated the same as the interior receiving point. We contend that all interests should be treated alike, that this principle that they seek to put in force here, if applied as a just and reasonable interpretation of the law would oblige it to be applied, would simply be ruinous to all of these roads, because it would bring down all their intermediate rates to the level of these compelled rates, these noncompensatory rates which are forced upon them by the active competition of seagoing carriers. This is one question that is involved.

Another question is as to the difference between carload rates for carload quanti-

ties and rates for less than carload quantities. There is an adjustment in California tariffs to-day which is about upon the same basis as similar adjustments in the majority of tariffs in the country. It operates to enable the merchants of San Francisco, Portland, Seattle, Tacoma, and Los Angeles, the jobbing and distributing centers on the Pacific coast, to import goods by carloads and then distribute back at less than carloads, precisely as the Chicago and St. Louis jobbers buy from the manufacturers in carloads and distribute into their territory in less than carloads. Now then, St. Louis and Chicago and other intermediate large jobbing centers, very aggressive and pushing, are reaching out into Pacific coast territory. They feel that the differentials between carloads and less than carload rates into that territory, while they are no greater upon the average than they are in their own territory or in the Middle West, like Colorado, is disadvantageous to them and an advantage to the San Francisco merchant, and they seek through the courts to compel the modification of those differentials so that they can distribute their goods there to the consumer as against the Pacific coast jobber.

Q. Could you state about the amount of the present differentials?—A. No; I can not. It differs.

Q. Or about the percentage?—A. No; it is arbitrary. I would like to take the tariff and go through it with you, but it would lumber up your records, and I can not deal here with anything but general statements. If you want the details of it, it will all be spread on the records of the Interstate Commerce Commission.

Q. I do not desire the whole of it, but I thought by way of illustration we could have it on one or two articles.—A. The differential between carloads and less than carloads will range all the way from 50 cents upwards, I suppose—the extreme is \$1.50 per hundred pounds—according to the rate.

Now, there is another feature of the case. Take the individual items of hardware. You know shelf hardware embraces a great many hundred different articles of general hardware, and the real movers in this complaint and the people who are pushing it and putting up the money for it are the Simmons Hardware Company of St. Louis, and Hibbard, Spencer & Bartlett company of Chicago, two of the largest hardware companies in the world. Simmons is probably the largest in the world, and Hibbard is a close second. So it is the hardware interests that are mostly interested. They want a number of articles that now take different rates to be rated the same. For the purpose of illustration, and without pretending to give you accurately the names of the articles they wish grouped under one rate, we will assume that hammers take one rate and hatchets another, and shovels still another, and planes another. They want those 4 items put under one rate. Why? So that when packed together in one package they would all go at one rate. While where they have different articles taking different rates packed together in one package now, the whole package is charged for at the rate given for the highest-rated article in the package. Now, you see at once the object of that proceeding is that they may make up an assorted package to get to the retail consumer out there.

With that explanation it would appear to be a fight between the Simmons Hardware Company of St. Louis and Hibbard, Spencer & Bartlett Company of Chicago, representing themselves chiefly but having the sympathy of certain other firms at St. Paul, Chicago, and St. Louis against the jobbers of Seattle, Tacoma, Portland, San Francisco, and Los Angeles (particularly the hardware and iron trade) for the Pacific coast trade.

Q. (By Mr. A. L. HARRIS.) Wherein does this case differ from what is known as the Chamber of Commerce case of Denver?—A. It differs only in its magnitude. It affects greater interests, covers more territory and a greater number of classes of business.

Q. The jobber at Denver in that case was trying to get a better rate for broken carload lots, was he?—A. No; the Denver case was one that came strictly within the long and short haul clause. It might fall wholly in the first subdivision of my testimony—that which comprehended graded rates. The Denver jobbers claimed that they should have a lower rate to points in California than were given to Missouri River points, and that rates from California, for example, to Denver should be lower than to the Missouri River. The case was tried and it was found that the exceptional circumstances and conditions were such as to justify a higher rate on sugar to Denver than to the Missouri from the Pacific coast. For west-bound business from Denver to California, the roads conceded the same rates to Denver as to the Missouri River—that is, the rates from Denver to San Francisco should not be higher than the rates from the Missouri River; but that was proffered in a spirit of compromise, simply because the amount involved was not worth quarreling over. But the question of differentials between carload and less than carload was not raised in that case, nor was the question of grouping a number of articles under one rate that would enable them to be packed together in one package. In those respects it differs from this St. Louis case, except that the Denver case involved very little business, while the St. Louis case covers a very large business.

¹ See testimony of Mr. Griffith, p. 851.

Q. (By Mr. DURAND.) Is there any difference in regard to the nature of the competition which the railroads pleaded as a reason for the differences in rates in this case? That is, was sea competition involved in the Denver case?—A. Sea competition was involved in that record to some extent; but, of course, the greater tonnage being shipped from the West to San Francisco, the sea competition has lost some of its force by the time it gets out there. Sea competition loses its force in an inverse ratio to the distance you go west from it. Seacoast competition is a vital factor and condition at Chicago, and goods have been taken to San Francisco via New York from Kansas City, and goods have been taken from San Francisco by sea and the Canadian Pacific and brought back as far as Dodge City on the Atchison road in Kansas.

Q. What was the ground for claiming the right to charge a higher rate or even an equal rate from Denver to the Pacific coast than the rate from Missouri River points?—A. It was simply this sea competition. The rates from New York were forced down by the sea, and rates from Chicago are affected by the sea competition as much as New York, except the cost of getting the goods from Chicago to New York, which is smaller, and so on, as you go west. Sea competition influences all the tariff as far west as the Missouri River. Now, suppose we stop at the Missouri River and admit that its force is expended there. That would make it easy, then, would it not, on the basis of the railroads being allowed a fully compensatory rate? It would not be fair to take the rate fixed at the Missouri River as the measure of the rate to be charged from Denver on a mileage basis. We held that the rate from the Missouri River was a fair rate to be applied from Denver. We accepted it, and it is the rate to-day, and the Denver shippers have accepted it.

Q. Was there any contention that from the Missouri River there was so much competition between the different railroad companies?—A. (Interrupting.) No; we have not raised that question, because the commission until recent court decisions has always refused to recognize either market competition or rail competition, but the Supreme Court has since recognized both, and I presume the commission will hereafter take a different view of it. Originally the stand was taken with respect to Denver on this ground, that if we reduced the rates from Denver then the rates would have to go down from all points, because Denver is not affected by the sea competition, and never has been. It might be said that its traffic practically moved under substantially the same circumstances and conditions as that of Salt Lake City, and traffic of all other towns that were similarly situated in respect to sea competition. We refused to recognize market competition; we refused to recognize railroad competition as a factor in determining rates under the fourth section of the law. Therefore we were obliged to hold the rates up from Denver in order to protect the revenue in other territories. When the Interstate Commerce Commission reviewed the complaint of the Colorado Fuel and Iron Company case they found it had a high rate from Denver. It was not a rate that the railroads wanted; it was not a rate that was fair and just and equitable to Denver. It was a rate that was compelled by our understanding of the construction that the Interstate Commerce Commission had given to the law. When the case was heard, much to our surprise the commission measured the rate from Denver by the rates from New York and from Chicago, thus giving Denver the benefit of sea competition. This ostensibly put the railroads in the ridiculous position of voluntarily maintaining a \$1.60 rate from Denver as against 60-cent rate from Chicago and New York. The rate from Chicago and New York was fixed by the sea. We did not reduce the rate from Denver, because if we had done so, according to the advice of counsel, we would thus have admitted sea competition as controlling at Denver, and if at Denver why not everywhere, which would have compelled us to reduce rates from all points. Further, we were advised that the reduction could not be limited to the products of the Colorado Fuel and Iron Company. It would have to be spread over all business, because the law prescribes that rates can not discriminate between different articles. It seems that our endeavor to comply with the law as we understood it put the Southern Pacific Company into an absurd position before the general public.

Q. (By Mr. A. L. HARRIS.) Is there any difference in policy between the Southern Pacific and the Great Northern or Northern Pacific with regard to either carload differentials or graded rates?—A. No; not as to practice with respect to graded rates, so far as I know. But, on one question in this case, yes. The Northern Pacific and the Great Northern originally carried the same tariff that is now carried to California. Upon petition of the Chicago and St. Louis people, they reduced the differential between carloads and less quantities and made it on a basis that was acceptable to the Chicago and St. Louis merchants. There is that difference. Now, the reason for that is this: The Great Northern and the Northern Pacific are, in a large measure, dependent upon eastern cities, like Chicago and St. Louis, etc., for their business. There is no considerable jobbing business at the western end of their lines. That is, there are no such houses of strength or magnitude of business on Puget Sound as there are at San Francisco. They simply elected between whether they would adopt the ideas of Chicago and the eastern houses or whether they would

adopt the ideas of the houses upon their western end, and they chose what they considered to be the strongest interest to protect, subordinating the interests of the weaker ones that needed protection. Of course, that is merely an expression of opinion.

Q. Do those rates seem to be satisfactory?—A. No.

Q. To Chicago and St. Louis?—A. Yes; they are to Chicago and St. Louis. I thought you were going to ask about Tacoma.

Q. (By Mr. DURAND.) Are Tacoma and Seattle taking an active part in this suit?—A. Yes; there are two Tacoma merchants and one Seattle merchant here, representatives of the largest houses.

Q. And what attitude do these two Northern roads take in the case—simply a neutral attitude, or are they actively favoring the changes or opposed to them?—A. They have got a tariff in, and their attitude is one of indifference, so far as I can observe, as to how this case goes. That is merely an opinion. I do not know that, as testimony, it is very valuable.

Q. What would be the effect of a decision that the existing differentials on the Southern Pacific, say, were justifiable? How would it affect the Northern roads?—A. It is not the differential of the Southern Pacific. It is the fair and through tariff, and all the transcontinental roads—the Burlington, the Rock Island, Union Pacific, and others—are interested. It is the fashion to put all the responsibility on the Southern Pacific. We are ready to admit the responsibility for this particular thing, but it should not be forgotten that the Santa Fe, the Burlington, and the Rock Island, and, for that matter, all the trunk lines, are just as much parties to this tariff as the Southern Pacific, and parties to these differentials.

Q. The question is, Will these Northern roads adjust themselves to these differentials, or can't you tell?—A. I can not tell. I can not tell what they will do.

Q. Naturally not; but the question might be raised as to whether there will be any change of the Interstate Commerce Commission directing a uniform differential to be pursued by all roads. Have they the authority to do that, or any inclination to do it?—A. It is questionable as to how far their authority extends. Of course, if it goes to the extent of making a rate or prescribing a rate, you know the Supreme Court is on record that the Interstate Commerce Commission has not the authority.

Q. It is rather a theoretical question anyway?—A. Yes.

Q. (By Mr. A. L. HARRIS.) Will you please describe the system of export and import rates in force and their bearing upon the jobbing trade of San Francisco?—A. There is not any system of rates in force. It is as good as you please. The steamships on the Asiatic side take freight for whatever they can get, and the railroads accept their proportion of the rate on an agreed division, whatever that may be. There is no published tariff. There are no agreements that are at all workable or enforceable. As far as its effect on the business of San Francisco is concerned, it has no effect whatever. San Francisco has never had the business and never can have it.

Q. You are in a different situation, then, from the Atlantic ports in that respect?—A. Yes; in one respect we are. The import business, except for the Pacific coast States, originally was centered in the hands of New York houses, Boston houses, Atlantic seaboard houses. They were the only importers; no interior man ever imported; and of course when it is once centered in any particular place it is pretty hard to change it. But there has been a rapid and large diminution in the proportion of the whole business of the interior brought in through the Atlantic coast ports, passing through the hands of the merchants of the Atlantic coast cities to the interior since the immediate-transportation act was enacted, which allows imported goods to go through the coast cities under lock and seal and duties, etc., settled at the interior point. There are now a number of interior ports of entry. Since that act the facilities of importation direct from foreign cities by interior cities like Buffalo, Chicago, Cincinnati, Cleveland, etc., has been increased, and many firms in those cities import direct without going through the New York, Boston, Baltimore, and Philadelphia houses, while formerly they did not import direct at all, but bought their goods in New York. Now, then, so far as San Francisco is concerned, it never distributed Asiatic goods to the territory east of the Rocky Mountains; could not do it because it had no railroad facilities; no means except wagons until 1870, you might say. The business was done via Suez or the Isthmus of Panama or from New York. The Atlantic houses distributed it back, and trade was centered there. When the overland roads, or the Pacific roads, were opened and they wished to participate in this business, they found it lodged in the hands of the New York merchants. They had to get the business from these New York people, and they had to make rates that would compete with the rates via Suez and around the Cape of Good Hope and via Panama; and in doing that they of course made through rates, which were lower than the local rates and than the rates of steamers which delivered at San Francisco from the Orient. But the railroads had no voice in the rates from Asiatic ports to San Francisco proper. Through the multiplication of steamship lines on the Pacific, and of the transcontinental railroad lines, and their fighting for this oriental busi-

ness as between themselves and against the Suez and Good Hope routes, rates have been at times lower from oriental ports to Chicago and New York than to San Francisco.

Q. Does that leave a sufficient profit to the railroad company when it gets as low as that, so that it amounts to anything at all—A. (Interrupting.) Well, I doubt very much whether there is much profit in it. The question of cost of carriage by rail is somewhat abstruse. With all railroads there is a volume of business that must be taken at certain rates without much regard to the cost of carriage. I refer to business which is the subject of competition. It may be market competition or competition by other carriers. Usually the measure of the rate obtainable for the carriage of such goods is what the competing carrier's charge would be. That must be equalized, or the business will seek the competing line. In such cases the carrier seeking the business is only concerned to see that he gets for his service something more than the actual cost of handling that particular traffic.

Ordinarily this cost would be the expense of taking up the freight, putting it aboard the cars, the clerical work of accounting attached to its handling, unloading and delivering it at destination. The carrier does not consider the numerous fixed charges or any elements of cost which does not vary with the volume of business handled. Somewhere in the neighborhood of 75 per cent of what is ordinarily termed operating expenses by railroad men does not vary materially with the fluctuation in the volume of business. Because of this, railroads always handle a considerable volume of competitive business, when it is necessary to do so, at rates which, by comparison with its ordinary rates, are very low. The business between the Orient and the United States would fall within this class of business, and with that explanation you will understand why I think the railroads have not carried any Asiatic business at a loss, although the profit from it may be small.

Q. (By Mr. DURAND.) Could you give any idea as to what proportion in a particular year—last year, for example—the Asiatic import business handled by the Southern Pacific Company bore to its total eastward haul?—A. I can not. I do not charge my mind with it; but I suppose we have never carried eastward to exceed 12,000 tons, and that would be a very small percentage of the whole business. I do not know whether there are any detailed statistics in the Annual Report or not. I do not carry those tonnage statistics in my mind. I have not a very good head for figures. I have never practiced that, because when I want to use them I can always turn and get them; but I guess we will let the answer stand, because the proportion of that particular business to the whole would make a very small percentage.

Q. (By Mr. A. L. HARRIS.) What is the nature of the differential allowed to the Canadian Pacific Railroad?—A. By the American lines?

Q. By the American lines.—A. None whatever; we fought that out.

Q. Has that been a disturbing element?—A. In the past?

Q. In the past.—A. A very great disturbing element.

Q. All the differences now are settled?—A. The Canadian Pacific—I think they were fair about it in the end. We tried to agree and did agree finally to arbitrate it. The result of it was that the American lines won. They objected a long time and refused to abide by the arbitration, but finally accepted it.

Q. Was there any rate cutting by the American trunk lines 2 or 3 years ago to meet that differential?—A. I can not answer of my own knowledge. I can say that so far as the transcontinental lines were concerned—and we generally mean by that term the roads west of the Missouri River—there was not; but the Canadian Pacific complained continually that, while their rates on their face showed a differential, the rates east of the Missouri River, and particularly east of Chicago, were never maintained, and that really they did not have the differential. Now, just how far they were justified in making that statement I do not know, but I suppose it is true there were sporadic instances of rate cutting arising constantly, and always have been.

Q. (By Mr. DURAND.) You stated, I believe, that to your knowledge there was not any such?—A. I could not state that there was any such of my knowledge. I have given you the rise of the rumor. It was part of the defense of their differential by the Canadian Pacific—that much was.

Q. (By Mr. A. L. HARRIS.) If it did exist then, it does not exist now to your knowledge?—A. I do not know of any rate cutting going on.

Q. (By Mr. DURAND.) Would you be in position to know?—A. I would not.

Q. With regard to your own road, I mean?—A. Yes, with regard to our own road I would. But the question was relative to the East by the trunk lines.

Q. Rates then made by the Canadian Pacific are precisely the same to the East and far Eastern points?—A. Yes; as the American lines, I understand.

Q. That is, from San Francisco?—A. They have been accused of cutting rates, but I never have found it to be true. I am constantly receiving charges against other lines, as I suppose other lines are receiving charges against us, but I think the con-

ditions as far as our traffic has been concerned have been unusually good in the last year. When I say "our traffic," I mean the transcontinental traffic.

Q. (By Mr. A. L. HARRIS.) Are present rates what you would call competitive rates?—A. They are always competitive. Conditions of competition always exist and always have, so far as the through business is concerned.

Q. What is the exact character of water competition at San Francisco?—A. There is the Panama Railroad running 3 or 4 steamers a month each way, New York to San Francisco. Between New York and San Francisco there are steamers owned by the American-Hawaiian Steamship Company of from 6,000 to 8,000 tons burden dispatched once a month via the Straits of Magellan from San Francisco. There are constant sailings of ships around Cape Horn. Just what the number is up for cargo now I could not tell, but I think at the present time the prospect and threat, so far as the railroad company's standpoint of competition is concerned, of competition by sea is greater than ever before.

Q. (By Mr. DURAND.) You mean in view of the proposed Nicaraguan Canal?—A. No; I mean in view of the building of steamships of large capacity, of small or relatively small coal consumption, and the demonstration that has been made that on account of their large tonnage and their relatively small coal consumption they can take cargoes from New York to San Francisco.

Q. (By Mr. A. L. HARRIS.) What class of freight do these steamers carry?—A. They are taking all classes of freight, mostly the lower classes; but there is no reason why they can not take everything. All the business that goes now, business of every class that goes now from New York to San Francisco, formerly went altogether by sea around Cape Horn or across the Isthmus of Panama, chiefly around Cape Horn on sailing vessels, with a voyage of 6 months.

Q. (By Mr. DURAND.) Are there not some classes of goods which on account of styles, perishable character, and so on, are needed sooner than that length of time would permit and so can not be shipped by sea?—A. Yes; but before there was any railroad—before 1870—those goods went by sea via Panama taking from 30 to 45 days from New York. There is nothing but perishable freight that can not go around that way, and if they are put to it, there is no reason why they can not ship perishable freight that way.

Q. Your company, the Southern Pacific, is interested in one at least of those water lines via Panama?—A. No.

Q. The Panama Pacific Mail?—A. The Pacific Mail, the western end of the line, from Panama up. It has not the making of the rates lately.

Q. (By Mr. A. L. HARRIS.) Is the Western classification satisfactory, or is there very much difference?—A. I do not think the Western classification is thoroughly satisfactory; that is, I do not think there is a road using the classification which, if it were able to adopt a classification for itself suitable to its own particular business without respect to any other business, would not make material changes in the Western classification; but it is a compromise in the views of hundreds in the deference to the public demand for uniformity of classification and for convenience, if there is any, in the interchange of traffic to the railroads themselves.

Q. Now, the second part of the question, in regard to commodity rates?—A. There never can be any classification adopted that will preclude the use or necessity of commodity rates. We will have to make commodity rates. In all my experience, and I have been in this business since 1868, there have been special tariffs, coal tariffs, lumber tariffs, salt tariffs, etc. They are commodity rates. As you enlarge the scope of your classification and extend its application over larger territory and over an increasing number of roads, you will multiply the commodities, because here is a road that wants to and does use the Western classification. But the Western classification does not provide for a commodity which is of very great importance to it and which is of minor importance to many other roads. It must be provided for by a commodity rate. The through business between the Atlantic States and the Pacific coast States is done almost wholly on the commodity tariff. That is because of the predominating or controlling influence of the sea carriage. It is commonly supposed, and I heard it stated up at the Commission yesterday, that sea carriers do not classify like railroads. On the contrary, they classify more. They will take tonnage, charging by weight or measurement, whichever makes the greater sum. Hence the rate per 100 pounds varies with every change in the density of that freight. Then the value of the goods effects a classification because the insurance on the goods, which, in the case of railroads, is included in the rates, is turned over to the underwriter. Every shipper by sea has to underwrite his goods, and the rate he pays per 100 pounds varies with every change in the value of the goods, so that if you should work it out you would find that there was a greater classification by sea-going vessels than there is with us; in fact, a weight and measurement tariff by sea amounts to a commodity tariff, the rate changing with almost every article as density and value change. If you were to express the rates—the ordinary rates—of a steamship or a clipper ship per 100 pounds, as against their

usual formula, you would find that you would have a different rate for every particular item, unless you should be fortunate enough to find two articles that were of the same density and the same value per 100 pounds. That is why we have found, in meeting the competition of the sea, that we must carry a very large commodity list. We can not classify because we can not get any more than sea competition will permit us to charge.

Q. (By Mr. DURAND.) Do all the transcontinental carriers, then, adopt pretty nearly the same commodity rates?—A. Yes, altogether.

Q. They agree?—A. Yes; the same through tariff is uniformly applied to all the lines. It is made by conference.

Q. (By Mr. A. L. HARRIS.) What will be the effect on operation of the acquisition of the Union Pacific by the Southern Pacific Railroad?—A. What will be the effect I can not answer. It ought to have no effect whatever. That is, the two institutions ought to be and probably will continue to be operated separately. That is merely an expression of opinion.

Q. (By Mr. DURAND.) Has there been any tendency in the past to have the practical consolidation of the Union Pacific and the Southern Pacific?—A. It is not a practical consolidation at all.

Q. Community of interest, then?—A. Hardly that.

Q. Has there been any tendency to divert traffic from the Central Pacific to the Southern Pacific because of the longer haul which the Southern has?—A. Oh, yes; in a certain sense.

Q. Will you explain about that?—A. That is said to have been done through the exercise of the control of the Central Pacific by the Southern Pacific. The Southern Pacific Company owned a line and operated a line from San Francisco to New York. It also owned or controlled the Central Pacific line to Ogden in connection with the Union Pacific, the Rio Grande lines, and others. These roads connecting with the Central Pacific at Ogden, not only the Union Pacific, but the Rio Grande Western and its connections, the Colorado Midland, the Chicago, Burlington and Quincy, the Chicago, Rock Island and Pacific, the Missouri Pacific, the Wabash, the Chicago and Northwestern, the Chicago, Milwaukee and St. Paul, the Illinois Central, all the trunk lines running from Chicago eastward, also the Northern Pacific connecting with us at Portland, the Great Northern, the Oregon Railway and Navigation Company. Every one of these companies has had and now has a well-equipped soliciting agency in San Francisco and in Los Angeles soliciting business for their lines. The Southern Pacific Company, since its control of the Central Pacific line, has not exercised any undue influence or authority in taking freight either one way or the other, but it has had its corps of men soliciting for the Sunset route, its long haul via New Orleans, precisely as the Union Pacific, and all the other companies I have named, have had their respective corps soliciting for the Ogden route and for the Portland route. Through these soliciting agencies the merchant said which way his freight should go, and it went the way the merchant so directed. The practice described furnishes the only foundation for the cry that has been floated about the Halls of Congress here that we were discriminating against the Central Pacific, and that the discrimination was having the effect of diminishing the value of the Government securities. It is all poppy cock; there is nothing in it and never was.

Q. Is there any traffic which the shippers do not care about, which you have the power to divert if you wish?—A. No, no. I suppose we do have the legal power, and we were advised that we had the legal power to direct the route which the freight shall follow, but as yet we have not exercised it, except in the case of oranges, and that only within a year.

Q. What is the arrangement you speak of about oranges at present?—A. Simply that we do claim and exercise the right of determining the route by which they shall go. That was in order to break up the rebate plan which was being worked. Shippers were holding up our railroad connections, saying that they would not give them any freight unless they put up from \$15 to \$20 a car. In other words, the practice is primarily for the purpose of enforcing the law and maintaining the tariff. We do not get a cent out of it. The Santa Fe does the same thing.

Q. Supposing that there should be in the future a pretty thorough community of interest between the Southern Pacific and the Union Pacific, would not more of the traffic go over the more direct route in the future than in the past?—A. You are asking me to discuss questions that are purely speculative, and might be in the nature of committing the owners of the road. I do not think I ought to express myself on that. I do not see how it would do any good.

Q. What is the exact nature of the transaction by which the Union Pacific acquires the Southern Pacific, stating the price paid for the securities, the effect upon the total capitalization of each road, etc.?—A. I do not know anything about it except what I get through the press.

Q. What would be the effect of the extension of the Chicago, Burlington and Quincy to the Pacific coast?—A. I can not say that it would have any further effect than

making one additional road for the community to support. I do not think it would build up any new industry or create any new business.

Q. The present volume of traffic does not demand it?—A. Any one of the lines crossing the continent to-day, with proper equipment and proper terminal facilities, improved roadbed, etc., can do all the business that all of them are now doing.

Q. Every additional road, in your opinion, would be only that much more expense for the shipper?—A. I think so. I think in the end the public has to pay these charges. There are sufficient roads now to introduce all the competition that the roads can possibly stand. There are none of them that I know of paying dividends except perhaps the Great Northern, and it is not doing it out of this transcontinental traffic.

Q. What will be the effect of Senator Clark's new road from Salt Lake City upon the rate situation?—A. I do not believe he is going to have one. I think the Union Pacific is going to build that road, and the effect of it will be simply to have one more road—simply divide the business of southern California with the Santa Fe and the El Paso routes. I do not know whether it will benefit the Union Pacific.

Q. What has been the movement of rates upon the trans-Pacific roads during the last 10 years? Have they been reduced, equalized, or in any case increased?—A. In the last 10 years, yes. The last 10 years would take us back—that would be since 1891, and the rates have been very considerably decreased since 1891.

Q. But in no case increased that you call to mind?—A. I think not; I do not think there is a single case of an increase since 1891. In my own time, though there have been violent reductions and violent fluctuations, but the standard to-day is very much less than it was this time in 1891, I think. The average rate is considerably less than it was this time in 1891.

Q. What is the effect upon the Union and Southern Pacific roads of the purchase of the Chicago, Burlington and Quincy by the Great Northern and Northern Pacific?—A. I do not think the Great Northern and the Northern Pacific have got the Chicago, Burlington and Quincy in that sense. I do not know any more about it, perhaps, than you do.

Q. Supposing there should be such?—A. I am not good authority on those things, and I want you to know that I am only expressing an opinion.

Q. Supposing there should be such a thoroughgoing community of interest between the Union Pacific, the Southern Pacific, and the Northern Pacific, would not those three roads then be in position to control rates aside from the matter of sea competition?—A. No, they will not be in a position to control rates, because the Great Northern will be out, and the Atchison, Topeka and Santa Fe, and the Texas Pacific, and all those lines will be out, and they will have to be consulted. No rate can become effective except at the risk of a light and great loss of revenue, except it is a rate that is agreeable to all competitors.

Q. I suppose there is a limited amount of traffic which would not be subject to the competition of these other routes?—A. Oh, well, then the common control of the roads you name would not affect that particular traffic. It would be strictly local to each particular road, and the common control would not affect it at all. If you want to know—if what you would like to draw out is whether I think that common control would have the effect of increasing the charges to the public, I freely express the opinion that it will not. I think that if there could be a control of that sort exercised in every natural division of the country so as to secure stability of rates and honest and efficient enforcement of the rules and rates as published it would be of great benefit to the public. I believe it is the only way under the present attitude of the public toward railroads that you can effectually squelch unjust discrimination, inequalities in rates, and continual fluctuations in rates.

Q. You do not think, then, that such a thoroughgoing harmony of interests between all the roads in a particular section would result in unduly high rates to the public?—A. No; you can not destroy the natural competition that exists; you can not possibly do it.

Q. What do you mean by natural competition? Do you mean between different sections of the world?—A. I mean between the different roads.

Q. But I was speaking of the possibility of a complete merger of interest.—A. Of all the roads in the country?

Q. Of all the roads in a given section, or west of the Missouri River.—A. No; the companies operating those roads are endeavoring to promote every industry and every class of commerce, build up the industries along the lines of their several roads, so that they should have the greatest tonnage, and they can not resist, can not stop it. The noticeable effect upon the community at large would be the stopping of preferential rates, the stopping of unusual, frequent, unnecessary, vicious, and hurtful fluctuations in rates. Now, I do not mean to say that you would not have a howl, but the howl would come from the fellow whose rake off was discontinued. I say that in all sincerity as an expert in this business of more than 30 years' experience, and I do not own any railroad stocks or bonds either.

Q. (By Mr. A. L. HARRIS.) Have you any suggestions to make as to increasing the power, in any particular, of the Interstate Commerce Commission, and especially as to their right to make or approve rates?—A. Yes; I have a suggestion, an opinion, to express, that they have all the power that they need to enforce the law to day if they would exercise it. I think it would be a dangerous thing to give them the rate-making power, but I think in their attitude toward the railroads, of fighting the legalization of pooling because the railroads will not consent to their having the rate-making power—I think that is to be condemned. I do not believe that the people of the United States who pay freights want this commission to make their rates. They can not do it.

Q. One great complaint that is made is the long time that intervenes between the filing of the complaint and the final adjudication of the case. Would you recommend that when a case is filed with the Interstate Commerce Commission it should be advanced on the docket as it goes into court, so that it could be disposed of quickly?—A. So far as my own particular judgment is concerned, founded on the experience I have had in cases before that commission, I see no reason why they should not come to a speedy conclusion or a decision—the quicker the better—and I would have no objection to any rule that had for its object simply to have the case disposed of upon its merits as soon as possible. I think that way with respect to every contention between private persons, as well as between corporations and parties.

Q. Is part of this delay by the commission on account of it being tardy in hearing?—A. I think not. So far as my experience goes they have been prompt enough. They have held up their decisions in some cases longer than I thought there was any necessity for, but I think, no doubt, they have a reason for it. I have in mind one particular case now, the differential case between carloads and less than carloads, in Texas. I do not know why that should not have been decided a year ago, so we would have some light in this case they are hearing now; but they are evidently holding that up until they get the hearing in this case, possibly because they want more light. You see it is a question that is very far-reaching. It will spread all over the country.

Q. Is it possible, and if possible is it practical, to have a national classification of freights?—A. No. Well, I would have to qualify my answer. I am not a believer in a uniform classification. We have practically now three classifications—the official classification in the trunk-line and New England territory; the Western classification for all territory west and northwest and southwest of Chicago and Texas, and I think the Southern classification in the Southeastern territory. In making those classifications the railroads have had to make considerable concessions from what would be a proper consideration for the conditions which would control classifications in individual cases. In going further than that, concessions will be multiplied, and they will be as often against the public as against the carrier. Commodity rates will also be increased in number, as I have already explained. We can not have a uniform classification without having thousands of commodity rates. Every road is going to have a number of different commodity rates. That will destroy the uniformity of classification. If you and I agree that as between our two roads we will join in a common classification, and then you say, Now, here is lumber; here is coal; here is iron or some other commodity or half a dozen commodities that are of very great importance to me, and under this classification their development and their movement will be retarded—they are of no importance whatever to the other road—I will put in commodity rates on them; and if then I offer a similar list of commodities that must be specially provided for—we would be doing just what all the roads in the country would do. Now, then, multiply those conditions and opportunities by the number of railroads in the United States and see the number of commodity rates that will be required, each differing with each road. What becomes of uniformity? It is a theoretical demand of no practical value, though it seems to have fastened itself on the commission here. There is no necessity for it, in my judgment.

Q. (By Mr. DURAND.) It is sometimes held, I think, that these numerous—we might almost say innumerable—adjustments that the railroads make in rates, in view of their conditions and their particular commodities which touch their territory and so on—that the result of all these conditions is to prevent a perfectly normal development of the resources of the country; that the railroad which happens to be in a given locality first tries to exploit the natural resources, even though they might not be so well fitted for immediate exploitation and so on. Does it seem to you that the absence of any uniform regulation of that sort tends in that direction?—A. If there is anything in what you say, and I do not believe there is, I do not see how uniformity of classification is going to help it. The rates determine the movement. There is no talk about making uniformity of rates. It is the greatest folly to me—the idea that this uniformity of classification is going to have the effect that is

claimed for it or have any such value that is worthy of consideration or worth talking about. It would seem to be absolutely ineffective, when you take into consideration my explanation as to commodity rates. It is a jack-o'-lantern, deceptive, a snare—something to fool the public with. That is all there is about it. Now, then, I do not believe that any railroad company retards an industry on its line. If any railroad company does do so, or unjustly discriminates against industries, there is not any penalty, in my judgment, that is too severe.

Q. How about the complaint of fruit shippers in California? There has been a good deal, has there not?—A. What complaint?

Q. To the effect that the rates are so high that they can not meet the competition of Florida?—A. I have heard no such complaint. The citrus fruit business has grown from nothing to about 20,000 carloads a year. How does that answer you? I have heard no complaint of that sort from the shippers in southern California. The complaint now is against the refrigeration charges, and against the railroads for not owning their own cars, but leasing them. Shippers want to dictate to us whether we shall hire a car or own it. There is a complaint as to whether we shall take the routing out of our hands and put it into their hands. The difference arises in the fact that the agent of the principal fruit growers' association wanted to lease or own refrigerator cars himself and snublet them to the railroads and be able to make something out of the refrigeration and mileage for use of the cars, and also be in a position to switch his cars from one line to another and hold up the railroads for rebates. That was all stopped by the Santa Fe and the Southern Pacific undertaking to route the freight. It is to determine these complaints—whether they are just—that the case was taken to the Interstate Commerce Commission. It has been tried and submitted to the commission and is now in their hands. They also complain about the demand on our part that they should load 13 tons to the car instead of 10 tons to the car. They allege that if 13 tons is loaded in the car there is not left sufficient air chamber for circulation and preservation of the fruit, which promotes decay. We are not satisfied that this is true, because for the most part 40-foot cars were used for 13 tons as against 36-foot cars for the 12 tons. We also found that instead of carrying 12 tons, as we thought, the size and weight of boxes had been increased, and instead of the average weight of 12 tons that we were charging for the load was 13 tons. I do not know but that we may concede that point. It will not be done until the case is decided by the commission, however.

Q. Has the California railroad commission exercised any direct control over local rates in California?—A. It has heard every complaint that has ever been made. It approves all tariffs.

Q. Then they have the absolute power to declare a rate?—A. That is what the constitution of the State says.

Q. Have they ever changed rates materially from those made by the railroads?—A. Well, I do not think that the Southern Pacific as a company would be willing to recognize, notwithstanding the constitution, that it had the power that the constitution pretends to give it, but still the commission has from time to time caused considerable reduction in tariffs. They undertook to make a reduction in grain rates, which we resisted before the courts and finally settled.

Q. Was that recently?—A. Yes; the settlement was made, I think, a little over 18 months ago.

Q. You mean it was settled by the court reaching a decision or by agreement?—A. Well, the court enjoined the commissioners, but the case never went to trial. We consented to a certain reduction in lieu of their order.

Q. That was the grain rates within the State?—A. Yes.

Q. On all the roads or on certain portions?—A. Well, it was on grain going to market, and it would be, on all the roads and on all the rates, sort of a blanket reduction of about .8 per cent, I think. I have forgotten what the settlement was. I think it has been a useful commission. It has not been anarchistic and confiscatory in its actions, and for that reason some of the people condemn it, but on the whole I think its course is satisfactory.

Q. Have you any idea how the rates are per ton per mile in California on low-grade freight, or on all classes of freight, for that matter—how they would compare with the transcontinental rates per ton-mile?—A. They ought not to be compared at all.

Q. Necessarily they ought to be different?—A. No; I never made a comparison—never made any such comparison.

Q. You might be able to give some valuable suggestions about the development of the Oriental trade and the acquisition of the Philippines?—A. I do not care to testify on that unless you want me to, because I think it is pure speculation as to what it is going to be, and I am sorry to say that while it is popularly supposed that there is going to be a vast increase of trade to San Francisco and the Pacific coast,

I do not share that view, and I do not care to discourage people by any testimony. From the railroad standpoint and from our standpoint I do not regard the building of the canal as an unmixed evil. I thought we could adjust ourselves to it; that so far as San Francisco is concerned it was going to do San Francisco more damage than anybody, so far as I know, except a very few people, and one of them, Senator Perkins's partner, conceived. The Nicaragua Canal is going to bring New York, New Orleans, and all these aggressive Eastern jobbing cities much nearer by water to Honolulu, the islands of the Pacific, the Philippines, the Orient, and Australasia, than they are now; and instead of increasing San Francisco's opportunities to enjoy that trade, or an increasing measure of the trade, it is going to diminish them, because it is going to increase the power of San Francisco's competitors, while it does not help her at all. So far as San Francisco's business proper is concerned, the transport of general merchandise which she takes, it is going over the railroads, no matter how many canals are built. There are too many railroads there; they are part of the natural features of the country, and they will be operated when we are all dead. They may be compelled to make rates that will put them in bankruptcy, over and over again, but every time they get out of bankruptcy they will be better able to beat the canal, and they are going to carry that business. While the canal may help San Francisco in such business as she has formerly exported to Europe, particularly grain, that is constantly diminishing in volume.

Q. May it not increase?—A. The advantage is very small compared with the disadvantages I have enumerated. That briefly and substantially expresses my views. They might be elaborated, but they would not give you any better idea.

Q. (By Mr. A. L. HARRIS.) What do you know, if anything, about the cooperative association among the fruit growers of California in shipping and marketing, where they ship and market their goods?—A. Well, there has been something like the prune growers' combination, as they call it; is that what you mean?

Q. Yes; that is what I had in mind.—A. That has been rather disastrous this year, I think. However, I believe, that something of that sort is necessary to the proper marketing of the goods. I believe it is necessary and I think it would be a great advantage to the growers of deciduous fruits. It would be an advantage to the orange growers, though they now have a form of association. It has been worked on raisins in Fresno quite successfully. The producers are said to have been their own worst enemies through lack of cooperation; that they were in the hands of the middlemen, who would work them and give them minimum prices for their goods. The effort has been to get them together and cooperate and employ good merchants to handle their association for them, and to give the manager authority to meet the market conditions. By this plan of organization they expected to stop the middlemen from taking undue advantage of them. I think it might be beneficial. It is said to have been in Fresno for the raisins, and I think it is bound to be so on the prunes. But it is hard, to get three or four thousand farmers to agree upon any cooperative plan or to trust any individual in handling a large business for them. With respect to oranges and green fruit some form of organization for cooperation is essential, because they are perishable; and the distribution of that fruit to Eastern markets ought to be under one head, so that if Chicago would take 20 cars a day no more than 20 cars per day would be sent there. If the capacity of New York is 25 cars per day it will be arranged that no more than 25 cars go there, and if Boston is 10 cars they will see to that in like manner. Now, in the past the vice of the business has been that everybody shipped as he pleased, and if John Jones heard that Sam Smith was shipping to Milwaukee he would say, "I guess that is the right thing to do," and he would send his fruit there also. The result would be that the Milwaukee market would be overstocked.

Q. (By Mr. DURAND.) To what extent is the system organized now—quite thoroughly?—A. In southern California they have their orange growers' union and it is said to be quite efficient. In northern California, so far as the deciduous fruits are concerned, they have no organization that I know of. They tried a plan some years ago, but it was not satisfactory. With raisins and, I believe, in southern California, with walnuts, a cooperative arrangement has been tried and has done well. The experiment this last season with the prunes was not successful. I think it is lack of management more than anything else.

Q. You think there has been no particular reason for complaint against the refrigerator car companies as such?—A. I would not like to say as to that. I have never made a study of it. Apparently refrigerator charges were pretty high. They claimed, and they made an excellent showing, too, before the commission that their charges afforded no more than a reasonable profit. While we are not responsible for those charges, and our effort is to get them down, I think there will be some reduction this year.

Q. Is it your judgment that it would be more desirable for the railroad companies that refrigerator cars should be owned by them?—A. Ordinarily I would say that

the railroad companies should own their own cars, but there are peculiar conditions affecting the use of refrigerator cars that make it doubtful as to whether it is best—chiefly that the movement of the fruit for which they are employed is confined comparatively to short seasons, and for the rest of the year there is no use for those cars. If there is an organized company owning refrigerator equipment whose cars can be leased during the season, or put into this service at reasonable rates and under just and equitable regulations so far as the carriers are concerned, then when the season is over the owners can find use for those cars in the Florida trade or in the berry trade of the South, thus keeping the total equipment employed the year around. Now, if that is true, and I am led to believe that it is true, such a company can handle the refrigerator cars and do the refrigerator work at a less cost than the railroad company.

And it ought to operate to the advantage of the growers or producer, provided the charges and the profits are only reasonable. Now, then, I did not answer as to the railroad. So far as the railroads are concerned it depends altogether on the price they would have to pay for running the cars. They might be made so high that they had better own them; but I think, from my experience, that so far as economy in management is concerned or expense of operating, it is in favor of leasing the cars rather than owning them, under the conditions I have just stated.

Q. Can you state the rate which you pay by way of lease?—A. Oh, I do not know why that should become public property.

Q. Some of the Eastern roads have intimated that there was a uniform rate.—A. The ordinary rate paid by Eastern roads is a cent a mile. It ranges from three-quarters of a cent to a cent a mile for the use of refrigerator cars; but we pay less.

Q. Can you compare the amount that the shipper has to pay for the use of the refrigerator car as such with the amount of freight he has to pay, stating the relative amount?—A. It differs. Our rate on green fruit is a flat rate—what we call a blanket rate or postage stamp rate, practically the same to Denver as to New York. The refrigerator charges necessarily, to be fair and equitable, are graduated rates. It takes less ice, I should say, to carry a car of fruit to Denver than to Omaha, and less to Omaha than to Chicago, and less to Chicago than to New York or than it does to New Orleans, owing to the difference in the climate and the cost of ice. I have not in mind what the rates are to the destination points. I would guess that they will range from \$50 to \$135 a car for refrigeration of deciduous fruit—not oranges. Oranges do not require as much ice. The railroad freight rate is \$1.25 per 100 pounds, for carloads. It has always struck me that, compared with the investment and labor, etc., the cheapest part of the service that the California fruit grower employs in getting his fruit from the tree to market is the transportation service done by the railroads, and I think so still.

(Testimony closed.)

Whereupon, at 11.55 a. m., the special subcommission adjourned without day.

NEW YORK, N. Y., May 22, 1901.

TESTIMONY OF MR. JACOB H. SCHIFF,

of Kuhn, Loeb & Co., Bankers, New York City.

The special subcommission of the Industrial Commission met in the rooms of the Fifth Avenue Hotel at 10.15 a. m., Mr. Clarke presiding. At that time Mr. Jacob H. Schiff, of the firm of Kuhn, Loeb & Co., appeared as a witness, and testified as follows:

Q. (By Mr. CLARKE.) Will you receive the oath?—A. Am I compelled to? I never like to swear, because I think my word is good enough, and I prefer not to swear.

Q. Then you make a solemn affirmation, do you? Will you please give your name and post-office address?—A. Jacob H. Schiff, 932 Fifth avenue, New York.

Q. What is your business?—A. I am partner in the banking firm of Kuhn, Loeb & Co.

Q. Have you had to do with the financing of corporations?—A. I have.

Q. Recently?—A. What do you mean by recently?

Q. Any time within the last 3 years?—A. I have; but not so much as, say, 5 or 6 years ago.

Q. Very well; go back to that, then. Can you give the commission a list of some of the principal corporations and transactions that your firm has aided in financing?—A. We have had leading interests in the reorganization of the Union Pacific Railroad, and to some extent of the Baltimore and Ohio Railroad. Those are two leading corporations.

Q. It is a matter of common knowledge that great movements are going on among the principal railroads at the present time, and we shall be glad to have you describe to us, so far as you feel that you can without embarrassment and without divulging business secrets, the methods that are employed and the objects that it is expected will be attained. Proceed, if you please, in your own way, and the commissioners will ask some questions as they may wish from time to time.—A. Primarily, I want to state that I am not a railroad man; that I am a financier, and that technical railroad questions I am unable to throw light upon. The movements to which you refer I assume are those that are generally understood as coming under the expression "community of interest." As I take it, this community of interest idea arose in the desire of the railroads, or the owners of railroads, to protect themselves against the demoralization, and, as a consequence, depression in the values of their properties, which was brought about by antipooling legislation. It is human nature that a producer and shipper wants at all times to get something better, to get ahead of his neighbor; so the practical consequence has been that when a shipper made a certain rate of transportation with the railroad company his neighbor went to the competing road and by straight or crooked means endeavored to get lower rates than his neighbor received. That naturally brought about demoralization of rates, and it damaged both the transportation interests and the producing interests. It is evident that there is little safety to the producer if he is not certain that his competitor pays exactly the same charge for transporting his goods or products than he pays himself. There is just as much danger to him as there is to the railroad if it does not get just exactly the same rate that the competing railroad receives. This unsettled condition produced a state of affairs which, in my opinion, has been more dangerous to the vital interests of the country than any benefits that could have possibly been derived from antipooling legislation. It demoralized both the shipper and transporter alike, and property of all kinds suffered by it; not only property suffered, but labor suffered. It is evident that when rates are depressed the railroads can not pay to the working forces the same compensation or remuneration that they can in times when they get full rates for their transportation.

This state of affairs brought about a gradual coming together of the railroad interests and induced them to buy into one another's properties. For instance, if I held stock of "A" company and you held stock in "B" company, and my shares were depressed in value because you were competing with me—each of us cutting the rates of the other—our interests would evidently be better served if you owned some of the stock in my company and I owned some of the stock in your company. In other words, if we had a community of interest. That is, in simple words, the process which has been going on on a large scale among the railroads, and which, in my opinion, while it is not completed yet, will naturally bring about some protection, as the way to perfect peace is always through war. I believe when brought to an entire completion, it will be a blessing to the laboring man, it will be a security to the shipper, and it will be a benefit to the owner of railroad property. I believe the community of interest will not only result in the community of interest between railroad property, but it will be community of interest between railroads, shippers, and labor.

Q. We shall be glad to have you tell us the methods of bringing about this community of interest so far as you may feel at liberty to do so.—A. I believe I have explained to you already; the business is simply carried out on a larger scale than in the illustration I gave. Without naming railroad companies, say if the New York and San Francisco Railroad Company, using a name to cover both extreme points, owned some stock in the Boston and Portland (Oregon) Railroad Company, both running in the same direction, if they owned stock in each other's lines they would be very careful before they did anything which would destroy the value of each other's property.

Q. Is it proposed to merge or consolidate these roads into one large company, after the manner of the consolidation of the steel companies, or is it proposed merely to have stock in one road held by a stockholder of another road?—A. I am quite certain nothing like the large consolidation is intended—nothing like such a consolidation is intended.

Q. The several companies will continue to operate their properties substantially as now?—A. That, I am quite certain, is their intention.

Q. Will there be any absorption by one company of another in this process?—A. Not that I am aware of.

Q. Will there be any agreement between these companies in reference to maintaining rates?—A. Not as far as I know; but, as I said to you before, as to railroad propositions proper I know nothing.

Q. Does the establishment of this community of interest necessitate the intervention of a syndicate?—A. Not necessarily.

Q. Does it involve a struggle for the transference of control from one party to another?—A. Not necessarily; but such might occur in single instances.

Q. If you feel at liberty to give us any illustrations of your idea of the process by which roads which have undergone this establishment of community of interest, we shall be pleased to hear you.

The WITNESS. I can not. As far as I know, most of these processes have been accomplished by direct acquisitions, either by the railroads or by their owners, of stock, not necessarily controlling interests, and I believe in most instances not actual controlling interests in other railroad corporations.

Q. What is your opinion as to the probability of the raising of rates after this community of interest has been effectually established?—A. While I have said to you that I am not a railroad man and that my opinion as to railroad matters itself is worth nothing, I believe it will result in the cheapening of transportation. The only thing that is sought, as far as I understand it, by the community of interest is not higher rates, but equal rates, steady rates.

Q. Is it the opinion of merchants and shippers generally that it is more important to them to have an opportunity by sharp figuring to get a lower rate than their neighbors have?—A. Every intelligent shipper I have ever discussed this question with has, without reserve, expressed his opinion that he would rather pay double the rate on transportation which he might be paying with steady rates than have to labor under a belief, as he must with unstable rates, that his competitor possibly gets a little cheaper rate than he does. Shippers, I think, in every section of the country will confirm that what they want to have is absolute certainty, uniform rates, no matter what they are; they want uniform rates first of all.

Q. Is it anticipated that there will be some popular apprehension of monopoly in the establishment of this community of interest?—A. Not if organizations like your commission treat the question in an intelligent manner, as no doubt you will treat it, and give the public the light; and not if those who can give information will give it without reserve. My own opinion is that if the public in general understands the question there can be no misapprehension and no fear as to the result.

Q. Will there be a willingness on the part of those owning the capital in railroads to have the railroads subject to public supervision that will be effectual for the protection of the peoples' rights?—A. I have not the least idea that this would be welcomed by every interest.

Q. Do you anticipate that this community of interest will be guarded so far as to bring into harmony substantially all of the railroads of the country?—A. That is hardly possible. What may be accomplished in years to come I can not foresee, but it is so big a proposition that it is hardly possible that the community of interest can be applied to every mile of railroad in this country.

Q. What is sought for at the present time is to bring into harmony certain great systems that have competed unfairly with each other?—A. It is just as you have stated.

Q. Those will embrace the trunk lines and the transcontinental lines North as well as South?—A. They are as likely to embrace the trunk lines and the transcontinental lines.

Q. To what extent is the shipping interest—the great ocean transportation lines—involved in this community of interest?—A. That is a subject I know very little about. What I could say is only from hearsay, and I would not give much for hearsay.

Q. You have been able to observe that something is going on in that direction, have you?—A. Only from what I have seen in the newspapers.

Q. Is it your opinion that the acquisition of certain ocean lines is in the interest of certain large railroads of this country?—A. I know nothing about that.

Q. (By Mr. FARQUHAR.) You spoke of the community of interest being practically subserved through the purchase of stock—the mutual purchase of stock in 2 roads. Now is it not a fact that within the last 3 years there have been practical evidences of this absorbing of the interests of roads?—A. I do not think that is the case.

Q. How would you state the position, as you very well know it, of the Pennsylvania system toward the Baltimore and Ohio?—A. The Pennsylvania Railroad does not, as far as I know, own to-day the controlling interest in the Baltimore and Ohio.

Q. Does not own the controlling interest?—A. No. The controlling interest, in my opinion, and I believe it has been so stated in legislation and in decisions of the courts, means a majority of the stock. A line has really no controlling interest so long as any one company owns less than 50 per cent in the other company. It does not actually own the controlling interest; and I am very certain that the Pennsylvania Railroad does not own a controlling interest in the Baltimore and Ohio.

Q. How does the directorate stand? Are the majority of the directors Pennsylvania system men or Baltimore and Ohio men?—A. I am quite certain that only the smallest percentage of the directors of the Baltimore and Ohio are in any way connected with the Pennsylvania Railroad system.

Q. Then, the cooperation of the Pennsylvania system with the Baltimore and Ohio as to rates has been reached, not by a Pennsylvania interest passing into the Balti-

more and Ohio on its directorate and so making peace as between the 2 roads?—A. I can not tell you that; I do not know that.

Q. Does that not naturally follow from the general phrase that you used, the community of interest?—A. Such is the intention—making peace, as you express it.

Q. Does this community of interest anticipate in any way the formation, the organization, or the financing of any transcontinental road, say, from the Mississippi or the Missouri River to the Pacific coast?—A. I have no idea what you refer to or what is in your mind.

Q. I refer to the question as to whether in the contest that has occurred between the Northern Pacific and the Union Pacific there is not involved possibly another transcontinental road or the extension of one of the trunk roads, like the Burlington, to the Pacific coast?—A. I am not aware of it at all.

Q. That has never been discussed in Wall street?—A. Not to my knowledge.

Q. Now, in the contest which has agitated the country and the people for the last month or two in respect to those two stocks—the Northern Pacific and the Union Pacific—is it the aim in that contest to make this same community of interest work between the two ultimately—between those who are financing and managing them?—A. I am not aware that there has been any contest. There may have been some Wall street speculation, of which I know nothing; but I am not aware that there has been any contest.

Q. How would you, as a financier, explain the fact of a single share of Northern Pacific stock going up to \$1,000 cash?—A. I can only explain it on the ground of somebody's having sold something he did not have, and when he wanted to get it back he could not get it back. Other investors have possibly bought perfectly bona fide a supply of stock for their own purposes. Gamblers who sold things they did not have and tried to get back what they had not possessed, found it was not there.

Q. Let us take a step farther. Do you know, or is it even a street rumor, a rumor at all, either in the London market or the American market of stocks, that one or the other of the parties, the Northern Pacific or the Union Pacific or the Missouri Pacific, in its extensions, intends to control two transcontinental roads if they can?—A. I know nothing about rumors. I never listen to rumors; nor do I know anything about one transcontinental line desiring to control any other.

Q. (By Mr. LITCHMAN.) Is not the idea prominent in this community of interest to establish a transcontinental line? Is not that one of the main objects of this community of interest and consolidation of interests that has been going on?—A. Not necessarily. The great systems of the country divide themselves into two divisions—the lines to and those beyond the Mississippi or Missouri River. I do not believe that the trunk lines, as they are generally called, have any desire whatever to extend their lines, either by combinations with other lines or by construction, beyond the North and South boundaries.

Q. Is it not the natural combination of these two interests, where the freight movement is east and west?—A. No. There is always, as far as I can see, a limit to what one system can handle, as I believe traffic questions in the different sections of the country are different; and I am convinced that the heads of large trunk-line systems on the one hand and of so-called Pacific roads or transcontinental roads on the other hand are very desirous of keeping apart, and very wise in doing so. For instance, the Union Pacific, which ends at Omaha and Kansas City, farther south, has never had any desire to cross the Missouri River or make any combinations which extend east of the Missouri River. It has always preferred to have every road—every trunk road that came to the Missouri River—come to it on equal terms and on an equal basis and use its facilities west of the river. The minute you extend east of the river you get into a hornet's nest.

Q. Your idea is that if they should have a line of their own they would immediately invite the competition which the community of interest has been desirous of remedying?—A. It would not invite competition; no. You can not serve too many masters.

Q. (By Mr. FARQUHAR.) Is it not a natural thing in railroad development and the acquisition of railroad properties to acquire even beyond the zone that you have mentioned, the Missouri River, for instance, where the terminals of the transcontinental lines are; for those who own big trunk lines to the East to extend and have under one control the roads beyond the Missouri River to the Pacific coast? Let me instance the Vanderbilt system: Is it not natural to suppose that the Vanderbilt system would now seek, under the stimulus of Asiatic trade and the Asiatic acquisitions of this country, to have control all the way from New York to Seattle or San Francisco?—A. Railroad problems are my weak point. What may be in the minds of those who guide the destinies of large railroad systems I do not know, but I hardly believe that any intention exists to deviate from the very wise policy of having a natural line about the center of the continent—a continental divide—across which neither those from the east nor those from the west shall go.

Q. Now, to carry the inquiry just a step farther, still referring to the community

of interest of which you have spoken so favorably here in the equalizing of rates, giving the purchaser and shipper, the consumer and the transporter equal rights, would it not naturally follow that in seeking that community of interest it would be right and proper for the owners of the great eastern trunk lines—I said the Vanderbilt, we will say in a measure the Gould system, the Wabash system, the Pennsylvania system, and even the Southern system—would it not be natural that they would acquire in that very community of interest and the purchase of stocks of other companies ultimately the control of a transcontinental line?—A. Not necessarily and not likely, in my opinion; but I can only express an opinion. I believe that these questions, much as I would like to answer them, when put to me will not lead to anything. I can only give vague opinions, which are not worth anything.

Q. (By Mr. LITCHMAN.) In the combination of these roads through the community of interest, what is your opinion in relation to the capitalization, whether it has been proper or excessive?—A. I do not believe that there is such a thing as excessive capitalization. It may be to the inexperienced, naked eye; but if you will take the market value of the stocks and bonds of different systems you will find how, finally, the actual market value adapts itself in one company to the market value of another company which may have an entirely different capitalization. In other words, while the "A" road may be capitalized at \$50,000 a mile, and the "B" road may be capitalized at only \$25,000 a mile, parallel lines let us say, you will find the \$25,000 capitalization in the market will probably sell for just as much as the \$50,000 capitalization.

Q. You think the market discriminates in over capitalization so-called?—A. The investor does. It is just like a natural law that works silently. The market value of competing lines exactly adapts itself to the relative level of each other's capitalization.

Q. Does not that estimate of value depend somewhat and even largely upon honest accounting on the part of the railroads themselves?—A. Well, you must always assume that people are honest.

Q. How far would you approve what is called the system of public accounting or public examination of accounts to secure that honesty?—A. Those are such large problems that I would not wish to give an off-hand reply to questions touching them.

Q. You see no objection, however, in having some guarantee that the information given of the standing of a railroad shall be accurate?—A. I believe that any dishonest action should be made punishable by law. As it is, I believe we do not need laws so much as we need to have our laws properly enforced.

Q. Is it not your experience or within your knowledge that there have been instances of dividends being declared that were not earned?—A. With reference to the corporations with which I am connected, I know that no dividend has ever been declared that has not been earned. Nor do I know as a fact, if you asked me the question, I could not point out a board of directors who have declared dividends that have not been earned.

Q. Do you not think that it has been done?—A. I believe, in general, directors act upon the figures before them. I believe that very generally directors are perfectly honest when they declare dividends.

Q. How far would you go in making the responsibility of the director personal for any misstatement of that kind?—A. There would be some difficulty in making the director personally responsible except for gross frauds, just as you could not make any one responsible for any negligence, except gross negligence.

Q. It is a matter of common notoriety that, in some corporations, what I have stated has been done; that dividends have been declared that are not earned. Now, where these corporations have their stock on sale in the open market and innocent purchasers buy on the strength of the reports made, ought there not to be some means of protecting these people when these reports are found to have been false?—A. Personally, I think it very wrong to declare a dividend that has not been actually earned, or for which a reserve does not exist. In conservatively managed railroads the earnings of one year are never paid out as an entirety. A railroad may earn 6 per cent and declare only 4 per cent, putting 2 per cent aside for a rainy day. I should not think it wrong if, in the following year, the railroad earned only 3 per cent and appropriated 1 per cent out of the excess from the previous year to keep its dividends uniform. But I would consider it wrong where a railroad company declared a dividend and practically had to create new capital to pay it.

Q. It would also, of course, be wrong for a railroad to declare a dividend one year and almost immediately afterward go into the hands of a receiver.—A. Decidedly wrong.

Q. (By Mr. FARQUHAR.) Practically in Wall street the worth of a stock is its earning power, is it not?—A. Yes.

Q. That is the financial rule of the street, is it not?—A. That is not only true in Wall street, but it is also true all over the world. The value of property is in the first instance determined by what it can produce. Every other value given is speculative.

If a road does overissue stock on presumptive earnings or extensions or by a vote of the board of directors is not that water practically eliminated by the rating that the market puts on the stock itself?—A. Almost always.

Q. Always?—A. Almost always.

Q. In other words, do not practically the financiers of Wall street squeeze the water out of the fictitious stock?—A. I do not know what you mean by the financiers of Wall street.

Q. I mean those who handle the finances of the road—all the railroad stocks and shares of the country.—A. I believe, as a rule, there are a very few companies or boards of directors that can increase their capital stock without a vote of the stockholders. So, if as you say, the stock is unjustly increased it is done by the owners of the property and not by the boards of directors.

Q. The point is this, that in the main the owners of large blocks of shares of a road can control all the lesser stockholders, and usually do.—A. Not as a rule.

Q. As a rule, is it not a fact that the motives and purposes of the road and the extending of its stock is controlled by the strong shareholders?—A. I believe every intelligent shareholder nowadays acts independently, and if anything is proposed by what you call the larger shareholders that is not approved by the smaller shareholders, they make themselves very readily and very forcibly heard.

Q. (By Mr. LITCHMAN.) What is your opinion of stock dividends?—A. As a general proposition I do not believe that stock dividends are advisable, but there may be exceptions to this if the stock dividend represents cash value or earnings actually retained in the course of years from the shareholders. For instance, if a road in the course of 10 years has earned an average of 8 per cent per annum, which in 10 years would be 80 per cent, and has paid its stockholders at the rate of 4 per cent per annum which would be 40 per cent, and for some reason has kept the remainder as a reserve, and acquired new property with it, I can see no good reason why the shareholder should not have a just claim for that cash which has been retained from him, in some form, either in cash or new stock.

Q. In the case of new stock it becomes a perpetual burden on the public, does it not?—A. It does not involve a perpetual burden. If you or I take our money to day and build a railroad and for that investment issue stock—

Q. (Interrupting.) But the laws of the different States restrict the building of railroads, and special privileges are thereby conferred upon the railroads already in existence, are they not?—A. That does not exactly meet the case. For instance, if I own to-day a line of road from New York to Albany, and want to build a branch, say, from Albany to Saratoga, and if, instead of issuing new capital, I take my earnings or the earnings of the shareholders of the company to build that new road with, I should be justified, after that road is completed, in returning to the shareholders their money which has been used for new capital in the form of new shares.

Q. That is true. Now, supposing the road from New York to Albany is already built and the road from Albany to Saratoga is already built, and each has been capitalized to a fair capitalization on the cost of building; if you combine those two roads and add as much more stock, so that the stock of the combined two roads is double what it was originally, would you consider that a just proposition to the public?—A. It all depends. It is impossible to answer the question, because so many questions of value enter into it. I could not answer offhand except as a general proposition.

Q. How far ought there to be a return to the public at large (from whom the franchise comes) in the shape of lowering the passenger rate and the freight rate?—A. So far as I understand it, transportation rates in general will adapt themselves, also by a natural law, to the prevailing rate of interest. If other investments, on an average, return 4 per cent, railroad capital actually spent, through some silently working law, can not be made to return more than 4 per cent, no matter what you do to force it. When railroads had to pay 7 per cent and 8 per cent 20 or 30 years ago for their capital, freight rates were more than double what they are now. Now, where railroads have to pay 3½ per cent and 4 per cent and 4½ per cent for their capital, freight rates are about one-half.

Q. There has not been much change in passenger rates.—A. Yes, there has; they have been changed very materially.

Q. It may be on long hauls, but not very much, say from New York to Buffalo, in many years.—A. I know very little about railroad matters, but so far as I know passenger rates, per mile, have gone down just about one-half.

Q. The State of New York fixes on the New York Central Railroad a maximum rate of 2 cents. That is a part of its charter.—A. Yes.

Q. The point is this: If by over-capitalization the New York Central Railroad doubles its capital, of course it may only pay a 4 per cent dividend or a 5 per cent or a 6 per cent dividend on the double capital; yet if it was required to restrict its payment on the single amount of capital it might result, might it not, in the reduction of the passenger rate as well as the freight rate?—A. Not likely. If the State

of New York permits the New York Central, as it does, to charge 2 cents, naturally it is the tendency of the railroad to maintain the rate at 2 cents as long as it can. But in fact, it does not. The New York Central transports passengers to-day at considerably less than 2 cents per mile.

Q. (By Mr. KENNEDY.) I would like to ask you if there is any probability or danger of this community of interest in railroads running into industrial combinations, such, for instance, as the United States Steel Corporation, and that company or corporation receiving favors on account of this community of interest which would be detrimental to the independent iron and steel manufacturers?—A. Personally I have no experience in industrial finances. My firm has not occupied itself with them, and I can give you very little information.

Q. (By Mr. RIPLEY.) Did not your firm underwrite a part of the securities issued for the United States Steel Corporation, for the American Bridge Company, the National Tube Company, and others?—A. Community of interest exists among bankers too. Bankers as a rule are very good neighbors, and we meet each other and combine capital when we have large financial transactions—larger than our resources can handle; we ask others to unite their resources with ours to handle a given concern under our management. That is what is generally termed a syndicate, and such exist very generally. Now, while my firm, as I said before, as a rule does not occupy itself with industrial financing that does not exclude it from taking an interest in the financing of industrial undertakings, when the financing is managed by others. Your question is perfectly well understood. If large bankers who financed the undertakings which you have named invited our firm, we no doubt to a very moderate amount accepted the invitation, but we had nothing to do with the details or the management.

Q. Did you know of the principle on which the United States Steel Corporation was financed, or did you see the statement respecting the basis of that capitalization which Mr. Schwab made before this commission?—A. I read Mr. Schwab's statement very hastily and the comments on it, but I do not know anything of the details of the financing.

Q. You said some time ago that the capitalization of a road is at once seen in the price of the securities. Is it not, however, recognized among bankers that you can sometimes double the amount of securities without thereby cutting the price in half? Will not investors sometimes pay a little more than half in the case of capitalization doubled?—A. Very exceptionally. There may be instances. Human minds differ, and you may for some reason believe that there are possibilities and probabilities in a certain company, from which opinion I may differ; but that means speculation, and that has nothing to do with the real value. Hence the real value always finds its just level, as water finds its level.

Q. I was referring particularly to the case of the Chicago and Alton road.¹ Your firm financed the capitalization of that road a few years ago?—A. It did not. The Chicago and Alton was simply a readjustment. It was not a reorganization, but a readjustment. It was an old-fashioned organization which had become so heavy that it was impossible to move it to expand the possibilities of the road, and the stockholders simply got together and decided they would readjust the finances of the company.

Q. Your firm had to do with the readjustment?—A. Our firm were large stockholders.

Q. What was the amount of capital of that road before and after the readjustment?—A. I can not give you those figures. I can only give you the facts showing that, independently of the large capitalization, the charges for dividends and interest in the new corporation do not vary, I believe, 5 per cent from the charges and dividends of the old corporation.

Q. The capital was increased, was it not, from something like \$30,000,000 to something over \$100,000,000, including stock and bonds?—A. I am not aware of that.

Q. I wish you could recall the figures in that case—I mean approximately—simply to serve as an illustration of this principle you have mentioned?—A. What I can very clearly remember is that under the old financing the charges for dividends and interest were something like \$2,600,000, I believe, and under the new scheme of finances which the stockholders adopted they were something like \$2,700,000, notwithstanding the fact that something like \$10,000,000 new money had come into the road.

Q. The total values of stock and bonds was very largely increased, was it not?—A. They were increased, but the dividends which for 30 years had been at 7 per cent were reduced to 4 per cent, which is nearly a cutting in half.

Q. The point I wanted to bring out was whether there was any increase in the burden on the public which they had to make up in rates by reason of this large increase of stocks and bonds?—A. I think that point I have very definitely answered by telling you that the Chicago and Alton Company, which paid, under the old arrangement for very unsatisfactory service to the public, something like \$2,600,000 to its

¹ Compare testimony of Mr. T. F. Woodlock, p. 458.

bond and share holders, to-day for very much more efficient service, brought about by putting something like \$10,000,000 into the company, pays perhaps \$2,700,000.

Q. It pays 4 per cent now instead of 7 per cent as formerly?—A. Yes.

Q. Is there not a constant temptation to increase that rate of dividend from 4 per cent up to 6 per cent; in other words, to regard 6 per cent as a normal return on that capital?—A. There is no more temptation to increase from 4 to 6 than existed before to increase the old dividend from 7 to 10.

Q. Might it not excite public comment very much more largely to increase the rate of dividend from 7 to 10 than to increase it from 4 to 5, or from 4 to 6?—A. Not necessarily.

Q. In the case of the acquisition of the securities of one road by another, is there ever danger that that purchase may be made at a high figure, which is for the time speculative perhaps, and that that may be afterwards fixed in the capitalization of the two roads exactly as Mr. Litchman suggested in his question?—A. That depends upon the good judgment of railroad managers. The fact is that where the acquisitions have been made during the past year or two they have been made on much lower figures than now exist, because railroad managers have been farsighted.

Q. Was there not a statement made yesterday officially that the remaining \$60,000,000 of bonds of the Union Pacific road out of the \$100,000,000 authorized were to be issued?—A. I saw some such statement in the morning papers.

Q. The statement was likewise made that that issue was to secure the purchase of stock in the Northern Pacific road by the Union Pacific interests. Have you any knowledge as to that?—A. I believe such a statement was made in the papers.

Q. Have you any knowledge concerning it? Your firm was concerned in the operation, was it not?—A. Will you repeat the question?

Q. I say have you any knowledge concerning that matter? Are there any statements which you are willing to make? The point I wish to bring out is as to whether in the case of the purchase of stock of one road by another that purchase may be made at perhaps a temporarily excessive figure and afterwards fixed in the capitalization of the road. To apply it to this particular case, suppose that \$60,000,000 worth of bonds of the Union Pacific road— A. (Interrupting.) Let me interrupt you. That is a leading question, which I prefer not to answer.

Q. (By Mr. FARQUHAR.) Could you give us a general idea about the proportionate amount of American securities that are held in Europe and in this country?—A. It is very difficult. Nobody can estimate that proportion correctly. To attempt to do it would be merely a guess. I believe that to day the amount of American securities held in Europe is extremely small; and the greatest protection to the welfare and prosperity of this country that can exist, the great strength of the country, lies in the fact that to-day Europe holds very few of our railroad securities.

Q. In those great transactions which occurred a few weeks ago in Wall street, where your clearing house made returns of over \$600,000,000 a day, is it a fact known in financial circles that the parties to those great transactions had all the capital and money back of them to sustain and hold the stocks even at the great rises that were made?—A. Wall street in the sense in which you no doubt mean it—the stock exchange—is something entirely different from what we should term the banking business. Large banking houses have only to do with Wall street in so far as it represents a market for securities. If my firm or any other large firm wishes to buy stock, it has to go into the stock exchange, or Wall street as you term it, to buy it; but that is the end of it. Speculation is something different. We pay for the stocks and bonds we buy and use them for the purpose for which we want them. The enormous rise in values which has lately taken place has to a great extent been the result of market speculation. People got insane and went into what is popularly termed Wall street and bought on margins, and naturally something had to occur, as it always does, to bring down these unreasonably inflated prices, and it did occur.

Q. Is it not a fact that, even with the great rise in stocks, ranging from 5 up to 40 and 50 points, there was American money back of that rise to sustain and hold them, and that American wealth and money back of it kept Wall street from a Black Friday during this last 3 weeks?—A. I do not know what you would call a Black Friday.

Q. Because there was no money back of the Black Friday it went down.—A. American money and American wealth and prosperity keep and will keep prices to their inherent natural level. Legitimate capital and legitimate prosperity can not and never will be used to build up a level of prices which is not justified.

Q. I am very glad you made that answer. I would like to hear you, if it were not quite late now, on two questions—first of all, the banker's profit and the men who are the conservators of American capital and speculation, wherein the safety of even the purchaser of stocks consists in the fact that the American banker, even in the same panic that took hold of Wall street a few years ago, came to their aid with millions and held the market and kept stock owners from ruin.—A. The American banker did not come to the aid of the speculator or help the market, as you call it. The American banker saved, as he always has done and always will do, the legitimate owners of securities from being compelled to sacrifice them at any price.

Q. You have had a long experience in banking, and especially your firm here, and a great experience in foreign exchange and the balances in respect to gold, etc. Is it not astonishing to you to see the amount of American wealth and American money far over and beyond the 2½ billions of circulating medium that in the last 2½ years have come in through industrials and through railroads and through general stock investments? Where has all this capital been for the last 10 years?—A. That capital has been partly in the earth—gold and silver that has been taken out. Partly it has been created by the creation of wealth. Wealth when created must have something to represent it. What does represent it is the bank note. The bank note or the paper currency simply mobilizes immobilized wealth. It is for this reason that government circulation, in my opinion, is unjustified, for government does not produce anything, and should therefore not be the maker of the vehicle of wealth circulation. The makers of the vehicle of wealth circulation—currency—ought to be those who represent the producers of wealth—the banks.

Q. (By Mr. KENNEDY.) Are you a believer in and an advocate of government ownership of railroads and telegraph lines?—A. I do not think that our Government is adapted to any centralization of power such as would be necessary to the ownership of the railroads; but that is simply a personal opinion and of no value.

Q. (By Mr. TOMPKINS.) In what way would you suggest they should be controlled? Now that power is growing daily to be more and more in a few hands, in what way would you suggest that these utilities be controlled for the benefit of the people? Is it better that they should be in a few hands than under Government control?—A. I believe that the silent laws of nature are better correctives than any written laws can ever become; but it is the right of government, and especially of a government by the people, to legitimately regulate those concerns that exist as its servants.

Q. Do you think it would be desirable for the Government to undertake a control of the railroads similar to that it now exercises over the banks?—A. I have not given this matter sufficient thought to answer that question.

Q. (By Senator KYE.) One of the best laws known to economics and most beneficial to the public is the law of competition. Do you think the law of competition is going to be preserved?—A. Undoubtedly. Capital is becoming so strong and so easily obtained that the moment compensation for any service is demanded at a rate in excess of that at which it can be produced, competition will set in.

Q. Suppose the transcontinental roads were to be consolidated; it is quite an enterprise to build a parallel line to preserve competition?—A. If the transcontinental lines were ever to be consolidated, which I very much doubt will ever happen in this generation (I do not know what will happen in the next), it would be the most certain way of immediately bringing about the construction of another line.

Q. (By Mr. CLARKE.) In your own opinion, is wealth being consolidated in a few hands, or is there constantly a larger distribution of wealth with the increase of wealth?—A. I believe that to-day there are more wealthy people in proportion to population than there have ever before been in the history of this country.

Q. Do you anticipate that the consolidation of companies or the establishment of communities of interest will tend to concentrate wealth, or will have the opposite effect?—A. I believe that the condition of affairs as it now exists will contribute to a larger distribution of wealth than has ever before existed.

(Testimony closed.)

WASHINGTON, D. C., June 15, 1901.

TESTIMONY OF MR. U. N. BETHELL,¹

General Manager New York Telephone Company.

The commission met at 11.02 a. m., Vice-Chairman Phillips presiding. At that time Mr. U. N. Bethell, general manager New York Telephone Company, 15 Dey street, New York, appeared as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. PHILLIPS.) Will you give your name and address?—A. U. N. Bethell; 15 Dey street, New York.

Q. What is your present position?—A. General manager of the New York Telephone Company.

Q. What business were you engaged in before you took this position?—A. For a time I was a Government clerk in Washington, and at the same time a law student. Soon after my admission to the bar I went into the telephone business, first in the legal and financial departments and later in the operating department.

Q. How long have you been connected with this telephone business?—A. Since about 1889.

¹See also for various statements criticised by this witness the testimony of Mr. Parsons, pp. 173-179; also supplementary statement of Mr. Parsons in this volume, post.

Q. Now, I have no doubt that you came prepared to make a statement in regard to the telephone business, and the commission would be pleased to have you proceed in your own way to make such a statement.—A. I shall first tell you briefly of the development of the telephone industry in New York City, the rates that are charged, the principles embodied in the rate plans, and something of the profits involved in the business; and then, if time permit and the commission desire, I shall give you some facts relative to the telephone industry in foreign countries; confining myself chiefly to the European countries, first, those where there is government or municipal ownership, and then those where the business is conducted by private enterprise.

First, as to New York: The New York telephone system is now by far the largest in the world, and represents the greatest per capita development among cities of 1,000,000 or more in the world. The growth in recent years has been exceedingly rapid, and the number of stations in the system now amounts to more than 62,600. In speaking of New York it may be proper to say that I shall use the words "New York" to mean that portion of New York City as now constituted, comprising the boroughs of Manhattan and the Bronx. That is old New York City, which is generally known as New York to day. The New York company covers a much larger territory than New York City, but I wish, for the sake of clearness, to speak first of the conditions in New York City, because that will show you the conditions in a great city. The telephone business was begun there practically in 1878, and the period from that time to the present may be divided into two parts, the early period running from 1878 to 1894. At the end of the early period, 16 years, there was a total of about 11,600 stations, and during the later period, from 1894 to the present time, 7 years, there was a gain of 51,000. I do not wish to give the impression that the gain during that early period of the development of the telephone industry in New York City did not compare favorably with developments in other parts of the world; I think it did. But I wish, by presenting these figures, to show you graphically what a tremendous development has occurred in the last few years, and that statements made about the telephone industry a few years ago are not at all to be relied upon at the present time.

Q. (By Mr. LITCHMAN.) Where you speak of stations, you speak of places where the telephone is installed, do you?—A. I speak of the station as a telephone installed—that is, a set of instruments from which one may talk to another person, using a similar set of instruments at another place. Now, this growth has been exceedingly rapid during the last 3 years, the gain during that time being more than 37,500; and during the last 2 months the gain averaged almost 2,000 a month. A very conservative estimate of the conditions in New York at the end of this year will perhaps place the number of stations at over 72,000, probably nearer 75,000. Now, it is interesting to note the causes of this rapid, unparalleled development. First of the causes, I should say, is efficient service; and then a growing recognition of the utility of the telephone in conducting various commercial and social transactions; and, chief of all, the rates, including the principle that is embodied in the rate plans, and the actual reductions in rates that have been made.

In speaking of the efficient service, I will briefly outline what has been done in the way of providing plant from time to time. The policy of the company has been to adopt improvements whenever their worth has been demonstrated, practically regardless of cost. As illustrating this, I would say that during the earlier years, in New York as elsewhere, all wires were overhead, and single wires were used. That is, earth was used as a part of the circuit. The New York Telephone Company had a very extensive overhead plant. In the development of the art it was found that the proper thing for best service was a metallic circuit; that is, two wires connecting each station to the central office. Without such construction it would be almost impossible to handle long-distance traffic, and every station in New York for several years has been so connected and so equipped and so maintained that talking from it could be successfully carried on to the most remote points; so that the subscriber in his residence and the small shopkeeper talk to remote points with just as much facility and ease as a banker or broker or the largest subscriber in the system. New York was among the first to undertake this great work, and for many years has had an exclusively metallic-circuit system. When I speak of conditions in Europe I shall show that in a great many places overhead single wires are still in use; thus showing the continuance of methods in some larger European cities which we began to abandon in New York away back in the eighties, and completely abandoned many years ago. This great change in the method of working involved a reconstruction of the entire plant, covering a number of years—from 1887, approximately, to 1893. The overhead lines were sacrificed, the poles were cut down, and the wires were sold for junk. Iron wires actually brought nothing. We may say the whole line plant was thrown away, and this plant represented on the books an amount perhaps in excess of \$1,500,000. The underground cables that were first put in to replace the overhead wires, the types adopted being new and untried, were, many of them, faulty, and worked unsatisfactorily. That was a very expensive experiment, before satisfactory cables were obtained. A large switchboard at one of the company's central offices had just been completed at a cost of \$180,000, for single-wire working. Through

this change in the art it was necessary to modify it at an additional cost of \$80,000 before it could be used for metallic-circuit working. I only mention these facts to illustrate with what rapidity the changes in the art have taken place, and to what great expense telephone companies are required to go in a great city if they keep pace with the development. In the past 12 years some of the company's exchanges have been reconstructed three times. What we now view as the most important change was the introduction of the common-battery system about 3 years ago. That required the substitution of an entirely new equipment at all of the central offices and at all stations to put the system on an up-to-date plan of working. Now, in order to do that, the company abandoned a plant, that is, a central office and station plant that was perhaps sufficient to serve a system of 30,000 stations. This work has been of such magnitude that 3 years have been consumed in carrying it out. The final work is nearing completion, and before September the Manhattan system will be working on the new basis. Another thing that I wish to mention in passing is, that the gain in 3 years of 37,500 stations does not mean as much, taken as a single fact, as when you connect that gain with the fact that to make it, it has been necessary to connect about 62,500 stations, the difference between the two, or about 25,000, being disconnected through people going off. The net gain was 37,500 in the 3 years. Very recently a European expert wrote that New York has not only the largest, but technically the best, system in the world.

Now I come to speak of rates, and I shall divide the period between the commencement of the business and the present time, for our convenience, into two periods, substantially the same as those mentioned when I was speaking of the growth.

Q. (By Mr. FARQUHAR.) When you abandoned the system there, did you adopt the conduit for all your wires?—A. Yes.

Q. All over the system of New York?—A. What system?

Q. That is, the system of the sunk wire.—A. Underground?

Q. Yes.—A. Oh, yes.

Q. Is that system all over the Manhattan and Bronx?—A. Not over all the Manhattan and Bronx. That is all over Manhattan, and a very large part of the work is underground in the Bronx. When it was decided to change from an overhead to an underground system, laws were enacted by the State legislature prescribing the methods that should be followed. First, naturally, the densely populated, telephonically speaking, parts of the city were to be dealt with, and as rapidly as possible the work was to be extended to all parts of the city. At the present time there is not a pole line in Manhattan, outside of a very small section north of One hundred and thirtieth or One hundred and fortieth streets, excepting one main trunk line used for long-distance wires.

Q. Was this provision that was made by legislation made only for your own wires or were there any municipal wires placed in your conduit?—A. Municipal wires?

Q. Yes.—A. The legislation provided for the building of subways for all wires; but wires bearing low-tension and high-tension currents were not put in the same subways or on the same side of the street.

Q. Can you give the commission any idea how much it cost your company to make that change by throwing away the old system? You said a million and a half in one case, but in the installation of the new system how much was the cost of that?—A. Well, I do not believe that from memory I could separate that figure from the rest of the accounts, but perhaps I may be able to give you a clearer idea when I come to talk of the profits of the business.

Q. (By Mr. LITCHMAN.) Are those conduits established by your own company?—A. No; those subways were constructed and owned by a separate company.

Q. Under a franchise from the city?—A. It was pursuant to the act of the State legislature.

Q. Well, the city would have to grant the right of location, would it not?—A. Oh, yes; there was a board of electrical commissioners appointed under whose supervision the work was carried out. The functions of the board afterwards passed to other officials and are now lodged in a commissioner.

Q. (By Mr. FARQUHAR.) This commission was to form a subway system for the city of New York for all wires, was it not?—A. Yes. The work of the commission, as I remember it, as outlined in the several acts passed, was to invite the submission of plans and to adopt some general comprehensive scheme for transforming as rapidly as possible the overhead into an underground system.

Q. (By Mr. LITCHMAN.) I would like to know something about this particular corporation which controls the conduits or subways.—A. I am not connected with that company in any way, and the information I have given you is simply through a knowledge of the law, which is open to anyone.

Q. (By Mr. PHILLIPS.) Are the offices of the one company connected with the other company?—A. Some individuals are officers in both companies.

Q. (By Mr. FARQUHAR.) Is the subway company a separate corporation from the telephone company?—A. Yes.

Q. Totally separate?—A. Yes. There are two distinct corporations. The affairs

of the two concerns are conducted separately. There is a financial or stock interest between the two. As fully as I can state it, the relation is shown by these facts: It became necessary to bury the wires, because of their great number and also because there was a widespread popular dissatisfaction with the conditions, the streets being full of poles carrying all kinds of wires belonging to various companies. It was desired to provide a general plan for all wire users. But burying wires was a new experiment, and capital hesitated; it did not want to go into it, and the people connected with the telephone industry put up most of the capital, as I understand it, and made it possible to carry out a general and comprehensive plan of putting the wires underground. There was nothing in the entire transaction that was not in every way creditable to the telephone interests.

Q. Then it was a corporation formed to work in harmony with the Bell Telephone Company?—A. They have worked harmoniously, and the public has not suffered because of that, but, on the contrary, has benefited largely by it. Some of the other occupants of the subways may also have been interested, but to what extent, if any, I do not know.

Q. What other occupants of the subways are there?—A. Companies operating telegraph lines and electric lines of various sorts.

Q. (By Mr. PHILLIPS.) Electric lighting?—A. Electric-lighting wires carrying high-tension currents are in an entirely different subway system.

Q. (By Mr. LITCHMAN.) An electric-light wire, I understand, carries too high a voltage?—A. They generally carry too high a voltage to occupy the same subway with telephone wires.

Q. (By Mr. FARQUHAR.) Are not municipal wires put through the same subway?—A. The fire department and police department wires are in the same subways.

Q. Was there anything in the charter of the subway company providing that any competing company might have the right to lay wires?—A. The subways are open to all on equal terms under general laws. There is nothing exclusive about it.

Q. Proceed in your own way.—A. I was about to speak concerning rates. Now, during this early period, when single wires were used, the rates were all flat. By flat rates I mean that all subscribers having the same general character of equipment paid the same amount, whether they used the service much or little. In the early times, the business was commenced by renting the telephone, and the idea of renting telephone having once gained a footing remained for a long time. When the business grew and became large, that idea was replaced by another idea—the correct one—that the company's business was to render a public service, not to rent a telephone. During the very early days, the flat rates ranged from \$60 to \$150 a year for single-wire service, and later, when metallic-circuit service was introduced, they ranged from \$120 to \$240 a year. There never was a time when all New York subscribers paid \$240 a year. There were lower rates; for example, \$180 for residence service, \$150 for party lines, \$114 for a second line, and various other rates; but the business flat rate was \$240. That being the rate most generally used became known as the New York rate; and even at the present time some students of telephone matters will speak of the New York rate as being \$240 a year. This is especially true, I may say, of magazine and newspaper writers outside of New York City who have not kept posted as to the changes that have occurred.

The great growth which I have spoken of commenced in 1894, and it was in that year that the New York company adopted an entirely different plan of charging for telephone service in New York City. We call it the message-rate plan, because the message, instead of the station, is taken as the basic unit in making the rate. It is a very simple plan. The subscriber pays for the service rendered in his particular case. There is a minimum charge, for which the subscriber may send a stated number of messages, with additional charges for additional messages, the amount per message decreasing as the number of messages increases. Practically, the wholesale principle that applies in ordinary business transactions is applied. The rates in New York now range from \$24 a year up for exchange service. There are other lower rates for supplemental stations as low as \$8 and \$12 a year; but for the primary connection, by which the subscriber puts himself in relation with the other subscribers in the system, the lowest rate is \$24 per year.

Q. Is there any competition in the city?—A. There never has been any competition in New York City. In Manhattan, where there are about 60,000 stations, the rate ranges from \$60 a year up; that is to say, for \$60 a year the subscriber has the right to send 600 messages to any and all parts of Manhattan.

Q. (By Mr. FARQUHAR.) Will you state what this \$8 rate is—what the subscriber is entitled to?—A. In just a moment. There is no maximum rate; but the charges for additional messages ranging from 6 cents down to 3 cents are so arranged that the traffic-carrying capacity of a line in New York practically limits the total rate in most cases to approximately \$240 per year. It would be fair to say, therefore, that, excluding exceptional cases, the rates in Manhattan range from \$60 to \$240 a year, according to the amount of service that each man receives. There are other rates

for special conditions. For instance, there may be a demand for a particular kind of service in a particular place. Take Harlem. Harlem is a city within a city. It has its own theaters, newspapers, banking institutions, and everything that goes to make up a city—a very large city, too. There is considerable local sentiment. It is center for a large number of people whose transactions are within Harlem. In our constant endeavor to give the public every rate that they may possibly ask for, we have introduced a rate in Harlem under which the subscriber pays 5 cents for a Harlem message and 10 cents for a message to any other part of Manhattan or the Bronx, guaranteeing only \$3.25 a month, or \$39 a year from the combined business. This message-rate plan has been worked out also in a way peculiarly adaptable to large business concerns. In the old times when a large business house would try to transact its business over one telephone, the result was that the telephones were constantly reported "busy," traffic was impeded, and the service was bad. A man will give precedence to the message that he wants to send, over the message that somebody else wants to send to him. By trying to do the business over one line many subscribers practically close their doors to would-be customers or people who want to transact business with them. Now, to obviate this, we worked out, in connection with the message-rate plan, a scheme under which a small switch board is located on the subscribers' premises, and in the various parts of his building, wherever he may desire them, telephones are located. The rate for these telephones is \$12 a year each. This local switch board is in turn connected with the general system by trunk lines running to the nearest central office. These trunk lines are paid for at the rate of \$36 a year. The subscriber guarantees 3,600 messages a year, and may send all of the messages that he pleases for 5 cents each, or \$3 a hundred, which, considering that you have the message and the reply, is actually cheaper than postage. This has proved tremendously popular among the larger merchants and great institutions, newspapers and banks, and with the steamship companies and railroad companies. At the present time the company is operating more than 1,200 such private branch exchanges.

Q. (By Mr. C. J. HARRIS.) How many telephones would be on some of these exchanges? How high would be the largest number?—A. They run from 2, 3, or 4 up to 180. Now, in that connection I will take up your question about the \$8 rate. I said there were rates as low as \$8 to \$12 for supplemental stations. In hotels the rates for stations in connection with the private branch exchange are from \$8 to \$12 per year per station. There is another class of business, called interior service, even at lower rates, which I will speak of later on. To this message-rate system, or this plan of charging for what you get, I attribute largely the remarkable growth that has occurred in recent years.

Q. Is there no trouble in keeping count of the number of messages sent?—A. There is always trouble in all kinds of business, but it is not insurmountable. As to the fairness of the principle, the question was carefully considered by a committee of the New York legislature some time ago, and it reported as follows: "With a fair minimum rate as an equivalent for the possession and right to use the telephone, and a reasonable scale of prices for connections, if used, the toll system seems to have for both customer and company marked advantages over the flat rate." This whole subject was taken up by an English Parliamentary committee, and I will read you an extract from the Blue Book later. The plan has also been adopted by the German and Danish parliaments and recommended by the management of the Amsterdam municipal telephone undertaking, but not adopted. I shall give you the particulars of that when I come to speak of Amsterdam. It has been adopted also by the Government in Switzerland, and in Stockholm it has been followed by the private company, and the private company has far outstripped the Government in competition, which has offered flat rates only. But this message-rate principle has been more generally adopted in the United States than anywhere else in the world, and, so far as results are concerned, in the way of development of the telephone industry the conditions are more satisfactory in the United States than elsewhere.

Q. (By Mr. FARQUHAR.) Would it trouble you just here to explain the unfairness of the flat system in comparison with the message system?—A. Inasmuch as I do that incidentally to the presentation of these several reports of foreign governments, I would like to leave that until later. In a system where you have a flat rate, you can only compare that rate, other conditions being equal, with the average rate in a system where you have a graduated scale of rates. On the first of this year the average rate in the city of New York was \$87.62; now it is safe to say that it is \$85. This includes all stations, even the \$240 flat-rate stations, except pay stations, of which there are about 4,000 in Manhattan. The rate is 10 cents for a message from any one of these stations to any part of Manhattan, of which 8 cents goes to the company.

There is great misapprehension about this \$240 flat rate, as I intimated before. When the new rates were introduced the subscribers went very rapidly from the \$240 class over to the new rates, because they could save money by it and get all the

service they wanted for a much less sum of money. The company never abolished it, but the public has practically abandoned it. At the present time, at this rate, there are less than 1,400 stations out of a total of 62,600, or less than 2½ per cent, so that it becomes practically a negligible quantity. I take it that the rapid development of the telephone business in New York City shows tolerably clearly that the rates and service are generally satisfactory to the public. Those rates and the service furnished have attracted a larger degree of the public patronage than has been attracted by any other telephone company, whether operated by government, municipal, or private enterprise, in any other city of the same class in the whole world.

Another very significant fact is the absence of any general demand for a revision or reduction of rates. Some years ago when the flat-rate system was in vogue, a number of gentlemen (with the very best of motives but with a great deal of misinformation) went year after year to the New York legislature seeking some sort of relief from the burdens which they felt the public was carrying. They urged bills under different names and titles year after year, but all of these were so framed as to perpetuate the old flat-rate principle. I do not care to thrash out that old straw, except to say that, during the last 2 or 3 years, the conditions have changed so entirely that no business association from New York and no individual subscriber, so far as I know, has gone to the legislature to ask legislation of any sort on the telephone question. Formerly a number of important commercial bodies in New York interested themselves in the question, and we sat down with them and talked the matter over in a plain, common-sense, business-like way. Finding that we were solving a very difficult problem as rapidly as it could be solved, they concluded to leave the matter in our hands; and I think it perfectly fair to say that now many of those gentlemen, as some of them have already done in writing, would admit that, if what they urged a few years ago had been enacted into law, disaster to the telephone industry in New York and great public inconvenience would have followed.

Q. Well, were not those associations in New York, like the board of trade and transportation and others, justified, under your \$240 rate and its inequalities, in going to the legislature for remedy? Of course, when the rate fell, there was no necessity for agitation or further pursuing of these plans.—A. The \$240 rate was not an excessively high rate under those conditions. It was a particularly unfortunate rate; but, up to that time, the whole efforts of the management had been directed toward the upbuilding of a proper plant to render efficient service in New York; and, while there was some justification for public dissatisfaction, the remedy offered by the board of trade and transportation and others associated with them would have made the conditions far worse even than they were at that time. I think that is generally admitted now, because they were urging a flat rate throughout New York. The flat rate that they chiefly urged was \$125. At the very time they were urging that flat rate, the average message rate in New York was less than that amount. But there is always some dissatisfaction, because the public interest is best served by the operation of only one telephone system in a given area; that is, by the maintenance of a monopoly. That dissatisfaction is, as experience shows, always aggravated by competition. The causes of that dissatisfaction are erroneous ideas as to the profits of the business and misinformation as to the rates elsewhere, especially those abroad.

Q. You made a statement there as to monopoly and the necessity of unity in the operating of the telephone. Will you state what the disadvantages are of 2 lines, 2 companies, even under the same rates, to any business man?—A. I shall show you those disadvantages very graphically when I come to speak of Stockholm, because there we have the Government and a private company operating, and the disadvantages are clearly shown in the conditions existing in Stockholm.

Generally speaking, however, they are 2 systems doing the work of 1, frequently double rates to many subscribers, and an amount of annoyance and exasperation to the general public which must be experienced to be fully appreciated.

Now, as to the question of profits. The legislative committee that I spoke of a few moments ago, appointed by the New York legislature, which made a report in 1888, took notice of this abandonment of properties that I have spoken of, through the doing away with the overhead wires, and they placed the loss through that abandonment at three-fifths of the company's net earnings from its organization. They presented figures which, taking that loss into account, showed remaining net earnings for 7 years—that is the period covered by their investigation—to be less than 10 per cent per year. As I remember it, the exact figure worked out was 9.66 per cent. A great deal of misinformation has been spread abroad through figures, based on that report, which did not take into account the committee's statement respecting the losses, and which, therefore, were entirely misleading.

Q. (By Mr. LITCHMAN.) Do you mean to say that it was 9.66 per cent over and above the expense that you went to to install the new system?—A. Oh, no; the cost

of installing the new system certainly had nothing to do with the figures which I am speaking of. The net earnings of the company up to the time of this report were first ascertained. This committee decided that the loss through the abandonment of the old property, not the investment in the new property, would sweep away three-fifths of the net earnings accumulated up to that time, and the remaining net earnings, after that three-fifths had been swept away, figured out a percentage on the investment, as shown in the report, of less than 10 per cent per year. Is that clear?

Q. No, it is not; because I do not now understand whether you mean that after charging off the expense of this new installation the company was able to make a little less than a dividend of 10 per cent.—A. I am speaking of the period prior to 1888. Any money that the company laid out in the way of the investment after that date has no connection with the figure that I am talking about.

Q. (By Mr. C. J. HARRIS.) Why do you not put it in this way? I understand that the company would have paid less than 10 per cent with a proper deduction for depreciation which has to be taken into account.—A. That is exactly the idea.

Q. (By Mr. LITCHMAN.) It was not clear to me whether you meant that the cost of the abandonment came out of this little less than 10 per cent earnings, or whether it was paid out of the surplus that had been accumulated previously and held for possibly just such contingencies.—A. That is it; that is exactly the case; but the future or subsequent investment does not figure in that at all.

Q. Well, that would come out of your cost of construction, would it not—your new system?—A. The subsequent investment was made through funds raised in other ways.

Q. I understand. And the funds raised in other ways came either through the issue of interest-bearing bonds, which had to be paid, or through stock that was added?—A. Quite so; and I am coming to that period. I am dealing now with the period up to 1888.

Q. The cost of the abandonment of the old plant up to 1888 was compensated to the company out of the reserve or accumulated earnings. Is that a fair statement?—A. The legislative committee so reported. That committee made a very exhaustive report of conditions all over the State of New York; and I may say in passing that it reported as to every place except Troy (and in Troy it found some unusual conditions) that no telephone company had made unusual profits, and that some of them had lost money. It also reported that nowhere in the State had it found that excessive salaries were paid to officers.

Q. In figuring that did the legislative committee take up the question of capitalization? Let me go further and suggest this thought: If the capitalization, let us say, were \$5,000,000 on a certain plant, and the dividend earned was 10 per cent, it would seem a fair dividend; but if there was an overcapitalization of \$2,500,000, then the real earning would be 20 per cent.—A. Well, I take it that the legislative committee, being made up of competent men, if it had found what it believed to be an overcapitalization, would not have made the report in those general terms, because it could not say, under the conditions that you refer to, that exorbitant earnings had not been made. I would say, as to the New York company, that the committee's report did take into consideration the investment made.

The New York company paid no dividends from 1888 to 1896. Since 1896 it has paid 6 per cent per annum. A far more significant figure than that is the percentage of expenses to earnings. The percentage of expenses to earnings for some time has been about 65 to 67 per cent; during the first 4 months of this year the actual figure was 65.3 per cent. This percentage indicates only conservative management. Any larger percentage would be unsafe, and it would not be possible, with a much larger percentage, to get capital to make extensions to meet the public demands. I think that does not require any particular argument.

Now, I pass to the question of wages, which I wish to speak of briefly. The New York company has in New York City 3,615 employees, or approximately that number, at the present time. The pay roll of the company for its New York force amounts to more than \$40,000 a week, exclusive of officers' salaries. When Professor Parsons, whose testimony I have read, was testifying before this commission, he said when he came to this point that abominably low wages were paid to telephone operators and that in this country they were little, if any, greater than in Europe. Now, on the contrary, the New York Telephone Company pays very liberal wages. The hours are reasonable, and the conditions with which it surrounds its employees are the best, I believe, that any telephone operators in the whole world enjoy. The company has made a point of getting employees of a high character, and to that end has adopted a high scale of wages and in every way has sought to make its service attractive. It goes to a very large expense in providing retiring rooms, sitting them up properly for the comfort of operators when they are off duty, reading rooms, locker rooms, and resting rooms, where, if a girl is tired, she may lie down and rest for a time; and dining rooms, where the company furnishes tea, coffee, and milk without charge. A short time ago Mr. Lockwood Kipling, the English artist, father

of Rudyard Kipling, was in New York and came to look over the telephone office as a place of general interest. He went all through it, saw the girls at work, and made remarks on the provisions for ventilation and for the comfort of the girls when at work. Then he went through the operators' quarters, which have been provided for their occupancy when off duty. Of course, he also took an interest in the mechanical contrivances. He said, "I wish I could understand the whole thing, but I do not. But what I admire most is the humane way in which you treat your employees."

Q. (By Mr. LITCHMAN.) You say that the wages are \$40,000 a week?—A. The wages are more than \$40,000 a week.

Q. How many operatives or employees does that cover?—A. That covers, as I say, about 3,615. I can not give you the exact number of males and females, respectively, but I will do that if you would like to have it.

Q. That approximates \$12 a week on an average?—A. Yes; I have not figured it out.

Q. Not quite \$12 a week?—A. I would say, however, that the New York wages are from 50 to 150 per cent higher than the London wages, and the average is about double, and that New York wages are very materially higher than continental wages. Trained operators in Europe get from about \$2 to \$6 a week. The trained operator in New York is paid from \$8 to \$12 a week. When a girl is first employed she serves a period of apprenticeship, learning the business, and we pay her a nominal sum—about \$3 a week while she is learning. As soon as she is able to go to work she is advanced, and again when she is able to occupy a position at the board, when skilled, the pay is from \$8 to \$12 per week. There are female employees in the switch rooms getting \$15 or \$17 a week, wages such as are paid nowhere in the European countries. For linemen, wiremen, inspectors, and mechanics generally the European average is about \$6 a week, possibly a little higher, but not much. In New York similar grades are paid from \$12 to \$21 a week.

Q. (By Mr. KENNEDY.) You say in Europe. Now, you are making a comparison of Europe with New York?—A. Of European conditions in particular.

Q. Are you picking out the great cities in Europe to make that comparison, or is it all over Europe?—A. I am giving wages paid in European cities.

Q. (By Mr. FARQUHAR.) Does the wage question enter into the details you have for European countries?—A. Yes.

Q. Each country separately?—A. Yes.

Q. When you speak of this general average, how high a class of service comes into that—clerks and salaried officers, or are you speaking only of operatives and employees proper?—A. I am speaking now of the operators, linemen, wiremen, and mechanics generally. Foremen are paid from \$7 to \$9 in Europe; in New York, from \$18 to \$25 a week. Now, in the higher grades the differences are even greater than these. An exchange manager in New York is paid as high as perhaps the highest engineering officer in some of the European telephone systems. The hours of labor for men are 8 hours a day in New York; in Europe you will find that 10 hours generally constitutes a day's work. Taking the employees as a whole, some work 7 hours, some 9, but the great body of the employees work 8 hours a day.

Q. (By Mr. LITCHMAN.) Do the girls at the boards work 8 hours a day?—A. The girls at the boards have various shifts. The service is maintained at all hours, Sundays and holidays, all the year round. One of our rules is that the operator who works on Sunday shall have a day of rest, with pay, in lieu of the Sunday on which she works, in order that she may have at least 52 days of rest during the year, exclusive of her vacation.

Q. (By Mr. LITCHMAN.) Now, that brings up another point. Is your weekly computation on the basis of 6 days a week or is it on a basis of 7?—A. There is extra pay for Sunday and overtime. Our men are all paid extra for overtime. A man working over 8 hours a day gets extra. It is regular time, and time and a half time under different conditions.

Q. Is it true that you run the switchboards on substantially 3 shifts a day of 8 hours each?—A. Well, that is not quite true.

Q. One will lap over another, I presume, so that the work continues?—A. Yes; the work is continuous, but there are not 3 regular shifts.

Q. I understand that; I understand what you have in mind.—A. There is a night force and a day force, and the arrangements are such that operators going on early in the morning go off early in the afternoon, and those going on later in the morning remain later in the afternoon. They have an hour at noon, and there are 2 rest periods—one in the morning, the other in the afternoon. The actual employment ranges from 8 to 84 hours a day.

Q. When does your day shift come on?—A. The telephone traffic is peculiar. It is very light during the night. In the early hours of the morning it does not amount to much, but at 10 o'clock or 11 o'clock it goes up with a bound. It goes down again at noon, during the lunch hour, when people leave their business places for a time,

and then again in the afternoon at 2 or 3 o'clock it goes up to a very high pitch, and off again toward evening. We must have more operators on duty during the busy hours than during the slack hours; and these facts are taken into account by the managers who regulate the hours of operators.

During my connection with the company we never have had a strike or a labor trouble of any sort that I am aware of. We endeavor to anticipate every demand that might reasonably be made, and as a result we have never had a grievance presented from any body of employees. On a few occasions some of our men have, in a proper way, presented some request or other, and we have, on looking into the matter, considered it proper to grant the request. No one, when once employed by us, can be dismissed except for cause, and then only with the approval of an officer of the company.

Q. Now, one question further in relation to the effect of the work upon the girls—that is, upon their nervous system. Have you noticed any effect of that kind?—A. We have very few resignations, except when a girl gets married or gets a better position. By better positions I mean that, through the building up of private branch exchange systems, which I have spoken of, a demand for a high class of telephone operatives has been created in New York. In one of our exchange districts—nearest the Battery—there are more skilled telephone operators getting good salaries with business houses on private branch exchanges than there are in the central office. A new demand for labor has been created. It is well paid and well treated. That has made a great draft upon our operating force.

Answering your point more directly, I may say that a short time ago, during one of these epidemic scares, the board of health of New York sent an inspector to look through the various central offices to see the conditions under which the operatives worked and examine the girls physically, in order that there might be no danger of a spread of contagious disease should one develop. He reported officially that he found all the conditions under which the operators worked most excellent, and that he found no ill health among any of the operators.

I was speaking of the causes of such popular dissatisfaction with telephone matters as exists, and referred to misinformation about rates and conditions in foreign countries as one such cause. There are many obvious difficulties in the way of making fair comparisons. Perhaps the most misleading practice—unfortunately a very common practice—is that of comparing the respective conditions and rates in places widely differing in size. We need not consider the proposition, as it is frequently stated, that in rendering telephone service the cost per station increases as the number of stations increases. Stated in that way, the proposition is a very difficult one. What we really should consider may more properly be stated in this way: The amount to be paid per year or month by a telephone subscriber in a large city should properly be more than that to be paid by the subscriber in a small town. This is particularly true when the station is taken as the unit of charge, and the correctness of the proposition is very generally accepted.

The almost universal practice by private companies and governments, except Switzerland and Sweden, is to charge more for telephone service in a large town than in a small one. It is practiced everywhere throughout the United States, England, France, Belgium, Austria-Hungary, Germany, and elsewhere. All proposed legislation on telephone matters, so far as I know, has been framed in recognition of the principle. The German parliamentary report contains an indorsement of the correctness of this principle. There is an indorsement of it in the Amsterdam report, where the municipality conducts the enterprise. This custom is also followed generally in the United States. It is not followed in Switzerland and in Sweden for special reasons. In Sweden the Government charges even a lower rate in a large town than in a small one, because it is in competition in the large town with a private undertaking, and it is not in competition in the smaller places. In Switzerland, where there are few large cities, the entire state is treated practically as one exchange system, with a uniform rate throughout.

Trondjhem, a little town away up in Norway, was referred to in testimony given before this commission as being a remarkable instance of the results of cooperative or municipal telephone management. The Trondjhem system is at present owned by the Norwegian Government and shows a very slow development, much inferior to that of many places of similar size in this country. Trondjhem has a population of 30,000 and at the first of this year had only 1,175 telephone stations, the gain during the last year being 75 telephone stations, or 6.8 per cent. On either side of the American continent you can find places much smaller than Trondjhem and places that are about the same size where the telephone development is very much greater and the increase in the use of the telephone very much more rapid. I shall only mention one in my own territory. Take the town of Larchmont. We have per 100 inhabitants 18 telephones, against Trondjhem's 3.8. We have in Spokane, Fresno, and San Jose, on the Pacific coast, respectively, 10.3, 12.4, and 12.6 per

cent, against Trondjhem's 3.8; so that it is not necessary to go to Norway to find illustrations of large development in small places.

Another thing I think I ought to refer to in this connection: The rate of the expense of operating a certain telephone system in the Interior Department was spoken of before this commission. Now, in connection with the legislative work at Albany, which I spoke of a few minutes ago, I had occasion to look into that Interior Department service at one time. I found that the system was confined to a few buildings, those occupied by the Interior Department and its branches, all near together and connected with a very few wires—a very cheap system. The Government, however, invested, as I remember it, \$6,000 in that plant. The witness stated that the Department substituted its own for 65 Bell telephones previously used, and that the Department had been paying \$600 a year to an operator. After the change he says the operating cost was \$6.43 per station, a total of \$417.95, and that the total cost, including interest, depreciation, and repairs, was \$10.25 per station; that is, \$248.30 for interest, depreciation, and repairs. The investment being \$6,000, interest alone at 4 per cent would amount to \$240 per year, leaving \$8.30 for depreciation and repairs. As to depreciation, I shall show in a moment how short lived the system was. As to repairs, I think it perfectly safe to say that the services of one man were engaged almost exclusively in trying to keep the plant in repair. But why go further in this analysis? The figures appear to be ridiculous, but should we accept them as correct, what then? In New York we have interior systems which we furnish and maintain for rates ranging from \$6 to \$12 a year per station, the subscriber paying the cost of installing the necessary wires on his premises. The operator or clerk who attends to the switching is the subscriber's employee, but that item of expense is more than offset by the salary of the repair man in the Interior Department case. On the question of depreciation it is proper to ask, What became of the Interior Department system? In official reports, which are open to anyone's inspection, it was declared that during the 2 years it was tried not 1 day—that is the way the officer put it—not 1 day was the service satisfactory; and he declared that after 2 years' trial it was worse than the old messenger system which they had previously had for communication between the Departments, and recommended that unless it could be put in first-class condition it be abandoned; and it was abandoned.

Summing up his testimony on this point, the witness said: "About \$10 for what used to cost \$7.5 under the old Bell régime, the cost under private ownership being sevenfold more than under public ownership." You will note that he says "what used to cost," notwithstanding the fact that in one case he deals with a small, compact, and inefficient system, and in the other with a telephone service extending over this entire "city of magnificent distances." It seems hardly possible that one who holds the views respecting the difference between the costs of furnishing telephone service in large and small places could be so misled as to make these assertions in a serious discussion. If a student of these questions is so misled, what may we expect from the ordinary layman?

I shall pass on without attempting to demonstrate why the rate in a large city should be greater than in a small city, because of the almost universal acceptance of the proposition, unless it is desired that I do so. Much information on the point, I may say, will come out incidentally in the extracts from parliamentary reports and papers of that kind in connection with my statement on European conditions.

Q. (By Mr. KENNEDY.) Have you any official correspondence from the Department covering that point?—A. I will give you the official papers covering this point. (See Exhibit A at end of testimony.)

Now, just a word about the character of the service furnished in New York. It is possible for the service in a given area to be cheap at \$150 and dear at \$50, according to the character of the service furnished. I have already explained the policy of the New York company with respect to the introduction of improvements. The plant is maintained at all times so that the service is absolutely permanent and reliable. We have a method of testing the rapidity of operating, under which certain tests are made, without the operator's knowledge, of the time taken between the subscriber's signal and the answer of the operator, and the other periods of time through the entire conversation or through the entire message. Now, for the last 3 or 4 years, those tests have shown that the average time elapsing between the giving of the subscriber's signal and the answer averages, from month to month, from 3 to 5 seconds. In only one case during the last year and a half did the average go over 5 seconds, and it was then less than 5.5. This, I think, shows a rapidity of operating that should be, and I believe is, entirely satisfactory to the New York public. There are exceptions, of course, but, in the main, service is entirely satisfactory on that point. Mr. Cedergrén, the manager of the Stockholm company, who has succeeded in outstripping the Government in his competition with it, occasionally comes to New York, and he has on more than one occasion given the New York service the highest of praise. Mr. Martin, a very competent expert, and editor of *The Electrical World and Engineer*, recently, in one of his editorial articles, com-

pared the New York and European service, and showed that the New York service was far superior to that which he had found anywhere in Europe. Now, in many European cities the grounded circuits are still in use. That has a great effect upon service; and the service is so faulty and unreliable through lack of discipline that it is not relied upon except in minor matters. I will say that in some of these cases, as I shall point out, the inferior service is perhaps not so much the fault of the management—as in London or Glasgow, for example—as it is the result of municipal interference. Take London, for instance. The company has sought for a great many years to put its wires underground, because there has come to be such a multitude of wires that it can not properly take care of the service with overhead lines. But they have to deal with 42 vestries there. One vestry will permit them to go underground and perhaps the next adjoining one will refuse permission to go underground, and so they have no comprehensive system at all; and it is part underground and part overhead; and the service is consequently admittedly very bad.

In comparing New York conditions with European conditions, you must also consider whether the service is self-sustaining or not, and you must consider the relative purchasing power of money, the varying conditions of living and wages. In many of the governmental systems they pay nothing for rights of way. No rents are charged up against the telephone service, and in Paris the entire cable system is in the sewers, for which no charge is made. As I have already pointed out, a flat rate is fairly comparable, even when all other conditions are the same, only with the average rate, when you have a flat rate in one place and a message rate or graduated scale in another place. Thus it will be seen that because of the complexity of the matter and the great differences obtaining between different places the greatest caution is necessary in making comparisons. There is no common factor—no common denominator—to make the problem simple or easy of solution.

Q. (By Mr. LITCHMAN.) I would like to ask you if you have any data covering any city now where there are rival exchanges, and can give a comparison with the rate charged by the Bell Telephone Company before, and the rate charged after the establishment of the rival telephone company?—A. In my own territory we have had opposition in 3 or 4 towns of considerable size. There has been no opposition in New York City; but in the suburban towns there has been opposition. We operate 21 towns outside of New York, and there has been opposition in 4 of them. We have not put, in those places where there is opposition, any rates or given any service that we have not given to every other town of like size and circumstances in the territory, and our systems have grown and practically wiped out the opposition systems in each of the towns referred to.

Q. (By Mr. FARQUHAR.) What towns do you refer to?—A. I refer to Mount Vernon, New Rochelle, Sing Sing, and Nyack.

Q. (By Mr. C. J. HARRIS.) You say you have done this without putting down the rates and cutting as against these other companies?—A. We have never introduced in any of those places a rate that we have not given to the whole territory under like circumstances.

Now, in speaking of European conditions, to avoid confusion, I shall express all money values in American equivalents, because there are so many differing values in coins that it would be very difficult to follow; and in mentioning the populations of various places I shall make my statements in even thousands. Perhaps I ought to say one word about the sources of my information. I have twice visited Europe personally for the purpose of looking into the telephone conditions there, and in the fall of 1899 I visited the countries of France, Belgium, Switzerland, Austria-Hungary, Germany, Holland, Denmark, Sweden, and England and obtained information from public documents and reliable sources on the ground. Statistics for the first of this year have been obtained from official sources by correspondence. I shall not make any statements of fact, at least I shall try not to make any statements of fact, that are based on private information. Everything is based on public documents, information that is available and open to anyone, or on personal observation.

Now, as to France. A company operated the telephone industry in France until 1889, and since that time it has been a Government monopoly. The development is practically nothing outside of Paris, and there are more telephones in New York than in the whole of France. At the beginning of 1901 the population of Paris was 2,536,000, with 33,000 telephones, about 50 per cent of the total in France. Only 4 other cities had more than 1,000 stations. In mentioning these I shall compare them as I pass along with an American city, so that you can see the relative development in the two countries. Lyons, population, 466,000; telephones, 2,267. Cleveland, population, 285,000; telephones, 8,492. Marseilles, population, 442,000; telephones, 2,151. Cincinnati, population, 325,000; telephones, 9,142. Bordeaux, population, 256,000; telephones, 2,009. Milwaukee, population, 285,000; telephones, 8,492. Lille, population, 216,000; telephones, 1,064. Louisville, population, 204,000; telephones, 5,049.

There is a very large development relatively in Paris which is due, in a great measure, to the inferiority in other means of communication. The rates are not relatively low. The Paris system is technically far behind the times. There are a few modern appliances, but much of the old apparatus used by the company before the Government took hold of the business is still in service. Of places where the telephone is under Government control it is fair to say that, except possibly in Belgium, one can not find a less efficient service in any large European city than is found in Paris. The fact that the subscriber buys his own instrument, and that the Government has approved 500 types of instruments, from which the subscriber may select any one, will give some indication of the possible character of the service. There is a very lax discipline because of the employees all being civil-service employees. The only way of maintaining discipline is to go through a very tedious and long process, which prevents the heads of the departments from taking any action whatever. The provincial conditions outside of Paris, technically speaking, are much worse, even, than in Paris. As to rates: In Paris the company charged \$120 a year; the Government has charged and now charges a flat rate, business and residence alike, of \$80 a year. The rate will be reduced in 1902, in accordance with a law recently passed, to \$60 a year, if the requisite plant can be provided by that time. I refer to this because it is already announced in many quarters that a reduction to \$60 has already been made. The subscriber bears the cost of the instrument, plus a part of the cost of the line, because, in Paris, the subscriber must pay for the line from the underground cable, which is in the sewer, to the station; and, if he is beyond the fortifications, he must pay for the whole cost of construction beyond that point. In towns outside of Paris the rates range from \$30 to \$40. But I shall offer nothing to show that those rates are considered high, considering the purchasing power of money in those places and the character of the service furnished, except the figures that I have already referred to, showing the absolute lack of development in those parts. In Paris Government buildings are occupied by the telephone administration, and so far as the published accounts show no rents are charged for that occupancy. They pay nothing for rights of way, because their lines are in the sewers; and, for the same reason, they are free from the cost of subways, which, in almost all other large cities, is a very heavy expense. Their cables are all laid in trenches right in the sewers. The men draw them down through, carry them, and place them in the trenches, and they can do it very quickly and very easily and very cheaply.

As to wages in France. The operators get about \$6 a week, and the linemen and mechanics \$7.20 to \$8.50, with 10 hours as a day. They keep no separate telephone accounts, so it is impossible to say whether it is self-sustaining or not; but, considering the low wages and the freedom from usual charges, the Paris rate is relatively much higher than the New York rate of \$85. And, considering the extra charges and the amount and character of the service, the Paris rate, plus extras, is absolutely higher than the New York rate.

Passing on to Belgium. The industry there was conducted by a company up to 1889 or 1890; since then by a Government monopoly. The first of this year, in all of Belgium, there were 14,920 telephones, or about one-fourth of New York alone. In Brussels, with a population of 560,000, there were 4,525 telephones; in Antwerp, population 278,000, there were 2,802 telephones—about the most meager development in any European or American city.

In general, the plant which was installed by the company before the Government took over the business in 1890 is still in use. The central office equipment is completely out of date, and almost worn out. They erected a building at Brussels, which was unoccupied for several years, on account of delay in deciding upon what style of equipment to put in. Single wires or grounded circuits are generally in use, although work is under way for installing a metallic circuit. In general, the service, plant, and methods are one with those that were abandoned in the American cities in the 80s. The company rates were adhered to as to the grounded circuits, but the rates were raised for metallic service. In Brussels and Antwerp the grounded circuit rate is \$50 and the metallic circuit \$70. Elsewhere, outside of the two cities of Brussels and Antwerp, the rates range from \$25 a year for ground circuit, and for the metallic circuit, \$54 up. That these are considered high rates is shown by the amount of patronage that has been developed. Operators get from \$1.90 to \$2.77 per week. They pay nothing for rights of way. The plant is starved and run down. Belgium is a cheap country, especially with respect to labor, as nearly everyone knows who has visited there. In all the cities dogs are beasts of burden; in the country districts women till the fields, and in the cities they clean the streets and perform other kinds of hard labor such as in this country would nowhere be assigned to women to do. The telephone accounts are not separately kept or published; but the assertion that it pays its way would not be surprising. The rates are, relatively, kept so high, and the systems are kept so small, and the expenditure for their maintenance and for furnishing service are so inadequate, that it would probably be fair to assume that the Government does make some sort of a showing in its accounts.

But of course, in considering this, the general conditions of development, and the facilities afforded the general public, should be taken into consideration.

Q. (By Mr. LITCHMAN.) Are you comparing a limited rate in one country with a limited rate in the other, or an unlimited rate in one country with a limited rate in the other?—A. I am comparing the unlimited rate—that is, the flat rate, wherever it exists, with the average rate where there are various rates, in the other place. I am not comparing the minimum rate where there is a general scale, with the unlimited rate in any other place. I think that is a fair way of making the comparison.

Q. (By Mr. FARQUHAR.) What New York rate are you taking?—A. I am taking the \$85 rate. That is the average rate of all stations excepting the pay stations.

Q. (By Mr. LITCHMAN.) Is not that for all intents and purposes an unlimited rate?—A. I shall discuss that a little more fully when I come to London, because there the conditions are more favorable to such a discussion.

Q. (By Mr. C. J. HARRIS.) You have just said that in Belgium the telephone system pays the Government. Do they pay fixed charges on the money invested and allow for depreciation and all that when they say it pays? Are you familiar with that?—A. I did not mean to say that the Government says it does pay. I meant to say that, in view of all the conditions, I should not dispute a statement that it did pay, although no such statement has been made, because they do not keep their accounts separately. The postal, telegraph, and telephone accounts are all merged together, so that no one knows what the conduct of the telephone industry costs them, or whether or not they make the allowance, in their accountings, that you inquire about. The rates are relatively high, the systems small, the wages low, and the plants, through a lack of reasonable expenditures, are kept in very poor condition. Under these circumstances they ought to be able to show a profit.

In closing about Belgium, I would say that, as to the telephone development, nowhere in Europe or America has private management, whatever its embarrassments or burdens, made anything like so poor a showing as has been made by the Belgian Government.

Switzerland does not properly come within the scope of my talk, which is about large cities chiefly; but Switzerland is such an interesting country, telephonically speaking, and it is so often referred to by writers on telephone subjects, that I shall, in passing, say a few words about the conditions there.

The population of the whole country in 1900 was 3,300,000. Of telephones there were 85,864. There are no places comparable to New York as to size and general conditions. Zurich is the largest place, with a population of 152,000, and it has 6,000 telephones. There were private companies operating in some of the large towns at first, but these were bought out by the Government, and there is now a Government monopoly all over the State. The rates are uniform in the various parts of the country, without any regard to the difference in size of places. The subscriber pays for the first year \$20, for the second year \$14, and for the third year and subsequent years \$8. Now those rates are frequently quoted as being inclusive for telephone service in these Swiss cities, but those are the charges only for the privilege of having a telephone, what you might call the charge for maintenance and keep-up, the privilege of belonging to the State's telephone club, so to speak. But every time you use the telephone you pay an additional charge. That additional charge is 1 cent for local messages. Take 400 messages at 1 cent each and that makes \$4. That added to \$20 is \$24, which is the annual charge during the first year for 400 messages. Now, in our Westchester towns that I have spoken of we have a rate of \$24 for 400 messages, and we give a vastly superior service to that furnished in these Swiss towns. That is not all, because, in the Swiss towns, mileage is charged, and in the larger cities the extra charges amount to as high as \$150.

I will read two brief extracts from a report, made in 1899, by the director of the municipal telephone system in Amsterdam to the aldermen of public works on a proposed revision of the telephone tariff. Respecting the Swiss rates, he says:

"In Switzerland the fixed subscription after the first 2 years is, to be sure, only 40 francs (\$8), but this amount is charged for only such connections as are situated within 2 kilometers' distance from the central exchange. Whereas, for connection beyond this distance—and there are many like this in Switzerland—an extra fee is charged of no less than 4.50 francs per 100 meters. A subscriber, for instance, who resides 5 kilometers distant from the head office, as also might be the case here in this town (Amsterdam), pays in Switzerland a fixed subscription of $40 + 30 \times 4.50$, or 175 francs (\$35) per year."

Thus far he is speaking only of the fixed subscription, which does not include the right to send a single message without additional payment. As to the additional charges for messages, this is what he says:

"In the whole of Switzerland the price for local calls is 5 centimes (1 cent) for all subscribers, no matter whether they make much or little use of their telephone. Subscribers who, for instance, make 10, 30 to 50 local calls per working day—and such subscribers in the systems of Basel and Zurich are not uncommon—pay, there-

fore, above the fixed subscription of the average of 70 francs (\$14) a year, respectively, 150, 450 to 750 francs (\$30, \$90 to \$150) a year for their local calls."

Very often, therefore, we have misleading information about Switzerland, because we are given only a part of the truth about those rates.

In many American towns and cities, I think, more and better service can be had for less money than in these Swiss towns. The plant there is cheap and inferior. Grounded circuits are still in use and the equipment is antiquated. There has been a very small outlay for maintenance. They pay nothing for rights of way, except in a very few cases, because of a practice established by the company which the Government has not been able to break entirely away from. The post-office collects their accounts, and wages are low. Skilled operators are paid \$4, wiremen and chief operators, in large central offices, \$7; linemen, etc., \$4.20 to \$6; foremen, \$6.50 to \$8.40 per week.

As illustrating the cheapness of things there: On the Geneva street railway where work was going on in 1899, when I was there, the workmen were paid 8 cents an hour, which, with steady employment and 10 hours per day, would make \$1.80 per week. The Swiss people are frugal to a degree undreamed of anywhere in this country, and all classes of labor are very poorly paid.

Q. (By Mr. LITCHMAN.) I was going to ask you whether this same discrepancy in wages did not apply to other industries as well as to the telephone?—A. I think it does, as indicated by the instance cited.

We come to a very interesting matter—the financial results in Switzerland. The telephone receipts in 1899 were \$1,007,011 (there they keep the accounts separately), and their expenses were \$1,251,803, a deficiency of \$247,792. The expenses were practically 125 per cent of the earnings. That would mean the worse kind of bankruptcy if it were a private concern.

Now, suppose for a moment that you consider these expenses as adequate. In order to do that you would have to ignore the very inefficient service and low wages. But, considering these expenses as fair and reasonable for the service furnished, the earnings would be less than one-half what commercial safety would require.

It is not very difficult to fix responsibility for these conditions in Switzerland. The technical staff is in no way to blame. The rates and plant have been brought down to the present conditions against their repeated recommendations. The telephone has practically been a political plaything in Switzerland, and, possibly with the very best intentions, in response to popular demands the service has been starved and the rates have been run down until the whole business is on a most unprofitable basis. Now, the department is facing the necessity of putting in metallic circuits in order to render service that will be at all acceptable. That will involve a tremendous outlay and an increased annual expense for maintaining the better service when already there is a deficiency, and the raising of rates is practically impossible.

The commission then took a recess until 2 o'clock p. m.

At 2.10 p. m. the commission reconvened, and the testimony of Mr. Bethel was resumed, as follows:

Q. (By Mr. C. J. HARRIS.) You might resume where you left off this morning.—A. When we left off this morning I had just finished talking about Switzerland, where, under Government ownership, with rates that ranged perhaps as high as in American cities of the same size, and with a very inadequate expenditure in the way of maintenance, an out-of-date plant, inferior service, and low wages to employees, the telephone operations during 1899 had shown that the expenses were 125 per cent of the earnings. Now, with just a few words about Austria-Hungary, I shall pass on to Germany.

In Austria several private companies conducted the business until 1894 and 1895. Since then the Government has, after purchasing the plants of the companies, operated the business as a Government monopoly. Practically the same conditions as to relative development in the large cities and in the small cities holds here as was pointed out in the case of France and Belgium. That is, nearly all of the development is to be found in the greater cities—in Austria, chiefly in Vienna, and in Hungary, chiefly in Budapest.

The Vienna plant was bought by the Government from the company, on a valuation fixed by experts, in 1894, the Government taking possession on the 1st of January, 1895. As shown by the public documents covering the history of the case, it cost the Government \$1,600,000. There were then between 7,000 and 8,000 stations. This is equivalent to \$200 or more per telephone station. Either through rapid changes in the art, or because the plant taken over from the company was out of date, the Government soon after began the construction of a new plant. They put up two very handsome buildings and laid out a comprehensive underground system, and provided the offices with new equipment throughout, so that in 1899 there was very little, if any, of the old plant which it had taken over from the com-

pany still in use. The Government, up to that time, had expended \$1,200,000 on its plant.

The number of stations in Vienna at the first of this year was 13,326, and in all Austria there were 31,902. Vienna's population is 1,635,000. Chicago, practically the same size, had more than twice as many telephones.

The Vienna rate was \$40 when the company operated it, and that rate has been continued by the Government. Elsewhere in Austria there is an installation charge or entrance fee, as they call it, of \$40 per kilometer (per five eighths of a mile), plus \$20 per year. The rates are thus relatively high enough to prevent any development, as has actually been shown, in the State outside of Vienna. They pay nothing for rights of way in Vienna. The wages are low. Operators receive from \$1.80 to \$3.40 per week; linemen, etc., about \$5 per week.

In the official documents relating to the transfer of the property from the company to the Government it was stated by the company that, should it continue the business, in order to protect its stockholders and creditors it would be necessary to raise the rate, which was then \$40.

In Vienna the telephone has been a particularly unfortunate victim of Government ownership, for reasons not connected at all with mismanagement and not involving any misguided action on the part of the legislators. You are all familiar with the political troubles that have grown out of the race question there. For several years there was no session of their Parliament and no appropriations made to the telephone business. The telephone business is peculiar, in that it requires constant additions to its capital account or it must stand still. It is not like a railroad, where the track is built and finished, and you have your investment, and the rest may go on operating expenses. You must have a constant and continuous addition to the capital account or growth must stop. That is exactly what happened in Vienna, through no fault in the telephone management or of anyone in particular, but through the conditions I have stated. Their funds failed them and they had a large waiting list and general dissatisfaction resulted.

There is another striking case illustrating that same point—not in Europe, but in Japan. There in Tokyo, where there is Government ownership, growth was not exactly suspended, but the Government was not able to take care of the business that was offered—was not able to furnish the facilities that the public demanded—and applications were dealt with in the order in which they were received. So there arose speculation in the rights of priority for connection, and those rights sold as high in some cases as 7 times the annual subscription for the telephone.

In Hungary there is no development, outside of Budapest, worth speaking of. In Budapest there are 5,796 telephones, with a population of 729,000. With the exception of two Russian cities, Moscow and Warsaw, Budapest has the lowest development in Europe or America among cities of from 500,000 to 1,000,000 inhabitants. Several American cities of one-half the size have twice the number of telephones. That is four times the development.

The people in Budapest are considered very progressive. Their city has been almost entirely reconstructed in recent years. They have put up some magnificent buildings, and they had the first electric underground railroad in the world. As to the telephone, however, their plant is antiquated, their service is inferior, and their rates are the same as in Vienna. That these rates are relatively high or that the service is exceedingly poor is fairly shown by the lack of development. The wages are even lower than in Vienna. They pay no rights of way, and, as a rather significant example of the powers that the Government reserves to itself, I may say that it has licensed a private company (the Telephone Newspaper Company) to string its wires throughout the city, attaching them to the public buildings and to private property without any compensation whatever to the owners.

I come now to the subject of Germany. Patents were never allowed for the telephone, and the Government has monopolized the telephone business from the beginning and operated it as a part of the postal and telegraph business. There has been a very large development in Germany, especially in large cities which have been favored by the German rate policy. Until very recently they have had uniform rates through the Empire; that is, the same rate in a great city as in a small city. This policy was changed by law in 1899, and since the adoption of new rates in 1900 there has been some growth in the smaller places, but relatively the conditions have not changed much. There are 720 telephone centers in Germany; and Berlin alone has 25 per cent of the total stations. Nine large cities have 52.5 per cent of the telephones, leaving 47.5 per cent to 711 other cities and towns. At the beginning of this year Berlin had 47,586 telephones, against 54,647 in New York, the population being approximately the same. The 1900 census figures give New York a little larger population than the last available census figures give Berlin, but I have seen, in places that may be considered reliable, statements as to the population of Berlin which make the two cities practically the same.

Q. When you speak of the population of Berlin and New York do you mean Man-

hattan Island or Greater New York?—A. In all this testimony I am speaking of New York as comprising the boroughs of Manhattan and the Bronx—the old New York, not the greater city.

A point that has often been overlooked when considering the Berlin service is that the service was rendered, until 1899, only from 7 o'clock in the morning until 10 o'clock in the evening. Since 1899 they have been rendering a night service, but they charge extra for calls made during the hours from 10 o'clock at night until 7 o'clock in the morning.

The lines are largely single wire, and a very large percentage of them still overhead. The same policy with respect to wires has not been pursued in Berlin as in New York. That is to say, they have supplemented their overhead wires by the underground plan, because the wires became so numerous that they could not carry them overhead; but they have not replaced, in a general and comprehensive way, the overhead system with the underground system.

In Berlin, too, the subscriber does a great deal of operating; that is to say, he calls the central office with which he is connected, and he must then work his own way from that central office to the next, and so on; whereas, in New York, we so supervise every call that the subscriber has nothing to do but give his order; and then the operators take care of it until the two people are put into communication. On the whole, I think the Berlin service is hardly comparable with the New York service, but I do not mean to say it is not satisfactory to the Berlin public.

Now, this uniform rate that I spoke of as holding through the Empire, until April 1, 1900, was \$37.50. At that time, flat rates, varying from \$16 to \$45, and minimum message rates from \$20 to \$30 were put into force. All rates now vary with the size of the town. The administration had many times reported to the German Parliament that the Berlin system did not pay, and various rate propositions were considered. As a result of that, in 1899 they enacted a law putting into force these rates I have mentioned. The Berlin rate was increased 20 per cent. Of the total number of subscribers throughout the whole Empire, 67.8 per cent (over two-thirds of them) were increased, 26.8 per cent were decreased (that was in the small towns), and 6.4 per cent were not changed. Thus the recommendations that had been made by the technical staff from time to time were followed.

The postal, telegraph, and telephone accounts are all merged together. No separate accounts are kept for the telephone service. Berlin is proverbially a cheap city. Wages, rents, and almost all other items that enter into the cost of furnishing a telephone service range from 2 to 4 times as high in New York as in Berlin.

Q. (By Mr. C. J. HARRIS.) I would like to know whether, in these running expenses, they allow anything for the capital invested in building these lines?—A. I think no one can answer that from any official documents, because the accounts for the 3 departments are all merged together and no separate accounts are kept for the telephone operations. But the fact that the administration reported to the Parliament that the rates did not pay, and that the Parliament, after consideration of the matter, raised the rates, seems to me ample justification for saying that the rates were not profitable in Berlin. That is the rate we so generally hear about, and it is the rate that writers on the subject usually use.

The fact that the public patronage or development is less in Berlin than in New York shows that the service and the rates are not more reasonable, from the German standpoint, than are the New York service and rate, from the standpoint of the New Yorker. Considering the character and amount of service, and the purchasing power of money in the two places, the rates in New York are lower than in Berlin.

Now, as to the responsibility for this inferior service, so far as grounded circuit lines are concerned. The technical staff has frequently urged the adoption of the metallic circuit, but this recommendation was disapproved of by the ministers, who would not spend the money, because they thought it was spending money on an unproductive industry. But at last, in 1899, \$1,000,000 was appropriated to begin the work of changing from the grounded circuit to the metallic circuit, and that work is now going on.

Night service was not rendered at all until considered by Parliament, and was commenced on November 1, 1899, and then only on the payment of extra charges.

A revision of rates was repeatedly urged. The unfairness of the uniform rate and its unprofitableness in great cities, such as Berlin and Hamburg, were frequently urged. This shows a tardy and incomplete response to the recommendations of the technical staff.

I will read a portion of the report of the commission to revise rates. It bears on some questions asked this morning as to the message rate plan. This is an extract from the report of the commission to revise rates, 1899. (Reading:)

"The present mode of charge for telephones, according to which all subscribers to the telephone system of the Imperial Post and Telegraph Administration have to pay the same annual sum of \$37.50, regardless of the size of the town or telephone

area and of the amount of use of the service, has for years past given rise to complaints on the part of the public, and to numerous questions in Parliament.

"The justice of the complaints, from the point of view of the telephone users, can not be denied, the conditions existing in the various towns being so different that a uniform tariff can not be considered a right one. It is justly felt that it is not fair that subscribers in Berlin and Hamburg, who can communicate with 30,000 and 12,000 telephones, respectively, should have no more to pay than the inhabitants of a town with 50 or 100 subscribers.

"A juster division of the present charges, which will maintain the revenue at its present rate, is, therefore, the problem to be solved in a sensible reform of the telephone tariff, which does not alone consider the success of the moment. And, in fact, it will be found possible to comply with most of the wishes expressed if the expenses of the telephone service are divided more among the subscribers in proportion to the use and advantages derived than has hitherto been the case. The relief given to subscribers in small places might be considerable if it is determined to make the larger and more promising places pay a little higher scale.

"The most just method is to readjust the charges so that each subscriber shall pay according to use. There would thus be different rates, not only in different towns and systems, but also between different subscribers in the same place.

"The expenses of the telephone system increase not only absolutely but also relatively, in proportion to the increasing extension, inasmuch as, especially in the larger towns, the increase in the number of subscribers augments the expense of each single subscriber, on account of the installations of the exchanges becoming ever more complicated."

You will see that thus far the report not only indorses the message-rate system as a proper system but gives reasons for adopting it. (Reading:)

"A general adoption of the proposal, however, is impossible on account of practical difficulties. It would only be possible if reliable automatic counting apparatus existed, which would afford a perfect protection against tampering on the part of the subscribers.

"The public is used to a fixed rate, and experience shows that, in most cases, they prefer a rate which they may know beforehand to payment by calls, the recording of which might cause them trouble and inconvenience."

Thus, after indorsing the message-rate principle, they declared its adoption impossible because of practical difficulties which have been completely overcome, not only in the United States, but also in some European places, and for the reason that it might be unpopular they compromised by adopting new flat rates—to vary with the size of the system—and supplementary message rates, notwithstanding the alleged practical difficulties.

Only a word about Bavaria. It is, of course, a part of the German Empire, but its telephone system is operated separately by the Bavarian telegraph department. They have the same rates and the same policy as to rates as exist in other parts of Germany. The general conditions are about the same. Munich has 8,500 telephones, Nuremberg 3,500. Seventy-one other centers have only 6,000 or 7,000 altogether. The technical staff has been a little more successful in having its recommendations adopted, and consequently the plant and the service in Munich are somewhat better than in Berlin.

Holland is particularly interesting because of the municipal ownership in its 2 leading cities of Amsterdam and Rotterdam. A private company conducted the industry in these cities until 1896, when they obtained franchises from the State for 25 years. Viewed superficially and narrowly, it may be said that at Amsterdam the municipality on taking over the business reduced the rate, improved the service, in 3 years increased the number of stations by 50 per cent, and made a profit. Let us go further with a view to ascertaining the whole truth if possible.

The reduction in rate was insignificant in amount, and moreover it was a mere shifting of taxation. The company's rate was \$47.20 per year; the municipality's \$36 at residences and business places for the exclusive use of the subscriber and \$46 for hotels, restaurants, and places accessible to the public, plus in each case an installation charge of \$10. Taking this last item into account, it will be seen that the reduction was on the whole very slight, and that in certain cases there was an actual increase. But there is another fact that must be taken into consideration. Under its franchise the company was required to pay the city 21 per cent of its gross receipts, which going into the communal treasury operated to lessen taxes in other directions. In 1894, the last full year of the company's concession, the percentage amounted to \$17,125.20. In 1898, notwithstanding the large increase in the number of subscribers, the communal treasury received from the telephone industry \$20,000.

The slight increase, it may be safely stated, was more than offset by the increase in the community's general expenses due to its telephone operations, to say nothing of the use of public buildings for supporting wires and fixtures for which no charges were made. Hence the communal treasury suffered by the change; in other words, whatever reduction was made benefited telephone subscribers at the expense of the general taxpayer. Therefore the municipality is entitled to no credit for an alleged reduction of rate.

Touching the question of reasonableness, it is very significant that at The Hague, the telephone industry is conducted by private enterprise at a rate of \$24 a year. In other European cities where private companies operate there are larger systems and lower rates than in Amsterdam.

The service is unquestionably better now than it was under the company's administration. But the present service is not so much a superior service as the former was an inferior service. Measured by other and fairer standards the present service loses its preeminence. What always happens under a limited franchise happened in Amsterdam. The telephone business in a way peculiar to itself calls for constant additions to capital account, and thus far in its history has called for constant and extraordinary outlays for reconstruction and substitutions. Hoping to undertake the business itself, the municipality opposed an extension of the company's franchise and was successful. Having no assurance of life, the company made no extensions or improvements. It did nothing to develop the business; there was no growth—only 1,700 stations in 1896. The municipality offered for the company's plant an amount equivalent to \$47 per station. This being refused, the municipality built a new plant, its investment being at the end of 1898 equivalent to \$182.80 per station. With its new plant and with a skillful and enterprising manager an improvement in the service was inevitable, an improvement which was particularly noticeable to those who had suffered under the previous miserable condition, due largely to the obstructive tactics of the municipality. But the Amsterdam service is by no means as efficient as that rendered by private companies in the Scandinavian countries, for example, or in this country. The feature that most condemns it is its insignificant scope—its entire inadequacy for so large a city.

This brings us to the question of development. Fifty per cent in 3 years sounds large, but if you remember the starting point it means but little. Compared with that in cities of the same rank in this country or even in Europe, where private companies operate, the Amsterdam development is absolutely insignificant. At the first of this year Amsterdam, with a population of 513,000, had 4,462 telephones. There are 61 American and European cities having a population of 200,000 or more. Arranged in the order of telephone development, Amsterdam stands 58 in the list. Among the cities of its class (from 500,000 to 1,000,000) Amsterdam stands at the very bottom of the list, with the exception of Budapest and Brussels, in both of which cities there is Government control, and of the 2 Russian cities of Moscow and Warsaw.

Let us compare Amsterdam with an American city and then with an English city. Amsterdam and Boston are fairly comparable. They are about the same size, Boston being a little bit larger. Both are seaports; both cities of commercial importance and activity. I have already given you the figures of Amsterdam. There are 4,462 telephones there, or 8.7 per 1,000 of population. Boston, with a population of 560,000, had 23,780 telephones, or 42.3 per 1,000 of population against Amsterdam's 8.7.

Now, comparing Amsterdam with Manchester, England. Manchester has 543,902 population and 10,647 telephones; or, per 1,000 of population, 19.6 telephones against Amsterdam's 8.7; and Liverpool has 20.1 against Amsterdam's 8.7. So it is not necessary to take an American city to show that the development is higher under private enterprise. Even as compared with European cities under private enterprise the development in Amsterdam is exceedingly low.

Q. (By Mr. CLARKE.) How does the suburban population of Amsterdam compare with that of Boston?—A. The point you mention is a very important one. Municipal boundaries and telephone-exchange boundaries are not coextensive. Around every great city the suburban places are of consequence and usually the very center of their business and social life is in the city. The municipality can serve only within its own area, or else conduct a business beyond its borders where it has no jurisdiction. Amsterdam's activity is practically confined within the municipal limits, and, as a result of that, the development in the suburbs is practically nothing, while the development in the suburbs of Boston and of New York is greater even, relatively speaking, than the development in the cities themselves. This limitation on its activities, considering the peculiarities of the telephone business, is one that I think is entitled to the greatest weight in considering this question of municipal ownership.

Q. (By Mr. LITCHMAN.) Have you entered upon the question at all so as to show a comparison between the strictly city traffic and the suburban traffic—that is, the

city within itself and the traffic between the city and suburbs, taking a city like Boston or New York?—A. I do not quite understand.

Q. I understood your testimony to be that the telephone service in the United States is appreciably affected by the service between the city and the suburb, the development of the suburbs being such that new lines were constructed rapidly for service between the suburbs and the city.—A. Quite so.

Q. I wanted to know whether you had carried it far enough to make the comparison between the suburban service and the city proper.—A. I have here a report of the mayor and aldermen of Amsterdam concerning the action taken by them, and their report on the effect of the telephone industry there. It appears in this report that there is practically no development whatever except within the very heart and center of Amsterdam, because their rates are considered so high in such territory as is included within their concession outside of the heart of the city that there is no development. Now, in New York City and its suburbs (including the cities within 35 or 40 miles of the New York city hall, the towns along the Jersey coast in Monmouth County and those on Long Island) there are over 100,000 stations. I think these facts show the relative development between the two places.

Q. My question went one step further, and that was to ask if you had any data which would show how large a proportion that suburban service was of your entire service?—A. You mean what proportion of the telephones are in the suburban territory? I have stated already that there are 60,000 telephones in New York and over a hundred thousand in the whole territory.

Q. You mean by the whole territory Greater New York or that under your jurisdiction?—A. I am speaking now of Greater New York and those portions of New York State, New Jersey, and Connecticut within 33 or 34 miles of New York City—the Jersey coast towns and the Long Island towns.

Q. And New York City proper has about 60 per cent?—A. Sixty per cent of the total, but you may remember that I cited this morning the case of Larchmont, where the development is about 20 per cent. There is a telephone for every 5 people—practically one for every family; and the same, or a little less, percentage runs through all these towns, none of them being so small as is found in New York proper.

Q. Is the suburban traffic considered profitable, or is it carried on as a necessity as a feeder to the main plant?—A. I think no one can tell exactly what any particular branch of the business costs. It is so complex that you can only estimate it and form your own opinion. A half a dozen men might have half a dozen opinions on the subject. The aim in fixing rates is to make each community carry its own burden as nearly as possible and pay a fair share of the general expenses of administration. The same may be said of the several kinds of business—the trunk-line business and the exchange-line business. Of course there may be places which for the general good must be served whether at a loss or not. They are essential parts of the system; the territory is developed as a whole; every part of it is provided with reasonable facilities.

I was speaking about the conduct of the telephone business by the municipality. Another point worth mentioning here is that Rotterdam and Amsterdam are both cities of great importance and activity. They lie close together, half an hour apart by rail, have frequent trains daily, and their entire interests are closely tied together; yet because of no central control, because each municipality is proceeding for itself, there are different styles of equipment, different engineering methods are followed, different rates are offered to the public, and the general practices are different.

I have spoken of the reduction in rate, the improvement in service, and the increase in the number of stations; there is but one point left—that is profits. The concession accepted from the Government, it should be mentioned in the first place, shows that a profit accruing to the communal treasury must not be depended upon from the telephone service. The stations are concentrated in the center of the city, close to the central office, and the system is very small, as already shown. The traffic is light, because there are so few places which the subscriber can reach. The statistics for 1897 show that one-half the subscribers sent on an average only 500 messages during the year. Labor, rents, etc., cost but little in Amsterdam. Operators are paid from \$2 to \$4 per week; linemen and mechanics, \$6.40 to \$8 per week—10 hours a day. The salaries and wages of the entire Amsterdam staff in 1898 were but little more than twice as much as the New York company expended in the same year for tea, coffee, and milk furnished its operators at no cost to them and the wages of waitresses employed in serving them. The entire Amsterdam rent roll was less than the rent paid by the New York company for quarters for its operators when off duty at one of its offices—not one of the large offices, but one of moderate size; one serving about the same number of stations as there were in Amsterdam. As indicating in general the cheapness of labor there, I may say that shop girls work-

ing from 8 a. m. to 10 p. m. have an average pay of \$2 per week; policemen and firemen, \$4.80 to \$5 per week; and for unskilled labor, \$4 per week is considered good pay.

The cost per station for the year, including working expenses, interest, and depreciation, was less than the New York company's outlay per station for labor alone. In 1899 a majority of the committee for the management of the communal industries formally recommended, after a careful analysis and study of the telephone accounts made with a view to the modification of the telephone tariffs, that the existing rates be continued for large users, and that a slight reduction (\$6 a year) be made to those sending 500 or less messages per year, with an extra charge of 4 cents for each message in excess of 500. A minority of the committee recommended the maintenance of a uniform rate, two members advising the trifling reduction of \$4 a year, and one strongly opposing any reduction whatever, because the costs per subscriber were already too high to warrant it, and it was anticipated that they would increase rather than decrease in subsequent years. This member forcibly remarked that a reduction would totally or partially wipe out the amount contributed by the telephone industry to the general fund of the community, and for this he could see no single sensible ground.

The mayor and aldermen determined that no reduction whatever should be made. I shall read an extract from their report to the town council:

"The fact must not be lost sight of that the working expenses per subscriber, as the trade accounts show, were higher last year than during the preceding year, and that the average expenses for construction were also considerably increased. Whether these expenses have already reached their maximum can not safely be stated; there is ground rather to think that they will further increase during the next few years. Contrary to what one observes with other businesses, with the telephone the expenses do not decrease in proportion of the increased number of subscribers, as every new subscriber requires new capital charges, on which interest has to be paid and on which depreciation has to be written off; and, further, the expenses of the service are not only increased by the amount which is required for attending to the new subscriber, but also with the additional cost incurred on behalf of the older subscribers. How large this amount will be is difficult to say at present, but this is certain, that by an increase in the number of subscribers the number of combinations to be made on the multiple switchboards will increase to such an extent that an increase of the service expenses per subscriber must naturally result. The question whether it would be desirable under these circumstances to decide upon a reduction of the telephone tariff we undoubtedly think we ought to answer in the negative. There can be no question of a reduction of any importance, whereas a small reduction would cause so great a loss to the communal revenue as to be out of all proportion to the small advantage which would accrue to the subscribers."

The so-called profits therefore are represented by payments made to the communal treasury, which, so far as one can tell, may or may not have been consumed by administration expenses incident to the telephone industry. If so, then there were no profits. If not, the profits were a charge upon the industry for the benefit of other municipal industries operated at a loss. In any event, the so-called profits were to a large degree fictitious and misleading.

I spoke of the energy with which the telephone plant was provided by the municipality when it was at war with the company. That was largely due to the enterprise of one man, a retired army officer, who pitched into the work and with great zeal built a plant and had it ready to operate within a year. If you should go into his central offices now, you would find them neat and clean, because Holland is proverbially clean. The manager, appreciating that the development was exceedingly low and that the conditions did not compare favorably with what was being done in the rest of the world, obtained authority to visit other places. He went to Stockholm, Copenhagen, Berlin, and Switzerland, the object being to determine what was being done in the way of message rates in these places. He made a very elaborate report and a very interesting one, in which he, summing up, showed there were no difficulties with the message-rate system on account of the necessity of counting the calls. On this subject he reported general unanimity in all the countries he had visited, and said that the question of introducing message rates need not be dismissed on account of the difficulty attached to the counting of the calls. He recommended a message-rate system and an installation charge, then a maintenance charge and a traffic charge. He said: "The whole tariff has been arranged in such a manner as through cheapness and fairness to render the development as quick and the service as efficient as can possibly be done." Speaking of the existing rates, he says: "The high telephone tariff and the irrational and unfair arrangement thereof blocks the way to proper development." Then he pointed out that a modification of the plan of charging was just as essential as a reduction in the rates themselves. Now, let us see what happened to his report. It was made to the

committee for the management of communal affairs. After a very long time and after careful consideration, apparently, a majority of that committee, as already stated, reported that they considered it fair to divide the subscribers into two classes, and to retain the existing rates for large users and the message rate, with the minimum of 500 messages, at \$30, plus 4 cents a call for the remainder. Now, the statistics of 1897 show that one-half of their subscribers averaged 500 calls a year and one-half about 2,500. They said that by the report of the director it was proved that there was no objection to the counting of calls, and that if message rates were adopted there would be a reduction of rate to a good many of the present subscribers and the telephone would become a boon to a large additional number of inhabitants. That is exactly what the message rate has done in New York—reduced the rate to a very large number of subscribers and been a boon to an additional number of inhabitants.

Q. (By Mr. FARQUHAR.) That is the motto, pay for what you get?—A. Pay for what you get. Now, some of the committee objected to this because the working cost per subscriber would be increased by adding new subscribers. Some thought that the rate to heavy users should be raised. This was objected to by others because for the present rate an unlimited number of calls was already allowed. They therefore thought that no change should be made. The majority, however, recommended that the ordinary subscribers, excluding hotels and like places, should be given the choice between the existing rate for unlimited use and this message rate of \$30 for 500 calls plus 4 cents per call, which is not only relatively, but I may fairly say absolutely, as high a rate as is charged in American cities for the same amount of service.

Q. (By Mr. LITCHMAN.) Is not the charge in American cities 10 cents a message?—A. No; the charges in New York City range from 6 cents to 3 cents. We are talking about the message-rate plan and not the public rate. Now, I have given you what the majority wanted to do on that committee. A minority could not agree to this at all, and its chief objection was that there was no automatic counting device, hence the calls must be counted at the exchange. The subscriber should have the right to complain, but finally he should be subject to the decision of the administration. Therefore, on this account the telephone in Amsterdam would become in the highest degree unpopular. The minority also reported that, no matter what was done elsewhere, it must be borne in mind that they were legislating for Amsterdam and that the Amsterdam people would not submit to official rules. So the minority recommended a uniform rate. Now, two members of the minority favored a reduction of the existing rate, and the three members could not agree upon a rate.

Now, with all these varying views presented, when the matter came before the mayor and aldermen of Amsterdam, after discussion, they decided to leave matters as they were, so that, while the technical staff desired to reduce rates and enlarge the facilities which the public required, and to develop the business, which the figures quoted show needed development very badly, its recommendations were all disapproved, chiefly, as is shown by the extracts from the report I read, because of the fear if the recommendations were approved the results would not prove popular. I think they were mistaken in that, because quite the contrary is proved wherever the companies have struck out to develop the business, and have provided the facilities that the public demands at rates that are fixed on a graduated scale.

At Rotterdam the rates range from \$26.40 to \$38.40 per year, plus an installation charge of \$8. In 1896 there were 1,000 telephones, and at the first of this year 3,089—making, with a population of 309,000, about ten telephones per 1,000—only a little better development than that of Amsterdam. In this entire record and in the whole telephone history of Amsterdam, considered in the light of the conditions that have prevailed and the results that have been accomplished in other cities of the same rank both in Europe and America, there is not a single fact, whether it relates to rates, scope or character of service, development, economy of administration, or the general welfare of the community, that argues for the municipal ownership and management of the telephone industry.

I shall pass now to Great Britain. The telephone was early held by the courts to come under the telegraph act of 1869, which made the telegraph a Government monopoly. The postmaster-general having, under this decision, the exclusive right to operate the telephones in Great Britain, and being unwilling or unprepared to directly exploit the new and doubtful enterprise, granted licenses to various private companies, limiting the operations of each to a specified area, and providing for the payment of a royalty to the Government of 10 per cent of the gross receipts. All of these licenses were made to expire in 1911.

The restriction to specified areas by preventing interurban communication proved most unsatisfactory, and in 1894 other licenses, which removed all restrictions and limitations as to the area in which the licensee company could operate, were granted. These new licenses were also made to expire in 1911. As a result, trunk lines were

very rapidly built between the several telephone centers, and the business in trunk-line traffic grew up.

Now, for a time the post-office endeavored to establish competing systems. You must remember that the Government was operating the telegraph and it feared that the telephone would make inroads on its revenues. It was a growing means of communication. So it started competition, but met with no success, notwithstanding the fact that it was taking 10 per cent out of its rival's earnings as a royalty. In Newcastle, the only place where the Government has had an exchange of any considerable size, the Government exchange was established before that of the company, but it has never had more than 650 subscribers, while the company's exchange in that place had, the first of this year, 3,748 stations. In Leicester the Government exchange had at one time several hundred subscribers. It now has none, while that of the private company has 2,305. In all other towns the Government's competing exchanges have entirely disappeared.

The next step in the history resulted in an amalgamation. For some time after 1884 there was a considerable telephone development, and it soon became clear that to get the best results there must be uniformity of system, similarity of method, concentration of administration and management, and complete intercommunication between all subscribers. The outcome of this was amalgamation and the formation, in 1889, of the National Telephone Company, which is now operating all over Great Britain. One of the first results of this amalgamation—although, as I said, none of the amalgamated companies had been in competition with another—was a reduction in rates practically to one-half of the former figures.

It is interesting to say right there that concentration under private management produces better results than under Government management, as is illustrated by a little incident in connection with the Swiss railroads. When the Government was planning to take over the railroad there it was urged as one important point in favor of the work that whereas there were three headquarters of the various roads which were to be taken over and three main offices, under the Government management there would be but one, and that consequently, through this concentration, economy would result. Owing to the pressure brought to bear upon the representatives by the various cities interested, however, the final result was the establishment of four headquarters and main offices instead of three.

Q. (By Mr. FARQUHAR.) How do you account for that great reduction as soon as this National Company had control of all the lines?—A. I account for it by the fact that there were economies through concentrated management and uniformity of methods and through doing business on a larger scale. Perhaps some of it was attributable to a reduction which had really gone on from the beginning through the development of the telephone business.

Q. That is, in efficiency of the operatives themselves?—A. Yes; to some extent through such increased efficiency, but more particularly to better knowledge as the result of experience on the part of engineers and managers.

Q. Did I understand there that the reduction was one-half?—A. One-half; yes.

Q. I think the commission would like to know how it was possible for that reduction.—A. I will give you my authority for the statement. I was mentioning the policy of the Government adopted in 1892. It was apparently designed to further safeguard its telegraph revenues, and led to the purchase of the telephone trunk lines. Now, in certain places, especially in London and Glasgow, as I have intimated, the local authorities persistently refused to permit the substitution of underground for overhead wires, and the company was therefore unable to render efficient and satisfactory service. The numerous complaints due to these conditions led, in 1895, to the appointment of a select committee of the House of Commons to consider the whole question of local telephone service. This committee took a very large amount of evidence, but did not make a formal report. The chairman (the then postmaster-general), however, submitted a draft report condemning the granting of telephone licenses to municipalities.

In 1897 another inquiry was made by a special commissioner at Glasgow, the municipality there desiring to compete with the company. The report of the special commissioner was against the municipality, and its action in refusing facilities was characterized as unreasonable and unjustifiable.

In 1898 there was still another inquiry by a select committee, presided over by the secretary to the treasury. In the report of this committee the main idea seemed to be that during the remaining years of the company's license (you remember, it expires in 1911) the State should endeavor to break down the company's business by competition. As a result of this, in 1899 the English Parliament voted the necessary funds to enable the Government to begin its competition in London—voted £2,000,000—and empowered the postmaster-general to grant licenses to municipalities. There was, however, this element of fairness in that law. It was stipulated that whenever the postmaster-general licensed a competitor the National Company's

license should be extended for a like time. The post-office is now constructing its plant, and will probably begin rendering service in London before the end of this year. Licenses have been granted to some municipalities. Glasgow has already opened an exchange, but the movement has not yet proceeded far enough to produce any results.

Q. (By Mr. FARQUHAR) Was it dissatisfaction in respect to the rates which caused this legislation on the part of the British Parliament, or the lack of service, or what?—A. Well, both. The service was exceedingly bad, for reasons I have stated, and although the English rates are always said to be very low by people comparing with us, there was just as much dissatisfaction there, and far more, in fact, than there has ever been over here. You will find that to be true almost everywhere, because the general public has actually known so little about the details of the telephone business that they have erroneous opinions as to the amount of profits involved. I think that holds there as well as anywhere else. Now, this competition in London will not be on equal terms. The post-office possesses statutory powers to run its wires, which the company does not possess. It can afford postal facilities to its subscribers and deny them to the company's subscribers, and it is taking 10 per cent of its rival's receipts. Now, under these same conditions, as I have already pointed out, the private company has in several cases outstripped the Government in its previous efforts to compete, and according to the announcement made by officers of the company at its recent annual meeting, it seems to be going forward cheerfully. Its stockholders have voted funds and there is to be an interesting telephone war in London. The result of it all will be a waste of capital and great public inconvenience. Just exactly what the final outcome will be no one can tell.

I have taken a great deal of this information about London from the various reports of the committees that I have referred to, and I have taken some data from a communication in the London Times. What the writer of that communication, in summing up, called "the mistakes of Government respecting the telephone," were summarized as follows:

1. It refused at the outset to acquire the patents.
2. It impeded and harassed the companies in developing the enterprise.
3. It favored the idea of unlimited competition, which failed.
4. It acquired a portion only of the companies' undertakings—namely, the trunk lines—instead of the whole system.
5. It has always refused the companies adequate powers for running wires, although two committees of Parliament have recommended that such powers be granted.
6. It has now reverted to the old policy of obstruction, coupled with an unfair competition.

After this summary the writer adds:

"The company is conducting a public service—the growth of barely 20 years—which, in volume of business, is more than five times greater than the postal telegraph service of the State, and the wonder is, not that it has done so little, but that under all the circumstances it has done so much."

Now a similar policy with respect to other branches of the electrical industry has been followed in England. As to this, the Evening Post of New York, said, editorially, day before yesterday:

"Mr. Arthur Chamberlain declared yesterday, in a speech at the meeting of a large manufacturing concern, that preeminence in electrical industry had gone to the United States, because it had been strangled in England by the mischievous activity of the home office and the local boards. Many facts supporting this contention are brought out in a recent communication in the London Times."

While speaking on this general subject I desire to make a few references respecting the present attitude of intelligent public opinion in England.

In an article entitled "Official obstruction of electric progress," published in the Nineteenth Century for February last, Prof. J. A. Fleming, D. Sc., F. R. S., after stating at length the story of the relations of the post-office and the telephone, says: "The whole behavior of the post-office toward private enterprise in telephony during the last 20 years has been marked by inconsistency, ineptitude, and want of prevision. * * * Its procedure so far gives no warrant for expecting a farseeing and successful business policy. * * * The chief complaint against the telephone company has always been its high charges to users, and the difficulty in getting connection. The first is partly due to the imposition of the 10 per cent royalty, which is really a government tax on telephony, and the second is partly a result of the opposition of the post-office to the telephone company's efforts to secure proper rights of way leaves. * * * The total royalty paid by the National Telephone Company and its predecessors up to the 30th of September, 1900, has been £1,081,490. * * * Hence, the business which the postal-telegraph department does not itself conduct, but only taxes, yields it a handsome profit; the business which it was formed to

carry out is conducted at a loss. * * * The most effective method of afflicting any department of applied science with creeping paralysis is to constitute it a government monopoly."

After reviewing the English electric lighting acts Professor Fleming states that when he "explained to Mr. Edison the nature of the legislative shackles that had been applied to the business of electric supply in England, that distinguished inventor exclaimed, 'Why, they've throttled it!'" In the same way, he says, the tramways enterprise has been simply crippled, and adds: "We find now that we have to go for much of our knowledge and for many of our materials and machines to the experienced inventors and manufacturers in the United States. They are past masters in the art; we are just learning the business." The lack of development in these industries is charged almost entirely by the distinguished writer to purchase clauses in the several acts, such as Professor Parsons suggested in his testimony for adoption in this country. Speaking of municipal opposition to the supply of electric energy in bulk, as it is called, he says: "Private businesses have to take all the risks of injury by competition or improvements, and the fittest survive. But when a municipal corporation goes into business with a capital borrowed on its rates, its tendency is to oppose all progress which may conflict with its own immediate profits, and to cry out for a protection to municipal trading not granted to private enterprise."

Summing up he says: "One answer, therefore, that is suggested to the question why electric invention goes slowly in Great Britain, is that the legislation of the last 30 years has put the control of its results largely into the hands of imperial and municipal officials. * * * Hence, if electrical invention is not to languish in Great Britain, some reforms seem necessary. Public opinion must be brought to bear more strongly through the press and Parliament upon the administration of imperial and local governmental departments, which are in the practical control of electrical monopolies. The conduct of municipal bodies to new electrical enterprises must be continually criticised."

At a recent meeting of the Institution of Electrical Engineers a paper was read by Mr. William L. Madgen, in which he says: "Every article on the subject (electricity) in the magazines and daily press, and they have been many, appears to bewail the backwardness of this country in electrical enterprises, * * * and it seems full time that steps should be taken to place the responsibility for our backwardness where it belongs. * * * We have no feeling but cordial good will for those friends abroad who have made our visit so pleasant and instructive, but the reflections of many of us on our return have been those of indignation at the obstacles set in the path of our industry by the governing bodies of this country and of resentment at the wretched waste of energy and enterprise which they have occasioned. * * * It (the lack of progress) is due in the first place to silly legislation by Parliament and to obstruction by the numerous local authorities intrusted with arbitrary powers. In the second place, it is due to a class of quasi officials and their associates to whose direct monetary advantage it is that an opposition should be entered to every project in which they are not employed. There may be contributory causes, but to these and others that flow from them our chief difficulties may be assigned."

In this paper and the discussion which followed its reading, as reported in the journal of the institution for April last, there is a full and lucid exposition of this whole question, including electric lighting, traction, power, and the telephone. Men justly eminent throughout civilization for their scientific attainments—the very men who should be and doubtless are best informed on the subject—took part in that discussion.

Time will not permit me to read extracts from this report. It shows throughout an intense feeling of humiliation over the condition of the various branches of the electrical industry in England and a practical unanimity on the question of responsibility, fixing it upon unwise legislation—along the exact lines which Professor Parsons recommends for this country—and municipal obstruction. Mr. Atherley Jones, M. P., present by invitation, took occasion to say: "We have perhaps coddled our municipalities a little too much. We have recognized by recent legislation that the chessboard system—if I may use the expression—of local government is not that which, in certain directions, is best suited to serve the public benefit. * * * We find that one of the greatest hindrances, probably, to the development of electrical enterprise, in traction or in lighting, has been the veto, which can be exercised by local authorities over the private enterprise. That, I think, will be removed."

A member of the institution, an officer of the National Telephone Company, said: "I have been fighting the opposition (Government) for many years and I have never yet been beaten on equal terms, and I have never been beaten on unequal terms—very unequal terms in many cases. The whole point of the matter is, thus, equality. * * * The history of the telephone branch of electrical engineering is a history of one long fight by the companies to be allowed to serve the public." He then states this history very fully.

Replying to this speaker the head of the engineering branch of the Government's telegraph and telephone department used these significant words: " * * * "In acting as the post-office has it is really protecting the rights of the Government under the telegraph acts. Those acts were passed as the result of a public demand pressed on the Government, and they were carried by Parliament in response to those demands. Any subsequent action, whether the action of the committee of the House of Commons, of the House of Commons, or of the post-office itself, is the result, generally speaking, of public pressure." He said nothing whatever in justification of the action of the post-office except that it was "to meet the demands of the public."

Thus it will be observed that among intelligent Englishmen the sad results of imperial and municipal control of the electrical industry, in all its branches, are clearly recognized and that already strong forces have been set in motion to remove the shackles placed upon it by misguided public opinion.

Now, on the whole, considering these handicaps that I have mentioned, the development in Great Britain has been far in excess of that attained on the Continent under government or municipal ownership. On January 1, 1901, London, with a population of 5,633,000, had 41,111 telephones; that is, 7 per thousand; New York, with a population of 2,050,000, had 51,647; per thousand, 26. Among European cities of its class London's development is exceeded only by that of Berlin, and in Berlin we saw how the rate policy of the Government had developed the business at the expense of the other imperial revenues.

The rates, generally speaking, in England, are flat. The Parliamentary committee in 1898, reported in favor of message rates. I will read an extract from the evidence of Mr. W. E. L. Gaine, before the select committee of the House. He is general manager of the National Telephone Company. He says: "I think we have been wrong [in adopting flat rates] from the very commencement; and nearly every other country has been wrong. America has rectified this. In New York, in particular, they have been very successful in bringing the message rate into operation."

This committee took a great deal of evidence and made a very voluminous report. It gathered information from the consular service reports from practically all over the world respecting telephone conditions, and it said respecting message rates:

"The present subscription system, with the subscriber's right of unlimited user, means this: That persons who are rich enough to pay a fixed annual sum and who use the telephone sufficiently often to find such a payment advantageous to themselves, whose correspondents also pay a similar sum and use the service with similar frequency, can alone or almost alone avail themselves of this mode of communication. It is just as if the post-office should decide to dispatch telegrams only from persons paying an annual subscription, and to allow such persons on payment of their subscriptions to dispatch without further charge any number of telegrams, requiring at the same time that telegrams should be addressed only to persons connected with the post-office telegraphs by private wires.

"Mr. Gaine, the general manager of the National Telephone Company, admitted to your committee that the system of limiting the service almost wholly to subscribers and giving to each subscriber an unlimited use—a system which is universal in this country and is adopted to a large extent abroad—has been based from the first on a wrong principle."

The London rates, as I said, are flat. The rates are, direct line, business \$100; residence \$60 a year, with discounts for long-term contracts. In comparing, I shall use the rates under one-year contracts. The payments are annual, in advance, in London; in New York, monthly, in advance. The National Company has a very large fund which it carries forward from time to time as rentals paid in advance. Its annual statement at the close of last year showed \$3,840,000 carried forward in that account. The exact amount for London is not stated, but the interest on such a fund would be an item worth considering in any comparison. I have no means of telling exactly what the average rate in London is, but taking their published statements, showing the number of stations they have, the number of lines they have in service, and taking their published tariff books, as near as I can get at it, the average rate in London—and I think it is a very conservative statement—approximates \$72. Now, as I have shown you, the average rate in New York is \$85. The one item of wages alone, inasmuch as our wages exceed theirs, on an average, by 100 per cent, is enough in itself to account for the difference between these average rates. There is another important point. One might urge that with a flat rate, an unlimited user, as you put it, the subscriber gets more for his money than where the message rate is applied; and that, therefore, in London for \$72 the man would be getting more than he would in New York for \$85. Now, unquestionably, imposing a charge on each message limits the number of messages that are sent. That is human nature. It eliminates, generally speaking, all frivolous conversation, the unimportant use of the telephone to make appointments for to-morrow or to discuss the episodes of last night, and so on; and there is a reduction, perhaps, of 20 to 30 per cent in the average traffic, where each talk is charged for. That is offset by an

excellence of service, which makes the service relied upon for most important transactions. In New York, for instance, most important transactions—transactions in stocks and important matters of all sorts—are transacted by telephone, without any hesitation whatever. The service is so permanent, reliable, and quick, that it is very generally relied on. Now, the London service is not so generally relied on, because of its inferiority, which is due, I repeat, in my opinion, largely to the municipal refusal to permit them to put in a plant that is absolutely necessary to render efficient service, and also due to the fact that their system is smaller than ours. I have already given you figures showing that our system is larger than theirs. We find that the greater reliability of the service and the larger system draw out just as much traffic per station as they have in London, the figures showing that the average traffic in the two places is about the same. Therefore, you have about the same amount of traffic in New York that you have in London, in the one place for \$85 and in the other place for \$72. I think the comparison very favorable to New York.

Q. (By Mr. LITCHMAN.) When you say you have the same service, do you mean that there are the same number of persons per telephone in London as in New York?—A. I say that the number of talks per station is just as great in New York as in London, notwithstanding that in New York we charge for each talk, while in London the charge is the same whether the talks are many or few. I am offering these facts to show that while the average rate in the two places does not differ very much, the average man in New York gets just as much service as the average man in London.

Q. By Mr. KENNEDY.) While you are making a comparison of that sort, I would like to ask you if you have prepared a comparison in regard to long-distance rates. I see that there are some remarkable statements in testimony here in regard to long-distance rates.—A. I have endeavored to confine myself to the conditions in the large cities, so far as possible, and while I think that the differences in conditions would account for any apparent differences in long-distance rates, I think I should leave that for Mr. Hall, who I understand will cover that in his testimony.

Q. It has been stated before this commission that long-distance rates are lower in Europe than in this country. It was stated that from New York to Philadelphia, 137 miles, the day rate is \$1.25 for 5 minutes, while in England, the rate would be 48 cents for the same distance; in France, 30 cents. That is a remarkable disparity in rates.—A. Yes; it is a remarkable apparent disparity. I do not know that the figures are correct. As I say, I have not undertaken to discuss this question of long-distance traffic, for the reason stated. I am not connected with the long-distance company in any way whatever, and, as I understand it, Mr. Hall is to give you full information on that point. From my observations, however, both in Europe and in this country, I think a careful inquiry into the question would satisfy any reasonable person that the differences between the two countries are more apparent than real, as I am showing you on the question of exchange rates.

Q. (By Mr. CLARKE.) Are you able to state how many private companies were amalgamated to form the National Telephone Company?—A. I do not know that.

Q. Was there any objection raised among the people to the formation of the National Telephone Company, on the ground that it was in the nature of what we call a trust?—A. Not that I ever heard of.

Q. Have there been any public evils or bad consequences from the formation of that company?—A. Not that I have observed, as brought out in any of these parliamentary inquiries, unless you would say that the general dissatisfaction with the rates and service in Great Britain, which led to the enactment of the law of 1899, could be so construed.

Q. Suppose the Government were not competing with this company, is it your opinion that the company would make its rates as reasonable as they are now?—A. I hardly know what the company would do, because I am not connected with its management, but I think a wise policy on the part of the company would be to make rates just as good as those it now offers, if not considerably better. I agree with the parliamentary committee entirely as to the wisdom of having a message plan in London. The company's rates were adopted before the Government's competition was commenced. Let me make another comparison, though, before I leave the question of London rates, because we so often hear of great discrepancies between New York and London rates. The London flat business rate, annual contract, is \$100. Now, that is for a direct-line station, eliminating all extras, all supplementals. Now, our New York measured-service direct-line average rate was \$102 at the beginning of the year. There are more measured-service direct lines in New York than there are direct lines in London, so that there we have another comparison favorable to New York.

Q. (By Mr. LITCHMAN.) Will you kindly explain that a little more definitely? I do not understand what you mean by direct line.—A. We call a direct line one that is exclusively for the use of a particular subscriber. If a line runs direct from your station to the central office, and no other subscriber's station is attached to that line, we call that a direct line.

Q. (By Mr. FARQUHAR.) Is there a large increase in the acquirement of these direct lines now by subscribers?—A. A large increase?

Q. Yes; demand for direct line.—A. Our growth consists almost entirely of direct lines in New York. On the question of wages, Mr. Forbes, president of the National Telephone Company, testified before the select committee of the House of Commons, in 1895, that the wages of the company's operators varied from 5 shillings (for understudies) up to 17 shillings per week; lady superintendents about 2 guineas per week; wiremen 6 shillings a day. The testimony taken at the Glasgow inquiry in 1897 showed the average pay per week for the National Telephone Company's operators in that city to be 9s. 4d. The London wages may have been increased since 1895, but considering the ruling rates then and now for all classes of labor in London, it is safe to say that the increase, if any, can not have been great. These rates of pay, with a reasonable allowance for increases, compared with those already mentioned for New York, show that the statement that New York wages average double those in London is very conservative.

Considering the extent to which labor enters into the cost of service, differences in wages, rents, transportation costs, etc., there should be a greater difference, perhaps, between the New York and London rate in favor of New York; but, in fairness, London is entitled to a consideration of the fact that it pays a heavy royalty of 10 per cent to the Government, and that the cost of the service is largely increased by the obstructive policy of the municipal government. Much that in New York we are enabled out of our earnings to pay to labor in the way of wages goes in London to the Government in the shape of royalty, or is wasted through opposition of the municipality.

In the Scandinavian cities we have a demonstration of what can be accomplished, even on European soil, by private enterprise, notwithstanding the embarrassments of governmental and municipal interference and opposition. The situation in these cities has been greatly misunderstood by those who have not studied it very carefully. Copenhagen and suburbs is operated by a private company. Copenhagen is one of the best telephoned cities in Europe. It has a population of 312,859; it has 15,311 telephones, or 49 per thousand. San Francisco, however, with a population of 342,782, has 21,321 telephones, or 62 per thousand. All these are first of the year figures. The service and facilities here are far in advance of all Continental countries, except Sweden. In Copenhagen the residence rate is \$27; business rates, \$32.40 to \$48.60 per year; message rates, \$13 per year, up. Skilled operators are paid from \$2 to a little over \$3 per week; linemen, about \$5.70 per week. So far as the plant is concerned, Copenhagen is chiefly on the single overhead-wire plan. It is now being gradually changed to metallic circuit, underground. The central office plant is somewhat out of date, but plans for a new building and new equipments are now under way.

Notwithstanding these excellent conditions under private ownership, the Government in 1898 assumed control of the telephone business, and licensed the company for 20 years longer, reserving the power to fix the rates every 5 years. In 1899, the Government fixed the rates which I have mentioned, and these are slightly lower than the rates which obtained prior to that time. To compensate the company for this reduction, the Government relieved it of the payment of a compensation to the municipality previously paid; freed it from all rights-of-way charges, even in the case of owners of private property; gave it protection from all users of high-tension currents; and, in some ways, gave the company the same advantages that usually accrue to a European State.

By comparing these facts with those stated as to other European places, we see that the best conditions thus far commented on exist at Copenhagen, where until very recently the industry was left to private enterprise with but little interference. Moreover, considering the relative purchasing power of money in the cities of even rank in this country and in Copenhagen, the rates in the Danish city are relatively as high as those in the American cities.

Sweden.—The Swedish Government has no monopoly by law of either telegraphs or telephones, but has the advantage of exclusive rights over State highways. Except in Stockholm, the industry is now conducted by the State exclusively.

Stockholm has the largest development among cities of its class in Europe or America, except, possibly, San Francisco. On January 1, 1901, with a population of 320,000, it had 22,000 telephones, or over 69 per thousand. The San Francisco figure I have already mentioned, but San Francisco has since been making such rapid strides that now it is perhaps ahead of Stockholm.

Q. (By Mr. LITCHMAN.) Do I understand you that Stockholm has not a public system?—A. There is a public system and a private system, which have been in active competition since 1890. The business is chiefly in the hands of the private company, its stations numbering at least two to the State's one. Usually the development in Stockholm is attributed to the Government, and generally popular writers, by ignoring the existence of the private company and by referring only to the State,

lead the public far from the truth. Even Professor Parsons, a student of the subject, as I understand his testimony, seems to have only confused information about the conditions. As I remember it, he speaks of the conditions as if they were produced by the State; anyone reading his testimony would get that impression. There has been very active competition between the private management and the State. The State has no monopoly under the law, but it has obtained control of the business in all parts of Sweden, except in Stockholm and its suburbs. It controls the interurban lines, and it has been in very strong competition with the private company in Stockholm.

On visiting Stockholm one is impressed by the beauty of the city, the substantial character of its buildings, the activity of its people, and above all by the cheapness of things. On this matter of cheapness I shall present a few details to serve as illustrations. The present American minister at Stockholm, Mr. W. W. Thomas, who has spent the greater part of 40 years in Sweden representing our Government in various capacities, has written a book on Sweden and the Swedes, from which I shall read a few extracts:

"The Swedes in the cities live in flats. You will find few families in Stockholm occupying a whole house. . . . Many bachelors and some families, too, in Stockholm, dine at the restaurants, of which there are many in the city, and all of them good. Special arrangements may be made by the month, which are very cheap. . . . The Swedish servant girls are admittedly the best in the world.

They are kind, obliging, polite, neat, skillful, and seem to have their employer's interests at heart. They usually do the marketing, and will procure much more with the money given them than you could get for yourself. They buy vegetables, fruits, meats, and fish on the open squares and market places, not infrequently at first hand from the country people, and cheerfully lug home their 20 or 30 pounds of purchases in large brown baskets. They work, too, for what would seem to us in America to be very small wages. The average pay of a first girl or cook in the cities of Sweden is 75 cents a week, and of a housemaid 50 cents. They expect, also, to receive a present of 10 crowns (\$2.70) and a new dress at Christmas and 10 crowns at midsummer; and besides, they receive a little gratuity now and again from guests who visit the house, but nothing more. The servant girls do not hire out by the week, as with us. They engage by the year, or possibly for 6 months, but rarely for a shorter time. . . . I once visited a friend, a captain in the Swedish army, in the interior of Sweden. His wife was an invalid, and his establishment was conducted by a most excellent housekeeper. Her salary, I found out, was 100 crowns (\$27) a year."

Speaking of insuring his furniture for a year at 50 cents per \$1,000, a premium of one-twentieth of 1 per cent, he comments that he had insured his office furniture, in what we call a first-class brick building in America, a few months before at 1 per cent per annum, exactly 20 times the Swedish rate, and adds: "This was a revelation in insurance. The subject was interesting. I looked further into it. I found the premium on first-class buildings, though higher than on personal property, was only 75 cents on \$1,000 a year. However, by paying \$17.50 on \$1,000 you may insure your house forever, and not only the particular house now standing, but all first-class houses that may be built on the same lot to replace it and its successors to the end of time; that is, the sum an American pays to insure his dwelling for 2 years will enable a Swede to insure his Stockholm house forever. . . . The Swedes are very economical and careful of everything. Skim milk is regularly carried through the city in bottles and sold. The blood of slaughtered animals is saved and used in making soups and puddings."

Speaking of physicians, whom he characterizes as skillful, highly educated, and most honorable gentlemen, he says they "do not make out or send in any bill to their patients. What you pay your doctor is entirely optional with yourself." The custom, Mr. Thomas states, is to send for a year's services an amount ranging from \$27 to \$135, according to the position of the family in society.

In a personal conversation, Mr. Thomas informed me that the pay of a policeman in Stockholm was \$21.60 a month, and that of a private in the Swedish army was 10 öre (2.7 cents) a day, with subsistence and uniform. The legal cab fare in Stockholm is from 13½ cents upward, according to distance, while in New York the minimum charge is 50 cents. The legal fare for a ride of 4 miles in Stockholm is 53 cents, and in New York \$2.

In "Railroad Transportation" President Hadley refers to Sweden as "the only country whose railroads have cost anything like as low a figure" as \$30,000 per mile, and says "land, labor, and material are all exceedingly cheap." In the telephone company's service skilled operators are paid from \$1.95 to \$2.92 per week; linemen and mechanics about \$6, and foremen about \$8.30 per week.

The company has in its entire territory in and around Stockholm 27,247 stations and 573 employees; i. e., one employee for 47 stations. In New York the figures mentioned work out one employee for 17 stations. These figures are very significant.

In view of these various facts showing the conditions of living and the cheapness of things in general, we should expect under normal conditions to find telephone rates that to us would appear to be very low. But the conditions are not normal. The bitter competition between the private company and the Government has created conditions which make it quite unsafe to take any rates that we may find in Stockholm as a criterion of what should be expected elsewhere, even were it possible to make due allowances for any differences that might affect the relative costs of rendering the service. On this point I quote from the official report of the director of the municipal telephone industry at Amsterdam, made in September, 1898, after a thorough investigation of the subject on the ground: "It is plain that the extraordinary development of the telephone at Stockholm is the result of the sacrifices which are made by the Kingdom as well as by the Allmänna Company, and we may also add that, according to the statement of Mr. Hultman, the shares of the company are held principally by the wealthy director, Mr. Ericsson, the manufacturer, who, after past years of profitable enterprise, would now be satisfied with little or no interest, in order to sustain the battle with the Government. For telephone enterprises which have to find the money themselves, and have to work, as a rule, at the same time under less favorable local conditions, the unique position of the telephone at Stockholm can hardly be cited as an example."

That the rates are too low even for Sweden, and that competition works in all ways unfavorably, are shown by the following extract (taken from the report of the select committee of the British House of Commons, 1895) from a letter to Sir William Preece, then engineer in chief of the British telegraphs, from Mr. Storckenfeldt, then and now director-general of the Swedish telegraphs:

"The private telephone company in Stockholm has obtained the right to work telephones within a distance of 70 kilometers radius from Stockholm, but may not extend operations outside of this circle. This concession does not, however, exclude the State from likewise working telephones in the same district. In consequence a competition has arisen which works in all ways unfavorably, and which has also entailed the result that the fees have been brought down far below the proper ones. Even for Swedish circumstances the fees are quite unreasonable, quite too cheap."

This is a frank acknowledgment. What the Government loses in Stockholm it can make up elsewhere. Contrary to the rule generally followed, it charges more for service at Malmö—for example—a much smaller city, than at Stockholm. Besides, it has the State's revenues from other sources to fall back upon if necessary. The intensity with which this Stockholm telephone war is carried on in absolute disregard of the public interest is shown by the fact that since Mr. Storckenfeldt's letter was written a still further reduction in the Government's rates has been made. The Amsterdam director reported: "The Riks-telefon has again lowered its tariff to 50 kronor (\$13.50), with 50 kronor entrance fee for places within the 2-kilometer distance from its head exchange; places farther distant pay an increase of 10 kronor per year and of 25 kronor entrance fee for every farther distance of 500 meters. According to a communication by Director Hultman, the Government in the dispute with the Allmänna is satisfied with paying the working expenses without calculating interest and redemption of capital, which is amalgamated with the capital of the telegraph." The company's rates are also very fully and clearly stated by this gentleman, and I will read them from his report: "The telephone tariff of the Allmänna is consequently reduced to 100, 80, 60, 45, and 36 kronor (approximately from \$27 to \$10) per year for different classes of subscribers. The first three classes pay an entrance fee of 50 kronor (\$13.50), the two last of only 10 kronor. Only the subscribers of the highest class have an unlimited right of user; the others are more or less limited in the service. Of the second class every two, and of the third class every three, have a mutual common line to one of the three head exchanges. The subscribers of the fourth (business) and of the fifth (residence) class are connected to one of the five subexchanges, and are allowed to call only those of the first class in an unlimited manner, but otherwise are not allowed to make more than 100 free calls during one quarter. Each call over this number costs 10 öre (2.7 cents)."

Although a krone will go practically as far in Stockholm as a dollar in an American city of equal rank, these rates appear to be low. Mr. Storckenfeldt said even when they were higher that they were unreasonably low even for Swedish conditions. But to a very large number of subscribers they are not as low as they at first seem, and here is a fine illustration of one of the disadvantages of two systems operating in one city. I quote again from the report of the Amsterdam director:

"When considering the situation from the standpoint of the subscriber, one must not lose sight of the fact that persons who wish to speak by telephone with all the subscribers, send and receive telegrams, and keep up intercommunal calls, have to connect themselves with the Riks-telefon, as well as with the Allmänna Company, and then have to pay at least 100 + 50 kronor (\$40.50) a year, with a minimum of 50 + 50 kronor (\$27.50) as entrance fee. Further, every call between the subscribers of the Allmänna and the subscribers of the Riks-telefon costs also 10 öre (2.7 cents)."

There are not 1,000 or more subscribers who are required to take both telephones, and the number of intercommunications amounted last year, according to the Allmanna's report, to 1,099,837. The combined rates and the extra charges, to say nothing of the great annoyance and vexation incident to the duplication of instruments, to a very large percentage of telephone users in Stockholm amount to a very considerable sum. The rates, therefore, under these conditions are not at all what at first glance they seem to be. Under competition, therefore, as seen in this Stockholm case, there is a waste of capital and energy, the public is annoyed, in many cases overcharged, and, in a way, badly served because of a fight in which it has no interest. Thus far the company has had the best of the fight so far as victory may be measured by the amount of public patronage, having now, as already stated, about twice as many stations as the Government.

Q. (By Mr. FARQUHAR.) How far has that increase been affected by the necessity of getting a grant through some legislative body?—A. The private company has not had to have a legislative grant. Anyone is free to conduct the business in Sweden.

Q. Under what control is the State plant?—A. The State plant is operated by the State telegraph and post department, which has an exclusive right of way over State highways and on Crown property. The municipality of Stockholm has strongly supported the private company.

Q. How far has that support to the private company operated as a deterrent to the extension of the public system?—A. It may have so operated to some extent, but I hardly think it has. If the Government could get the business it could take care of it by overhead wires. Its system is not too large for that. The municipality has said to the Government, "So long as you impose unequal terms on your competitor, the private company, we shall not give you underground privileges within the municipality." So far as I know, only in this way has it aided the company. The State may run its lines overhead to any extent, but it can not go underground without the consent of the municipality. The attitude of the municipality and the distribution of the public patronage between the two competitors does not sustain Professor Parsons in his statement that under public ownership the "civic interest" of the people increases the service and that the people patronize their own institutions to a far greater extent than they do private institutions. This is the only case in the world, so far as the telephone business is concerned, where the people have had an opportunity to bestow their patronage as they prefer upon a public or private enterprise, both going concerns.

When some 2,000 or more stations—those used by the Government itself and those which it furnishes free or in exchange for the privilege of attaching its wires to private property—are eliminated, it will be seen that the Government gets a very small share of the patronage. Even those who do take its service are not entirely free to choose between the two enterprises. By discriminating against the company's subscribers in the use of its long-distance lines, imposing an extra charge on every long-distance message originating at a company station, it forces a number of people to take its service merely to avoid these extra charges. This accounts for many duplicates, that is, both services at one place. At Amsterdam the public and the press were opposed to the taking over of the telephone business by the municipality. The facts in that case, especially the meager development, do not justify Professor Parsons's generalization.

The company, forced to economize in every direction, has pressed wages down to the lowest possible point. The relations between the management and the force, to say the least, have been strained, and there are occasional ruptures. At one time an operators' strike caused a practical suspension of business to the immeasurable inconvenience of the public. The company's financing has been declared by competent English experts to be unsound, and such as would be absolutely illegal in England. It has paid dividends regularly, but only on a small part of the capital invested in the business; this of course at the expense of the underpaid employees, the plant which has not been adequately maintained, and proper reserves which have not been provided.

When speaking of conditions in various cities under State or municipal management I have referred to the results obtained in these Scandinavian cities under private management. I have appreciated that an allowance should be made for the abnormal conditions at Stockholm. Were this done the facts as modified, it is reasonable to believe, would at least equal those at Copenhagen; and these are quite sufficient to justify my statements. Further, it may be pertinent to point out that with such a modification San Francisco, an American city fairly comparable as to size and general conditions with Stockholm, would stand far ahead of the Swedish capital in the order of merit.

The enterprising general manager of the Allmanna Company has kept well informed about telephone conditions in all parts of the world. He has recently made arrangements to conduct the telephone industry in two of the leading cities of Russia. He visits this country occasionally. I referred this morning to the fact that he had on

several occasions spoken most favorably of our New York conditions. I have here two letters from him. In one, written 3 years ago, he says:

"We are going to build quite a new central exchange, and it is very likely that the directors of the company may consider it necessary for me to see the new arrangements for central exchanges in your country, always so ahead of everything." He is ahead of everything in Europe, and that is his remark at that time. Just 3 years later, in February, 1901, I received a letter from him from Moscow. These are private letters, but I do not think I abuse his confidence at all or that he would object to my using them in this way. He says: "We have not, I am sorry to say, the same faculty of working quickly as the sons of the New World. You ask me when I am going to pay your country a visit. To that question I can answer, in 2 or 3 months. I wish before starting the great new business in Russia to see and learn from the enormous progress of telephone matters in America since we last met."

I have hastily run over the whole of Europe, showing that the cheapest and poorest conditions obtain through Government and municipal ownership; that the next best conditions are obtained under private ownership with Government control; and that the best conditions are obtained where there is the least restricted private ownership. That is the case of Stockholm. The private company has outstripped the Government against odds. In not one of the cases where there is Government or municipal ownership have we found adequate facilities, efficient service, reasonable rates, and a self-sustaining system. Speaking generally, now, for the whole of Europe and America, there are 20 American and 44 European cities with 200,000 or more population. In the American group, per thousand of population there are 21 telephones; in the European group, 13 telephones; almost 2 to 1 in favor of American cities. Among cities of 1,000,000 or more, New York stands at the top, with twice as many telephones per capita as any city in its class except Berlin; and I have explained the causes of development in Berlin. Of the cities from 500,000 to 1,000,000, Boston is at the top, with more than twice as many as any European city except Hamburg, and almost twice as many as Hamburg. Of the cities that run from 200,000 to 500,000, Stockholm is at the top, with San Francisco a close second. It is possible that San Francisco may now be ahead. At the date named (January 1, 1901) San Francisco had 21,231, as against 22,000 in Stockholm. The European small towns have shown a most insignificant development, and the American small towns a very great development. In all these figures I have not included the independent telephone companies, for the reason that I have not wished to present any figures showing duplicate systems. The independent companies claim to have a very large development, and however much of truth there may be in the claim, it only strengthens the case in favor of America.

President Hadley, in "Railroad Transportation," calls attention to a difference between American and European ideas which I think worth remembering in this connection. He says: "There is one respect in which England and America are like one another, but sharply different from France, Germany, or other European countries. It is in the way in which people in general are disposed to regard Governmental interference. The English and American maxim is that whatever can be done without Government should be thus done. The continental principle is that whatever can be done by Government should be. It has become a commonplace saying that our Anglo-American idea of liberty is not developed in continental Europe. When a Frenchman speaks of liberty, it is not so much freedom from interference with his own movements that he seeks as the right and power to interfere with other people's movements. What he really wants is political power. A party may call itself Liberal or Republican; but when it gets into power it governs about as strictly as its predecessor. Sometimes there is a monarchy, sometimes a democracy; but there is always a bureaucracy, a government by officeholders."

When we consider that difference in ideas and at the same time remember that the telephone development under private ownership in the United States is so far ahead of that in Europe under governmental and municipal ownership, we may safely conclude that the best possible results will be obtained by leaving the industry to private enterprise.

Q. (By Mr. LITCHMAN.) What has been the effect in those cities and States where independent telephone companies have been established upon the charges of the Bell Telephone Company?—A. I answered that question in respect to my territory by saying that there were 4 towns where we have had opposition, and that we have not put in in those 4 towns any rates which we have not put in in towns of similar size and circumstances elsewhere in the territory.

Q. Now, how is it about the city of Detroit?—A. The city of Detroit has a very peculiar history. I was quite familiar with the conditions there at one time. I do not know that I could give you the exact conditions at the present moment, but I understand that there was great dissatisfaction there and that the competition created worse conditions than existed previously.

Q. How about the State of Indiana which has a telephone system covering pretty nearly the whole State, called the New Telephone, if I remember correctly?—A. I do not know the details of such a system. I saw a press statement yesterday respecting the telephone development in Indiana, showing that there was a very large independent development there, but as to the exact details I do not know.

Q. Is it not a fact that when that exchange was established there was a decrease in the rate charged by the Bell Telephone Company?—A. I do not know that there was.

Q. You are more familiar with matters in your own territory. I did not know but as a matter of general knowledge you might know respecting it.—A. No.

Q. In these figures that you have given of stations, etc., in this country in comparison with cities in Europe and everywhere else, are you giving the figures of your own business or have you taken in any independent figures?—A. I have taken the Bell figures only. As I said, so far as comparisons between this country and Europe are concerned, the showing for this country would be better if we included the independent figures. But I have not thought it advisable to consider any duplicates.

Q. (By Mr. KENNEDY.) I have a question which Professor Jenks, of Cornell University, desires to be submitted to you, and it is this: If in Ithaca, N. Y., the telephone rate charged by the Bell company is \$24 per year for single unlimited service, long distance phone, and \$15 a year secures unlimited service with but 3 phones on a line, how much less is your cost in Ithaca, a city of 12,000 inhabitants, than in Washington or Boston, and why?—A. I can only say as to that, that having nothing to do with Ithaca or Washington or Boston it is impossible for me to use exact figures; but, speaking generally, I can do little more than repeat what I said this morning about the difference in cost of furnishing service in a large city and in a small town. I shall not undertake to demonstrate that it costs more per any unit of measure to render telephone service in a large city than in a small town, but just make a few suggestions that may make it a little clearer to you. In the first place it must be remembered that we are talking about rendering a service, not about selling or renting or manufacturing things that can be stored and sold piecemeal or in bulk at will. And then that more than half the operating expenses go for labor; the various figures I have given you show that wages, as well as rents, and many other items that enter into the question are higher—much higher—in the great city than in the small town. Take a small town with an overhead plant with lines generally less than 1 mile long. Any talk involves only 2 miles of wire, as a rule. Usually beyond that point there is a mileage charge. The operation of connecting two stations together is very simple; the labor involved is very slight. Now, go to the other extreme and take a great city where you have 60 times the number of telephones. You do not have 60 multiples or 60 duplicates of the place where you had 1,000 phones, because the whole 60,000 must be so provided with plant and switching facilities that on demand of anyone that particular one may be connected with any other one. These 60 groups of thousands must be so tied together with trunk lines and plant that is not represented by any factor at all in your small exchange, and this switching must be done by operators that perform labor which is not performed at all in your small exchange. Therefore in a large exchange you require many fold more labor and more plant to accomplish a particular thing than you had in the small exchange.

Another thing: In the large exchange there is necessarily a very large surplus plant. In your underground work you must use cables of standard size. If your standard is 100 wires or 50 wires, you may have to take 100 wires where you need only 51, or you may have to take 50 wires where you need only 20; so that you have always quite a large surplus plant, which you do not have in the small place, and interest and depreciation run on that surplus plant all the time. There are surplus subways for the same reasons and for the additional reason that when once the street is opened ample conduits for future growth must be laid, for you can not be always taking up the streets. In the large place you have a great investment lying idle during the slack hours of the night and a large part of the day. Your plant must be right up to the highest requirement of the busiest 5 minutes of the day. In the city the work of the 24 hours is concentrated within narrow limits, a few hours in the afternoon—2 or 3 hours—and a few hours in the morning. In the small place it is spread out over the whole 12 hours—that is, more generally spread out. Now, in the small place, if you talk with another man, you are monopolizing a wire which can not be over 2 miles long—relatively a cheap wire. If you are at the Battery and talk to a man in Harlem, your message does not flow along the line with a lot of other messages following it, as street cars full of passengers run over a track, but you take the entire plant, the entire wire, from the Battery to Harlem and you monopolize that entire wire. Not another single man can get on it while your conversation is going on. So that the message in the great city is not the equal of the message in the small town. The cost of the one is insignificant as compared with the cost of the other.

I appreciate that that argument might, without some correcting force coming in somewhere, carry you to a point where you would say that the more business you get the worse off you are; and that has been frequently urged. But the message-rate principal brought in that correcting factor in New York, and we abandoned the station as the unit of measuring things and took the message instead. Now, the message in the great city costs you vastly more than the message in the small city, but the volume of traffic tends to equalize that thing, to bring down the cost in the great city, because you have got more business to handle.

Then, again, you must remember that every message occupies your whole line. You can not send your traffic over the line as you do on a railroad. If you had one railroad track and your traffic got beyond the capacity of that track, you would keep that track going at its full capacity and you would put another track alongside of it, and another and another; but in a comprehensive telephone system the limitations upon the traffic-carrying capacity of the single line are such that you can not go on as in the case of a railroad. Now, in a place like New York City, with short business hours, you can send comparatively few messages over a line; that is, as compared with the number that you might send if you were distributing them over the whole 12 hours.

And another thing, the traffic must be so limited that when one man wants to talk with any other one among the 60,000 he must get that one within a reasonable time. It is not as if you were sending your traffic from one terminal to another terminal and providing only enough tracks to shoot it through. But you have 60,000 people and each one must have the potentiality of an immediate connection with any other of the 60,000. If you should overload your lines, the result would be that a great many of the lines would be busy and your service would be inferior.

Q. (By Mr. LITCHMAN.) In the management of the New York exchange has the increase in the cost of maintenance and management been proportionate to the growth and extension of the plant? And then, supplementary to that, which may explain that question, is there any point where a percentage of the service may be added without increasing the cost of maintenance and management?—A. There is a great difference of opinion as to the principles upon which charges shall be made. My own personal opinion is that, in railroad transportation, for example, the point is never reached where you can carry additional traffic for nothing. So in the handling of telephone traffic you never reach a point where you can carry more traffic for nothing.

Q. There are certain fixed charges, are there not, in the management of the business?—A. Yes.

Q. And are not those fixed charges the same whatever the amount of business you may do, assuming that you do any business at all, of course? For instance, you have to have a superintendent, do you not?—A. Yes.

Q. You have to have a manager of your exchange?—A. Yes.

Q. And you have to have a certain number of girls employed; you have to have a certain size of switchboard; you have to have a certain number of wires; you have to have a certain number of connections. Now, I want to get at, if I can, within what limits this is elastic, permitting a certain amount of loading without increasing the number of girls, without increasing the size of the switchboard, without increasing the superintendents and management, and so on. The object of my question is to meet exactly that point which you raised a few moments ago, that the paradox is sometimes made, taking the argument of the telephone company, that the more business you do the nearer you are to bankruptcy. Now, I want to find out where the happy medium is between doing too much and too little business, if there is such. For instance, in the steel line we understand that a steel mill run at its full capacity can be run more economically than if it is run two thirds time, and that frequently steel mills run full time and sell their surplus in foreign countries because of that fact. I understand that to a limited degree that may apply here, and I wanted to find out how far it might apply here.—A. Of course that same line of reasoning does not apply here, because we are not producing a product that can be stored. Our product is a service rendered. Now, unquestionably, if you have your plant and your skeleton organization, such as you have defined it, you can within certain limits add work at very little additional cost; but when you dispose of that additional service at very little charge you deprive yourself of earnings that would enable you to reduce other charges and further extend the benefits of your system to the general public. One man would think the one course preferable, perhaps, and another the other. You suggest that there is a product that might be sold at a very low figure; in other words, that certain messages to very heavy users could be sold at a very low price.

Q. That is not the point I am trying to get at at all. What I am trying to get at is whether, after your plant is established, there is not a certain amount of loading of the plant which makes it possible, perhaps, for the plant to be run at its full

capacity and which, for all practical purposes, costs nothing, and whether there is not a point where that loading can be made for the benefit of all the subscribers and will secure a reduction of the rate to each?—A. Of course, that is what we are aiming at, and have been aiming at. Our endeavor, ever since 1894, I may say, has been to so arrange our rates as to afford the largest benefits to the public and give them the best facilities. But there is one that you must keep in mind, and that is the limit to the carrying capacity of a telephone line—not as a single line between two points, but as part of a very complicated and very extensive system of lines, any two of which may have to be connected at any moment. One might use his telephone 50 or more times a day, but such use is only possible when the line over which such a number of messages is sent is connected with other lines not used to that extent. That line is so fully occupied by outward messages that few, if any, incoming messages can be handled over it. Practically it is "busy" to all inquirers. It is obvious that all lines could not be used to any such extent; an attempt to so use them would necessarily result in complete failure. If a large part of the lines were so used the service would be inferior and unsatisfactory. Incidentally the costs would be vastly increased because of the futile use of plant and labor in performing the work to ascertain that the line wanted is busy. For example, a subscriber in Harlem, let us say, wants to reach a downtown point. He gives his order. The Harlem operator and the trunk line operator do practically as much work to ascertain that the downtown man is "busy" as they would do to put the call through. The waste of labor and plant would be enormous. The average use per line would doubtless be increased by lower rates. It has been increased by lower rates, and the New York system may to-day be capable of carrying more traffic than it does carry without detriment to the service, but these facts may show you that the problem is not a simple one. A common statement by those who have not had experience in the matter is that by reducing the rates by half the business would be increased at least fourfold, and the net profits to the company would be increased. If this were true, self interest alone would lead the telephone company to so reduce its rates at once. Professor Parsons says in his testimony that a proper rate for any large city should be \$30 a year. I assume that he means this as the proper rate for unlimited use—a flat rate. I have already shown you that wages alone in New York exceed that amount per station. Were such a rate fair in New York the New York Telephone Company could not hold the field, and ought not to hold it.

To show you that our rates are fairly well arranged to bring out the results you speak of, I may say that in Manhattan we begin at \$60 for 600 messages; then run the additional message rate down from 6 to 3 cents per message, along a graduated scale under which at a point within the average traffic carrying capacity of the line, we reach about \$240. (See Exhibit B at end of testimony.) Now there are a great many people who can not get on with only one line; their business requires more than that; and our rates are so arranged that when the traffic overloads the line we can give a private branch exchange, with two lines and with two stations without change of rate. By the operation of the rate itself we avoid the busy-line trouble, which, until a short time ago, was the greatest source of annoyance that we had. I will insert a card showing these rates at the various points.

I have spoken of the \$60 rate. There is an additional charge for the exclusive use of the line of \$15 or less, the idea being that two moderate users can use the line together. Our system is such that we can signal one without signaling the other, so that the service is first class. But if a man wants the line exclusively and sends only 600 messages, he pays \$15 extra, but that extra charge is gradually worked out of the schedule and disappears. At 2,100 messages they are all the same.

Q. Is there any free service to the city of New York?—A. Not that I can think of. The city pays for its service. There may be a little, here and there a line given to the police or fire department as a courtesy, but, speaking generally, the city pays for its telephones.

Q. Have you any means of estimating the cost per telephone?—A. The cost of service per telephone?

Q. Yes.—A. Well, I think that is hardly a useful figure where you have the complexity of a message rate, because your station is not the unit at all. We do not fix the cost that way.

Q. Your cost, whatever it is, has to include the royalties to the parent company?—A. We pay no royalties to the parent company.

Q. Do you not pay royalties to the Bell Telephone Company?—A. No. We rent our instruments from the Bell Telephone Company and pay a rental.

Q. Is not that a royalty?—A. No; I think not.

Q. You do not buy the instruments?—A. No; we rent them, and they furnish us efficient instruments. If they go wrong, as they frequently do, they are returned to them, and they replace them with others perfectly good. I think we pay only a fair rental, considering the value we get from that transaction, but nothing in the way of royalties.

Q. Is yours one of the companies that the Bell Telephone Company owns 51 per cent off?—A. Speaking from general knowledge, I think it owns at least that; but I am not a stockholder of either company.

Q. (By Mr. KENNEDY.) Do you follow in any way the practice of the Western Union Telegraph Company in giving favors to politicians and public officials—in giving franks to them?—A. The State of New York, in adopting its new constitution not long ago, prevented the giving of franks to any public official, and since the adoption of that constitution no frank has ever been issued to a public official that I am aware of.

Q. Would that part of the constitution interfere with the Bell Telephone Company's giving free telephone service to an official or politician of the State of New York?—A. Yes.

Q. Or the city of New York?—A. Not only free service, but any discrimination in favor of that officer. So far as I know, no such discrimination has ever been made.

Q. (By Mr. FARQUHAR.) Does the newspaper press of New York receive any special favors in respect to rates?—A. We have no newspaper rates. The larger papers take the private branch-exchange service and pay the regular rates. I have a letter here from the New York Journal. (Reading:) "We have found the branch exchange to be of the greatest possible service in the business of publishing a newspaper. We make constant use of the telephone for intercommunication between our various departments, and we have no doubt that this use of the system effects a saving in the conduct of our business equal to the whole expense of maintaining the exchange."

And that is absolutely regular rates in every respect.

Q. (By Mr. KENNEDY.) The case of Grand Rapids, Wis., was referred to in testimony given before this commission. It was stated that under a cooperative plan, which the people have there now, the actual cost to a subscriber is \$3 a year for a residence phone and \$18 a year for a business phone, and that, prior to that arrangement, the charge by the Bell Telephone Company was \$36 a year for a residence phone and \$48 a year for a business phone. I should like to ask you if the difference between \$3 a year and \$18 a year, and \$36 a year and \$48 a year, in your opinion, represented clean profits to the Bell Telephone Company?—A. Well, I can only say, as to that, that I will leave it to your good judgment as to whether or not any telephone service could be furnished by any company anywhere at \$3 a year which pursued methods of accounting that would throw into its accounts all the items of expense. But even if you have a cooperative concern where everybody pitches in and does everything that is needed to be done, that is, if the cooperators furnish the phones and put them up, and do all the work and charge nothing for the time, even then it would be difficult to conceive of any efficient service at \$3 a year.

Q. (By Mr. LITCHMAN.) As far as you know, are the charges for rental of telephones by the Bell company the same to all exchanges throughout the United States?—A. That I do not know.

Q. (By Mr. KENNEDY.) The statement is made that in England you can send telegrams free over the telephone. Does that mean that the charge is the same for a telegram that is sent over the telegraph wires and over the telephone wires?—A. I do not know just what is meant.

Q. What do you know about it?—A. In New York, for instance, anyone may call either of the telegraph companies and send a telegram by making previous arrangements with the telegraph company for keeping an account there without any additional charge for the telephone service involved, over and above what he is otherwise charged.

Q. What he is otherwise charged by the telephone company?—A. For any other business. For instance, to make the comparison absolutely fair, let us take one of our old-time stations where a man paid \$240 a year for all the service he got or could get over one wire. Now, suppose he arranged with the Western Union company or the Postal company for sending telegrams over the telephone. He might call those offices as many times as he pleased and he was not charged anything in addition for it.

Q. I would like to ask you if there is any monopoly in the telephone service of the country, or whether there can be any?—A. Well, that is a very large question, quite beyond me. I do not know that I understand exactly. All things are possible.

Q. Well, you have a monopoly of the system on Manhattan Island, have you, at the present time?—A. We are the only telephone company conducting the telephone business on Manhattan Island.

Q. Therefore, you have a monopoly of the telephone service on Manhattan Island?—A. Yes.

Q. Well, the Bell Telephone Company has competitors, I judge, in other parts of the country?—A. Oh, yes.

Q. In Indiana and Wisconsin and even some places in your territory? I should like to ask you whether they have the same facilities for the business that you have, in instruments and patents and everything?—A. We are all equal before the law, as I

understand it, and if one or the other has patents—and they both claim to have—it has those possessions under the law of the land and it is entitled to what they are worth; but I know of no inequalities.

Q. I want to know whether an independent company would be free to go into the city of New York or the city of Washington and set up in opposition to the Bell Telephone Company—if that company has a monopoly in any way that would prevent an independent company from doing it. Is there anything in the way of an independent company going into the city of New York?—A. Why, yes; there are 60,000 telephone subscribers getting efficient telephone service at reasonable rates from a company which is continually working to extend its system and to increase its popularity among its subscribers. But so far as any legal restriction upon any other company's coming into the field is concerned, if it complies with the laws of the State of New York and with the regulations of the municipality, I know of nothing to keep it out. We are competing on strictly business grounds.

Q. The statement has been made that the more you reduce the rates the greater will be the use of the telephone; and it seems that the independent companies, wherever they have come in opposition to the Bell Telephone Company, have reduced the rates and increased the service. I wondered if that would not be the effect in New York.—A. The general statement that the more you reduce the rates the greater will be the use of the service is quite true. That has been our experience in New York. The great reductions and modifications in rates which we have made from time to time have produced a most wonderful growth and extension of the telephone system, increased the use of the service, and made it more valuable to the public in every way. You may remember that when speaking this morning of the unparalleled growth in our system during the last 6 or 8 years I attributed it chiefly to our repeated modifications and reductions of rates. But there is a limit beyond which you can not go and survive. I have shown that in rendering service in New York at the present rates the operating expenses take about 65 per cent of the gross earnings, indicating only a safe and conservative management. If the percentage were greater than that, you could not get capital to make the extensions required by the public. I have also attempted to show that, as compared with rates in other quarters of the globe, considering what we give for the money and what they give for the money, our rates are reasonable; and that the fact that New York has the greatest per capita development among cities of its kind and class in the world shows that the public is pretty well satisfied with the service and the rates. You must always bear in mind the suggestion I made a moment ago as to the limit upon the capacity of your plant.

Q. Is there a growing mutuality or community of interest between the telephone system and the Western Union Telegraph system?—A. Why, the Western Union Company transmits messages, and the telephone company is, generally speaking, in the same business. We are both competing for public patronage, but we do an entirely different class of business. It is not possible to compare the two kinds of business.

Q. Is there any community of interest or ownership between the two—the same men on both boards of directors, for instance?—A. I am not a director of the company, but from general newspaper reports you know as well or perhaps better than I do that some gentlemen are on both boards. That is a public fact.

Q. (By Mr. PHILLIPS.) Do you or do you not know the directors of the company you represent?—A. I know them. I can supply the names. It is a matter of public record.

Q. Is long-distance telephoning displacing to any appreciable degree the business of the telegraph companies?—A. I have no exact information on that. I think the result usually is that if you provide the public with facilities they use them. If you throw a bridge across a stream, you compete in a certain sense with the ferry; but if you watch closely you will find that the ferry and bridge will both do more business than before.

Q. (By Mr. LITCHMAN.) Your company at the present time is a subordinate company of the American Telephone and Telegraph Company, is it not?—A. I do not know what the legal relations are.

Q. I asked the question to lead up to the question whether, as far as you know, the American Telephone and Telegraph Company is doing any telegraph business?—A. I do not know.

Q. (By Mr. KENNEDY.) Have you any information as to whether the long-distance telephone of the Bell Company is, in any degree, cutting into the profits of the telegraph companies?—A. I have no knowledge on that subject at all.

Q. Have you ever heard any complaint under that head from the telegraph people?—A. No. If they have any complaints to make they probably would not make them to me.

Q. Is there ever any violation of secrecy in the use of the telephone service? Do

you have any complaints on that head?—A. The State of New York has enacted laws on that subject making it a misdemeanor, I think, to divulge telephone messages, and I have never had any complaint of that kind. Perhaps it is proper to say that once in a great while some subscriber thinks that his conversation has been listened to and used; but I should say that during my experience I have not heard, on an average, two such complaints in a year; and upon investigation I have never found that any such divulging of the secrets of subscribers has occurred.

Q. (By Mr. LITCHMAN.) Does not your system provide a safeguard against interruption by an outsider while conversation is going on?—A. Oh, if the wire were on a housetop, a man might go there and attach instruments to it and listen.

Q. I mean in the ordinary course of business. Take your wires in conduits.—A. There would be no means for anyone to tap them.

Q. No; I understand. But if there were two or three persons on the same wire—what you call unlimited service, but no direct wire—would it be possible for either of the other two to break in while one was using the wire, or do you have an attachment by which that is impossible?—A. A lockout?

Q. That is what I mean.—A. No; we do not have any of those things, because we have very few party lines in service. Nearly all of ours are direct.
(Testimony closed.)

EXHIBIT A.

CORRESPONDENCE RELATING TO TELEPHONE SYSTEM IN THE DEPARTMENT OF THE INTERIOR.

DEPARTMENT OF THE INTERIOR,
UNITED STATES GEOLOGICAL SURVEY,
Washington, D. C., January 1, 1898.

The SECRETARY OF THE INTERIOR.

SIR: I beg leave to invite your attention to the Departmental telephonic system. So far as this office is concerned, during the 2 years that have passed since its installation, there has not been an entire day when it gave satisfactory service throughout the building. It has been a daily source of vexation, and has caused more inconvenience than the old method of sending messengers to convey communications. At times it seems to work fairly well, but there are occasions when in the midst of a conversation it will suddenly suspend.

Frequent complaints have gone from this office to the Department, and efforts have been made to correct the difficulties, but sometimes the repairer would scarcely depart before the same trouble, or worse, would be discovered.

Unless it can be made into a system that will perform proper service, I have the honor to request that it be entirely removed.

Very respectfully,

CHAS. D. WALCOTT, *Director*.

DEPARTMENT OF THE INTERIOR,
UNITED STATES GEOLOGICAL SURVEY,
September 28, 1898.

DEAR COLONEL RIZER: The telephone on the fifth floor of the Survey building is absolutely worthless. Much time is lost in trying to use it, and generally a messenger is sent from the telephone room with the message that our instrument can not manage. Can not something be done to improve or replace the thing?

Yours, truly,

F. W. CLARK, *Chief Chemist*.

[Indorsement.]

SEPTEMBER 28, 1898.

Respectfully forwarded to the chief clerk, Interior Department.

This complaint will apply with equal force to every Departmental telephone in the Survey building, and it has been repeatedly made ever since the inauguration of the system.

I again urge the installation of a practical system.

H. C. RIZER, *Chief Clerk*.

DEPARTMENT OF THE INTERIOR,
GENERAL LAND OFFICE,
Washington, D. C., October 19, 1897.

The SECRETARY OF THE INTERIOR.

SIR: I have to call your attention to the workings of the Department telephone service, which is totally unsatisfactory and unreliable, and that although frequent repairs and attempts are made to remedy the difficulties they appear to result in no practical improvement.

It is respectfully requested that some better system be adopted to afford a more satisfactory method of communication with the various branches of the Department now reached only by this inefficient system.

Very respectfully,

BINGER HERMANN, *Commissioner.*

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., September 28, 1897.

Mr. E. M. DAWSON,
Chief Clerk, Department of the Interior, Washington, D. C.

SIR: I beg leave to call your attention to the fact that the telephone in room 33 is in very bad condition. It has not been in good shape for the past 5 or 6 weeks, and for the last few days it has been found necessary to resort to the telephone in an adjoining room. This telephone is perhaps used more than any other in this office, and the repeated efforts on the part of the electrician of the building to repair it have not met with success. I must ask that, unless it can be put in better shape than it is now, it be removed from the room entirely, as in its present condition it is simply an aggravation.

Very respectfully,

GEO. L. MORTON, *Chief Clerk.*

DEPARTMENT OF THE INTERIOR,
BUREAU OF PENSIONS, OFFICE OF THE COMMISSIONER,
Washington, August 2, 1898.

The SECRETARY OF THE INTERIOR.

SIR: For some time past we have had numerous complaints concerning our local telephone service. I called upon the chiefs of divisions, and I have the honor to submit herewith reports from each for your consideration.

Very respectfully,

H. CLAY EVANS, *Commissioner.*

(This letter from the Commissioner of Pensions is accompanied by reports from 15 chiefs of divisions, in which the telephone service is said to be "very unsatisfactory," "absolutely worthless," "practically useless," "a source of continual annoyance," etc. In none of these reports is the service favorably mentioned.)

DEPARTMENT OF THE INTERIOR,
OFFICE OF INDIAN AFFAIRS,
Washington, August 16, 1898.

Hon. E. M. DAWSON,
Chief Clerk of the Interior Department.

SIR: I regret exceedingly to inform you that the telephones in this Bureau are a continual source of annoyance, much of the time out of order, and always unsatisfactory, both as to speaking and hearing.

I inclose a letter of complaint from my chiefs of division. I sincerely trust that you may be able to supply us with a better service.

Very respectfully,

W. A. JONES, *Commissioner.*

(This letter from the Commissioner of Indian Affairs is accompanied by a report from 4 chiefs of divisions, in which the following statement is made:

"These telephones were put in some 2 or 3 years ago, the object being, as given out at the time, to facilitate communication between the several divisions of this Bureau of the Department. They are a lamentable failure. They never have been entirely satisfactory. Even when first put in, and it was supposed they were then at their best, they were a source of annoyance on account of their erratic behavior.

They have constantly grown worse, until now their work is so uncertain and irregular as to be of little or no value; much of the time they will not work at all. "We do not know where the difficulty lies, but naturally infer that it is in the thing itself. Be that as it may, for any purpose of our divisions they are entirely worthless, and it would be a relief if they were removed.")

EXHIBIT B.

NEW YORK TELEPHONE COMPANY—EXCHANGE RATES—MANHATTAN AND THE BRONX.

MANHATTAN.

(a) Message rates, direct line, and two-party line.

Local messages to be sent in 1 year.	Annual rate to be paid monthly in advance		Additional local messages, each
	Direct line.	Two-party line.	
600	\$75	\$60	<i>Cents</i> 8
800	87	75	8
1,000	99	87	8
1,200	111	99	7
1,500	126	117	7
1,800	141	135	6
2,100	153	153	6
2,400	165	.....	5
2,700	174	.....	5
3,000	183	.....	5
3,300	192	.....	5
3,600	201	.....	5
3,900	210	.....	5
4,200	219	.....	5
4,500	228	.....	5

For convenience in accounting, contracts will be taken at the above figures only; but in making adjustments, when the number of messages sent is less than the number paid for, the entire schedule (which advances by steps of 100 from 600 to 4,500 messages for direct lines and from 600 to 2,100 for two-party lines) will be taken into consideration.

(b) Auxiliary station.

A station auxiliary to a message-rate station on the same premises with the main station, but connected by a separate direct line, will be furnished at \$48 per annum, all messages to be accounted for as if sent from the main station. Both lines will be designated by one drop number and will be adapted for use as a "double track." A subscriber employing an auxiliary station may contract for messages under the direct-line schedule up to 4,500, and beyond that number in groups of 400 at \$3 per hundred, the contract in any case, however, not to be for more than 4,500 local messages for each line contracted for. Additional messages 4 cents each.

(c) Private branch exchange schedule.

[For a private branch exchange, on Manhattan Island, south of One hundred and eighty-first street.]

Item.	Annual rate.
Local switchboard, transmitter, and telephone at same.....	\$36.00
Each line to the central office.....	36.00
Each station on the premises.....	12.00
Each station elsewhere (plus a mileage charge, varying with length of line).....	12.00
The right to send 3,600 local messages in one year.....	108.00
Additional local messages, 4 cents each, or \$3 per hundred if contracted for in advance.	

¹ At hotels and apartment houses this rate is from \$3 to \$12, according to the number of stations contracted for.

Contracts will be taken or renewed only at the above figures, or figures reached by advancing from 3,600 by steps of 400; but in making adjustments at the end of the

contract year, when the number of messages sent is less than the number paid for, the entire schedule (which advances from 3,600 by steps of 400), will be taken into consideration.

(d) *Harlem rate.*

"Harlem," comprising Manhattan Island between 110th and 140th streets; a "Harlem" message being a message to any other station connected with an exchange of the company in "Harlem," and a Manhattan or Bronx message being counted as two "Harlem" messages.

Harlem messages, each..... \$0.05
Minimum monthly charge..... 3.25

Two-station line; individual signaling; contract term, six months.

For the exclusive use of the line an additional charge of \$1.25 per month.

THE BRONX.

(e) *Flat rates—Business or residence.*

[A local message being a message to any other station connected with an exchange of the company in the borough of The Bronx]

Direct line..... Per year. \$90.00
Two-station line..... 75.00

(f) *Message rates—Business or residence.*

[A local message being a message to any other station connected with an exchange of the company in the borough of The Bronx]

Local messages to be sent in 1 year.	Annual rate to be paid monthly in advance		Additional local messages, each.
	Direct line.	Two-party line.	
500	\$48	\$39	7
600	54	45	7
700	60	51	6
800	65	56	6
900	70	61	6
1,000	75	.....	5

(g) *Melrose two-borough rate—Business or residence.*

[A local message being a message from a station connected with the Melrose exchange to a station connected with any exchange of the company in the borough of Manhattan or the borough of The Bronx.]

600 local messages, per year..... \$90.00
Additional local messages, each..... 10

(h) *Message rates—Residence only.*

[A local message being a message to any other station connected with an exchange of the company in the borough of The Bronx.]

Three or more station line:
400 local messages, per year..... \$30.00
Additional local messages, each..... .07

(i) *Flat rates—Residence only.*

[A local message being a message to any other station connected with the same exchange.]

Direct line..... Per year. \$48.00
Two-station line..... 36.00
Three or more station line..... 24.00

(j) *Commission pay stations (Manhattan and The Bronx).*

Subscribers operating public pay stations will charge the established tolls and pay the company 80 per cent of all tolls received, the subscriber to retain, however, not more than 5 cents on any one message.

STATEMENT OF EDWARD J. HALL,

Vice-President and General Manager of the American Telephone and Telegraph Company.

The telephone first received general public notice at the Centennial Exposition held in Philadelphia in 1876, and immediately following this, attempts were made to develop its commercial use.

At the outset its possibilities were appreciated dimly, if at all, and with the crude instruments and electrical appliances then available its range of communication was extremely limited.

At first agents were appointed by the Bell Company to rent telephones and bells for the equipment of short private lines; that is, lines connecting a man's office with his factory, or his house with his stable. Each customer built his own line, usually employing the agent who rented the telephones for that purpose, and the agent's income was derived from the profit on this construction and a commission on the rental charged for equipment.

Very shortly it became evident that it would be an advantage to the owners of these lines if they could be interconnected at some central point, constituting what is now known as a telephone exchange. When this had been arranged for, applications began to come in from customers who desired to be connected with the exchange, but did not care to build their own lines for that purpose, preferring to have them furnished by the agent at an annual rental. Such use as was made by individuals of public highways was, of course, unlawful, and no substantial business could have been built up on this basis, making it necessary that quasi-public corporations should be formed for this purpose.

The construction of these exchanges on any considerable scale throughout the country also called for an investment of capital, which neither the Bell Company nor its agents could furnish, and steps were therefore taken to organize local companies everywhere, each company having exclusive exchange rights within the area allotted to it, and the Bell Company reserving to itself, or to other licensees, the right to connect exchanges with each other by trunk lines.

As would naturally be expected, some of the companies thus organized were progressive and energetic and others were not, so that in some places the public was well served (so far as the crude methods then in use made that possible) while in others it was badly served, and the business inadequately developed.

So long as the service was purely local this had no generally bad effect, but when intercommunication between exchange areas was attempted many difficulties naturally resulted. To meet the demand for this intercommunication the Bell Company (not itself undertaking to construct and operate lines) issued licenses for lines connecting these small local companies, sometimes to parties not holding exchange licenses but usually to such licensees, and naturally to the most progressive of them.

The difficulty of maintaining satisfactory interconnecting line service under such conditions led to the purchase of many of the local interests by companies organized on a larger scale to operate over wider areas. This process brought about many improvements both in the better construction and operation of the interconnecting lines and also in the local exchanges, which of necessity had to be reconstructed and improved in order to make communication over longer distances practicable. At that time the state of the art made it impossible, under the most favorable conditions, to talk satisfactorily between points any considerable distance apart, but fairly good service was given between the larger exchanges and their suburban tributary points.

Up to 1885 the apparatus in use was adapted wholly to grounded circuits, and the use of iron and steel wire was universal. Lines were constructed on poles or roofs of buildings. The use of hard-drawn copper wire, which has made transmission over great distances possible, was unknown, but the possibility of its use had been suggested as a means of establishing real long-distance service.

For the purpose of testing this idea an experimental circuit of hard-drawn copper wire was tried, and the result was so promising that early in 1885 the American Telephone and Telegraph Company (which has since been popularly known as the "Long Distance Company") was organized and the construction of a commercial line between New York and Philadelphia at once commenced.

It was 2 years after this before the experimental line was ready for public service, and that period was filled with trials and discouragements before a successful result was finally achieved.

It was determined to try the experiment on a large scale, and heavy poles, 45 feet in length (an unusual size at that time), were erected. Upon these poles 24 hard-drawn copper wires were strung, the method of handling and connecting this wire in use to-day being substantially worked out at that time. It was believed that by using these wires in metallic-circuit pairs inductive disturbances would be eliminated, but when the line was finished it was found that conversation on any one of

the circuits could be readily overheard on any of the others, and that the line would be a commercial failure unless this could be overcome.

Skillful inventors were asked to work on this problem, and after much study and many experiments a successful solution of the problem was finally reached.

Another serious difficulty was encountered in transferring the current from the metallic-circuit trunk lines to the grounded-circuit wires which were then used by the local exchanges. A method and apparatus for this purpose were worked out, as it was the purpose of the company from the outset not to undertake the method which largely prevails in other countries—of requiring users of the lines to come to special toll offices at the terminal points. It was not thought that the American business man would take kindly to this waste of time; and it is believed that this policy, then established, has had much to do with the great development of trunk lines in this country as compared with any other in the world.

About this period, and following on for the next few years, a number of causes were at work leading finally to the introduction of the metallic-circuit service in the local exchanges, which, to accomplish this, were obliged to go through another era of plant reconstruction.

Wires had multiplied to such an extent that a general demand arose to have them put under ground where they were heavily massed in the business centers around the large exchanges, and the rapid development of high-tension currents for electric-lighting and street-railway purposes tended to seriously impair and, in some cases, make almost imperative the service given in the local exchanges over single wires using the ground for a return.

Inventors were again called upon to devise cables suitable for use under ground, and cables have been so far perfected that to day, for short distances, they are as satisfactory as the old overhead wires, and are generally used where wires would otherwise be massed on poles in the principal streets of our cities. Unfortunately, cables are very detrimental to the efficiency of transmission over long-distance lines, and every effort is made to eliminate them in the long-distance service, except in the short section from the terminal exchange to the customer's station.

At this point I might call your attention to the fact that constant and rapid changes in the extent and character of service furnished and the continuous reconstruction of the plant demanded by the changes in conditions to which I have referred, and by the perishable nature of the materials and apparatus employed, have made the question of rates for service one of great complexity for the managers of telephone companies.

At the outset rates were made by men who necessarily had had no experience in the business, and in many cases they made prices below the actual cost of service, and even when they fixed prices which adequately provided for existing conditions the increase in size and cost of exchanges soon tended to make a fixed flat rate unprofitable.

The result of this was that many of the companies were losing money and advances in rates became absolutely necessary. It was natural that these advances should meet with resistance from their customers and become in many States a matter of legislative consideration and investigation.

As a result of this study of the subject and the knowledge acquired by longer experience, both parties have come to a better understanding. What helped more than anything else to bring this about was the recognition by telephone managers of the fact that the true unit of charge is the message, and the recognition by the customer that it was reasonable and just that he should pay in proportion to service rendered. This makes it the interest of the exchange manager to furnish the best possible service in order to promote traffic, and satisfies the small users—who always constitute the great majority—that they are not called upon to pay an unnecessarily high price for their service in order that great corporations and business houses may have service at cost or below. So-called flat rates are reasonably equitable in smaller places, where the conditions as to facilities and traffic are fairly uniform, but they have no place in the service of a large city where these conditions do not prevail.

Trunk-line rates have shown less variation because they were originally started on the correct principle of charging by the message. Originally the rates established were usually about 1 cent per mile for the time actually consumed in conversation, with an allowance of 5 minutes for each message. It having been found that many messages actually consumed less time than this, a substantial reduction in the rate was made by reducing the initial message period to 3 minutes and making a proportionate reduction in rates, so that the prevailing rate to-day in this country is substantially three-fifths of a cent per mile for a conversation of 3 minutes, with a proportionate increase for use in excess of that time.

Stated in another way: The trunk-line customer pays one-fifth of a cent per mile for each minute of conversation, but is required to guarantee a use of at least 3 minutes.

The development of all classes of telephone service in this country so greatly

exceeds that of foreign countries that it is a fair assumption that service and charges are comparatively more acceptable to the people here. Speaking generally, the charges for service are higher here than in Europe, but there are so many differences in conditions, both as to character and amount of service furnished, and as to the cost of construction and operation, that it is almost impossible to make a fair comparison. The greatest single factor is the low cost of labor in Europe compared with its cost here. I understand that this has been fully presented to you by other witnesses, and I will not go into details which would be largely a repetition of testimony already received.

I want to say a word more on this subject, and that is that in relation to charges for long-distance service many of the figures reported from other countries are misleading; as, for instance, in Germany, between points where the message charge would be, say 25 cents, it is necessary, if one desires prompt service, to make what is called an "urgent call," for which the charge is three times the regular rate. In Sweden, for prompt service, or for service at fixed hours, double rates are charged, while in Holland the regular schedule is doubled between noon and 4 p. m.

In general the number of trunk lines provided in Europe is very limited, and a customer has no idea when he will be served unless he offers in advance to pay two or three times the tariff rate.

The service is also subjected to many embarrassing restrictions; as, for instance, in England a customer at a public station is absolutely limited to a 3-minute conversation, no matter how much he may desire to continue it, and this rule also prevails in other countries. The small size of many of these countries as compared with our own, and their greater density of population, are also very important factors in the consideration of any traffic problem.

What may be called the present era of telephonic development in this country really commenced with the opening of the long-distance line between New York and Philadelphia on the 1st of January, 1871. In 1886 and 1887 lines were commenced from New York to Boston and New York to Buffalo, and since that time there has been a constant extension and development both of lines and of the apparatus necessary for their operation, until at the present time the American Telephone and Telegraph Company and 38 associated companies, forming what is known as the Bell system, now furnish local exchange service to about 900,000 stations and trunk-line service over nearly 700,000 miles of wire.

The capital stock of the American Telephone and Telegraph Company has been increased from time to time as its part in this development has required, both for the construction of long-distance lines and the purchase of telephones, telephonic apparatus, real estate, and stocks representing investment in telephone property.

The following table shows the capital outstanding from time to time, the amount outstanding July 1 being held by over 8,000 stockholders, or, to be exact, by 8,120:

Mar. 3, 1885.....	\$100,000	Jan. 1, 1894.....	\$7,250,000
Jan. 1, 1886.....	100,000	1895.....	7,500,000
1887.....	100,000	1896.....	12,000,000
1888.....	100,000	1897.....	20,000,000
1889.....	2,500,000	1898.....	20,000,000
1890.....	4,000,000	1899.....	20,000,000
1891.....	4,750,000	1900.....	70,975,500
1892.....	5,000,000	1901.....	89,100,500
1893.....	5,000,000	July 1, 1901.....	94,237,500

The increase between 1899 and 1900 was partially due to the purchase of the property of the American Bell Telephone Company.

The authorized capital has been increased to \$150,000,000, and stock to the amount of \$20,709,000 has been offered for subscription at par. In addition, collateral trust 4 per cent bonds have been sold to the amount of \$15,000,000, of which \$5,000,000 have been sold during this year, and are, therefore, not included in the last annual report, which I present with and make a part of this statement.

This report gives full details as to the assets and liabilities of this company, its receipts and expenses, together with full information as to the plant, and operating statistics of this and its associated companies.

Respectfully submitted.

EDWD. J. HALL,
Vice-President and General Manager.

NEW YORK, July 15, 1901.

STATE OF NEW YORK, County of New York, ss:

On the 15th day of July, 1901, personally appeared Edward J. Hall, to me known, and known to me to be the vice-president and general manager of the American Telephone and Telegraph Company, and made oath that the foregoing statement by him subscribed is true to the best of his knowledge and belief, before me.

[SEAL.]

HARRY H. BRIGHAM,
Notary Public, New York County.

EXHIBIT A.

ANNUAL REPORT OF THE AMERICAN TELEPHONE AND TELEGRAPH COMPANY
FOR THE YEAR ENDING DECEMBER 31, 1900.OFFICE OF AMERICAN TELEPHONE AND TELEGRAPH COMPANY,
New York, March 26, 1901.*To the stockholders:*

It is my painful duty to record the great loss which this company has sustained by the death of Mr. John E. Hudson, October 1, 1900. He had held the office of president of this company since 1887. Immediately upon the organization of the American Bell Telephone Company in 1880 Mr. Hudson became its official attorney. Afterwards he was successively its general manager, vice-president, and general manager, and after 1889 its president. In all these relations he displayed exceptional ability and sound judgment. He gained the respect and confidence of all who were associated with him, as well as of the public, and contributed in large measure to the successful development of the corporation of which he was so long president.

The output of telephones from 1891 to the first of the current year and the various statistics of the companies operating under our licenses are exhibited in a consolidated form in the tables which follow:

Instruments in the hands of licensees, under rental.

[The figures in lower line show increase from year to year.]

Dec. 20, 1891.....	512, 407	Dec. 20, 1897.....	{ 919, 121
1892.....	552, 720		{ 146, 494
	40, 313	1898.....	{ 1, 124, 846
1893.....	566, 491		{ 205, 725
	13, 771	1899.....	{ 1, 580, 101
1894.....	582, 506		{ 455, 255
	16, 015	1900.....	{ 1, 952, 412
1895.....	674, 976		{ 372, 311
	92, 170		
1896.....	772, 627		
	97, 651		

Extra-territorial and toll lines.

	Jan 1, 1892.	Jan 1, 1893.	Jan 1, 1894.	Jan 1, 1895.	Jan 1, 1896.	Jan 1, 1897.	Jan 1, 1898.	Jan 1, 1899.	Jan 1, 1900.	Jan 1, 1901.	In-crease.
Miles of pole lines.....	41, 298	42, 894	46, 727	49, 324	52, 873	60, 453	67, 791	75, 718	89, 292	101, 087	11, 795
Miles of wire.....	115, 088	133, 002	154, 106	180, 557	215, 647	268, 806	324, 883	385, 911	501, 332	607, 599	105, 767

Toll connections.

The average daily number of toll connections is 148, 528
Or a total per year of about..... 47, 800, 000
The toll revenue reported by all companies for the year 1900 was..... \$8, 972, 030. 90

Exchanges.

	Jan. 1, 1892.	Jan 1, 1893.	Jan 1, 1894.	Jan. 1, 1895.	Jan. 1, 1896.	Jan. 1, 1897.	Jan. 1, 1898.	Jan. 1, 1899.	Jan. 1, 1900.	Jan. 1, 1901.	In-crease.
Exchanges.....	788	812	838	867	927	967	1, 025	1, 126	1, 239	1, 348	109
Branch offices.....	509	539	571	572	686	832	937	1, 008	1, 187	1, 427	240
Miles of wire on poles.....	180, 139	201, 259	214, 676	232, 008	260, 324	286, 632	327, 315	396, 503	509, 036	627, 897	118, 861
Miles of wire on buildings.....	14, 954	14, 980	16, 492	14, 525	12, 861	12, 594	13, 776	15, 329	15, 087	16, 833	1, 746
Miles of wire underground.....	70, 334	90, 216	120, 675	148, 285	184, 515	234, 801	282, 634	358, 184	489, 250	705, 260	216, 019
Miles of wire submarine.....	1, 029	1, 336	1, 637	1, 850	2, 028	2, 818	2, 675	2, 973	3, 404	4, 203	799
Total miles of wire.....	266, 456	307, 791	353, 480	396, 674	459, 728	536, 845	620, 400	772, 989	1, 016, 777	1, 354, 262	337, 425
Total circuits.....	186, 402	201, 322	205, 891	212, 074	237, 837	284, 645	295, 004	338, 293	422, 620	508, 202	85, 642
Total employees.....	8, 379	9, 970	10, 421	11, 094	11, 930	14, 425	16, 682	19, 688	25, 741	32, 837	7, 096
Total stations.....	216, 017	232, 140	237, 189	243, 432	281, 095	325, 244	384, 230	465, 180	632, 946	800, 880	167, 934

* Not including herein earnings of the American Telephone and Telegraph Company, which will be found in the comparative statement of revenue and expenses appended hereto.

EXCHANGE CONNECTIONS.

The estimated number of exchange connections daily in the United States, made up from actual count in most of the exchanges, is 5,668,986, or a total per year of about 1,825,000,000.

The number of daily calls per station varies in different exchanges from 1 to 15.9, the average throughout the United States being 7.1.

The average cost to the subscriber varies, according to the size of the exchange and character of the service, from less than 1 to 9 cents per connection.

The tables of mileage include the long-distance toll system owned and operated by this company. This system consisted on the 1st of January, 1901, of 12,427.63 miles of pole line and cable, and 167,410.39 miles of wire, connecting 359 offices, a gain during the year of 420.80 miles of pole line and cable, 17,030 miles of wire, and 36 offices.

The following comparative statement shows the number of exchange stations of the companies with which the long-distance lines directly connect, and which furnish the terminals of that system:

	Number of stations.	Connected by metallic circuit.	
		Stations.	Per cent.
January 1, 1900.....	557,979	311,129	55.76
January 1, 1901.....	697,674	438,222	62.81
Increase	139,695	127,093	7.05

The investment in line construction, equipment, and supplies for this system up to December 31, 1900, amounted to \$16,152,020.72. The gross revenue from the toll traffic upon these lines shows an increase of 13.45 per cent over the amount earned in 1899.

At the close of the year 1899 the property and business of the American Bell Telephone Company, except its holdings in the stock of this company, were taken over by this company.

The revenue statement appended to this report exhibits, therefore, as there stated, the result of operations of the combined properties for the entire year 1900, as compared with the total of revenues and expenses of both companies in 1899.

The exchange of shares under the circular of the American Bell Telephone Company dated April 18, 1900, by the terms of which 2 shares of the stock of the American Telephone and Telegraph Company were given for each share of the American Bell Telephone Company, has been substantially completed.

By a circular dated April 18, 1900, this company offered for subscription by its shareholders 1 new share for each 5 shares held by them after the exchange before referred to.

Of the total number of shares so offered (103,545), 103,018 were subscribed for and 52,175 shares were issued on August 1, 1900, and 50,843 shares on January 15, 1901; those remaining (527 shares) were sold by auction and issued in February, 1901.

Collateral trust 4 per cent bonds to the amount of \$10,000,000 were sold during the year.

The past year has been one of marked progress in the development of the business, the increase in number of exchange subscribers having exceeded that recorded in any previous year.

During the last three years the number of exchange stations has increased from 384,000 to more than 800,000. This remarkable growth has been due in great measure to the adaptation of improved methods of construction and operation to the needs of subscribers.

The general adoption of the measured-service system and metallic-circuit party lines, with corresponding lower rates, has attracted many thousands of subscribers, both business and residence, who were previously deterred by the higher cost of other classes of service.

All this has been brought about, moreover, without impairment of the quality of service. As a whole, the standard of construction and efficiency of service has been steadily advanced throughout the country.

In the larger exchanges the old type of multiple switchboards is fast being replaced by relay boards equipped with electric-lamp signals and central battery plant, installed in buildings specially designed for the purpose and owned by the companies.

Material progress has been made also in underground construction, so that at the close of the year 705,000 miles, or more than half the entire mileage of exchange conductors, were operated under the surface of streets.

Most of the gain of exchange stations consists of those connected by metallic circuits. At the end of 1900 there were 538,000 of that class, making an increase of 154,000 during the year.

It is doubtless true that in certain localities rates too low to cover current expenses and necessary allowance for renewal have been offered to meet similar rates offered by competitors. We believe, however, such conditions can not be lasting, and the growth throughout the country as a whole has been of a healthy and substantial character.

The expenditure to provide for extensions of the business throughout the country has been larger than that of any previous year. The new construction completed in 1900 by this company and the companies operating under our licenses amounted to \$28,862,970.85. Of this sum, \$21,914,542.94 was expended upon exchange construction and equipment, and \$6,948,427.91 upon toll lines. In addition to the above, \$2,349,103.28 was invested in real estate, to be utilized for exchanges and company offices. The entire expenditure for construction, including real estate, to the close of the last year has been \$168,474,517.83.

Estimates already made indicate that the extensions of operating plant during the current year will require further expenditure on a large scale.

The year just passed rounds out the quarter century, within which is compassed the discovery and application of the art of transmitting speech by telephone. A brief review of the development and growth of this new industry, which has become so important a factor in commercial and social life, seems appropriate at this time.

Twenty-five years ago the wonderful invention of Professor Bell was made known to the world. Twenty-three years ago the first telephone exchange in the world was established in the United States, and from that beginning has been built up the great system of exchanges, and the network of connecting lines over which conversation can be held between points over a thousand miles apart.

Twenty years ago there were 47,880 telephone subscribers in the United States, and 29,714 miles of wire in use for telephonic purposes. At the end of last year there were 800,880 exchange stations equipped with our instruments, and 1,961,801 miles of wire were employed for exchange and toll line service.

The United States has from the beginning held the leading place among nations in respect not only of the extensive development of the business, but in the employment of modern and improved appliances, tending to greater efficiency of service.

In connection with the record of development of telephone service in this country, some comparison of the systems of foreign countries is of interest.

The latest reports that can be obtained, part of which are for the year 1899, others to the close of 1900, show the countries next in order to the United States, as respects the development of telephone service, to be the German Empire, having 229,391 stations; Great Britain, 171,660; Sweden, 73,500; France, 59,927; Switzerland, 38,864; Austria, 32,255; Russia, 31,376; Norway, 29,446.

As before stated, there were, at the close of last year, more than 800,000 stations connected with the exchanges of our license companies, which exceeds the aggregate number of subscribers in all the countries of continental Europe.

In addition to this, there were over 40,000 private-line stations equipped with our telephones.

The number of exchange and toll line connections in the United States now reaches almost two thousand millions yearly.

The suits of The American Bell Telephone Company v. National Telephone Manufacturing Company et al., and of The American Bell Telephone Company v. Century Telephone Company et al., brought under the Berliner patent in the circuit court of the United States for the district of Massachusetts, were argued before Judge Brown in November, 1899. On February 27, 1901, Judge Brown filed a decision for the defendants in each case. An appeal will be taken to the circuit court of appeals.

For the directors.

ALEXANDER COCHRANE,
President pro tem.

Ledger balances, December 31, 1900.

DEBTORS.

Construction, equipment, and supplies	\$16, 152, 020. 72
Telephones	4, 311, 928. 75
Real estate	1, 587, 018. 85
Stocks and bonds	71, 719, 324. 01
Patent account	24, 101. 00
Machinery and tools	31, 477. 94
Cash and deposits	1, 078, 071. 70
Bills and accounts receivable	5, 240, 640. 27
American Bell Telephone Company	22, 110, 400. 00
	<hr/>
	122, 234, 983. 24

CREDITORS.

Capital stock	\$89,100,500.00
Surplus	1,813,199.74
Bonds	10,008,000.00
Reserves	2,416,363.34
Bills and accounts payable ¹	2,928,709.91
Contingent	15,970,210.25
	123,234,983.24

WM. R. DRIVER, *Treasurer*.

MARCH 26, 1901.

Comparative statement of earnings and expenses.

EARNINGS.

	1899.	1900.
Dividends	\$3,044,908.89	\$3,846,821.67
Rental of instruments	1,714,526.54	2,427,037.52
Telephone traffic	2,698,359.01	3,027,171.85
Real estate	42,285.11	31,824.67
Interest	217,301.53	201,643.50
	7,687,381.08	9,534,499.21

EXPENSES.

Expenses of administration	\$591,826.34	\$746,259.48
Legal expenses	103,748.46	85,134.07
Interest and taxes	1,234,275.83	1,876,199.94
Telephone traffic	1,487,021.88	1,849,847.86
	3,416,872.51	4,048,441.35
Net revenue	4,270,508.57	5,486,057.86
Net revenue, 1900		5,486,057.86
Dividends paid		4,078,001.25
		1,407,456.61
Carried to reserves		937,258.22
Carried to surplus		470,198.39
		1,407,456.61

N. B.—The foregoing statement for 1899 is for the purpose of comparison and is made up of the transactions of the American Bell Telephone Company and the American Telephone and Telegraph Company in the same form as those which appear above for 1900.

WM. R. DRIVER, *Treasurer*.

MARCH 26, 1901.

BALTIMORE, MD., July 23, 1901.

SUPPLEMENTARY STATEMENT OF DANIEL H. HAYNE,²*General Solicitor Merchants and Miners Transportation Company.**To the honorable the members of the Industrial Commission, Washington, D. C.*

SIRS: With a view of simplifying the proposed acts which I inclosed to you in my letter of March 3, I would recommend that an additional act be adopted by Congress to specifically cover the crime of "buying, receiving, or selling any money, goods, bank notes, or other things which may be the subject of larceny, and which have been feloniously taken or stolen," and thus eliminating this feature from the two acts as heretofore proposed.

¹ Of this amount \$1,282,277.25 is for the dividends payable January 15, 1901, to stockholders of record December 31, 1900.

² See this volume, p. 423.

With a view of making this suggestion as simple as possible, I would recommend that the two previous amendments to R. S. 4596 and R. S. 5356 which occur in my former testimony be eliminated, and the following put in their place, for such action as your commission and the Government authorities may desire to adopt:

AN ACT To amend section forty-five hundred and ninety-six of the Revised Statutes of the United States, relating to offenses and punishments.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That subsection eight of section forty-five hundred and ninety-six of the Revised Statutes of the United States be, and the same is, amended to read as follows:

"SECTION 4596, subsection 8. For willfully damaging the vessel, or embezzling or willfully damaging any of the stores or cargo, or taking or carrying away, with intent to steal or purloin, the personal goods of another, by forfeiture out of his wages, of a sum equal in amount to the loss thereby sustained, and also, at the discretion of the court, by imprisonment for not more than twelve months."

AN ACT To amend section fifty-three hundred and fifty-six of the Revised Statutes of the United States, relating to crimes arising within the maritime and territorial jurisdiction of the United States.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section fifty-three hundred and fifty-six of the Revised Statutes of the United States be, and the same is, amended to read as follows:

"SECTION 5356. Every person who, upon the high seas, or in any place under the exclusive jurisdiction of the United States, or upon waters within the maritime jurisdiction of the United States, takes and carries away, with intent to steal or purloin, the personal goods of another, shall be punished by a fine of not more than one thousand dollars, or by imprisonment not more than one year, or by both such fine and imprisonment."

AN ACT To amend section fifty-three hundred and fifty-seven of the Revised Statutes of the United States, relating to crimes arising within the maritime and territorial jurisdiction of the United States.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section fifty-three hundred and fifty-seven of the Revised Statutes of the United States be, and the same is, amended to read as follows:

"SECTION 5357. Every person who, upon the high seas, or in any place under the exclusive jurisdiction of the United States, or upon waters within the maritime jurisdiction of the United States, buys, receives, or conceals any money, goods, bank notes, or other things which may be the subject of larceny, and which has been feloniously taken or stolen from any other person, knowing the same to have been taken or stolen, shall be punished by a fine of not more than one thousand dollars and by imprisonment at hard labor not more than three years."

Respectfully submitted.

DAN'L H. HAYNE,
General Solicitor.

BOSTON, MASS., February 20, 1901.

TESTIMONY OF HON. CHARLES FRANCIS ADAMS.

Former Chairman Massachusetts Railroad Commission.

The special subcommission met in the rooms of the Home Market Club at 10.07 a. m., Mr. Clarke presiding. At 11.40 a. m. Hon. Charles Francis Adams, of Boston, was introduced as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. CLARKE.) You may give your name and post-office address to the stenographer.—A. Charles F. Adams; 23 Fort Street, Boston.

Q. Have you been chairman of the Massachusetts board of railroad commissioners?—A. When the board was formed, in 1869, I was one of the original appointees, and I became chairman, I think, in 1872, and remained chairman until 1879. I then retired from the board and have had no connection with it since that time. In 1897 Governor Wolcott appointed me as chairman of a commission to investigate the subject of the relations between street-railway companies and municipalities. The other members of the commission were Mr. W. W. Crapo, of New Bedford, and Mr. E. B. Hayes, of Lynn. We made an examination of the whole subject of street railways as they then existed and their relations with municipalities; and our report was submitted in February, 1898, to the Legislature of Massachusetts, which report

is now on file; and, in accordance with recommendations then made, a general act was passed modifying largely the relations of street-railway companies, as they are called, to municipalities and this law now regulates that subject in Massachusetts.

Q. Will you please proceed in your own way to give your ideas of the most recent application of electricity to street-railroad purposes and suggest such changes in laws or the granting of franchises as may occur to you for the protection of the public?—A. The subject is rather a large one, and I do not immediately see how it bears very closely upon your inquiry. The essential feature in the situation is, so far as I am concerned, that the report to which I have referred, made by the commission in 1898 and the legislation passed in accordance therewith is no longer applicable to existing conditions. Here in Massachusetts—I do not know how it is in other States; I dare say their laws are more elastic—but here in Massachusetts to-day all our legislation, so far as street-railway companies are concerned, is based upon a condition of affairs that has ceased to exist, and the legislation needs overhauling. Our report has already become ancient history and, I hold, has little if any bearing on conditions existing to-day. Accordingly, so far as it goes, it is deceptive. I think we have set up a false guide, and a guide which, as considering myself largely responsible for that report, I have already indicated to our authorities is rapidly carrying our Commonwealth and municipalities into a position of a good deal of difficulty, from which hereafter they will be forced to extricate themselves at much expense and by a very violent effort. That is to say, the legislation in Massachusetts is based upon the fundamental principle that a street railway is nothing but an improved line of omnibuses, or a street-railway company is nothing but a company to operate an improved line of omnibuses over a special pavement which they are authorized to lay, in combination with other pavement, in the streets of our towns and cities. Accordingly our whole principle has been to turn that business over to what might be called local management, and each municipality is supposed to regulate its pavement and to regulate the line of omnibuses just as they did in the old days. Our legislation—our whole organization of these companies, is based on this principle. It is very much as if, for instance, the great railroad companies in the State, of which we now have but three in the Commonwealth—the New York, New Haven and Hartford, the Boston and Maine, and New York Central—were left to the regulation of every town or city through which they pass, and had to look for their franchises to the governments of those municipalities. It is only a question of degree, and the street-railway corporation, as we call it, has burst through town limits. Sometimes we have street-railway corporations which go through at least a dozen different municipalities and operate roads which are getting up now to 50 miles; and moreover they have long since ceased to use horses, the motive power with which they originally began. They have introduced a new motor—electricity—and the fact is, therefore, to-day we have in this State not the old street railway and the steam railroad, but we have the steam railroad and the electric railroad. The motive power is the only difference between the two, except that the electric railroad is allowed to do what the steam railroad is not; that is, it is allowed to lay its tracks in the public thoroughfare and to operate its cars with new motor. All conditions have changed in regard to speed, and they are rapidly changing with regard to the methods of doing business. So far our legislators and town authorities have not wakened up. The community does not realize the fact that these new conditions are now in their infancy; that the introduction of electricity has entirely changed the character of the street-railway company and is really introducing a subordinate system of railroads; and they have got to be treated as railroads, because the time is not remote, as is obvious when these street railways have got to be operated at a rate of speed which hitherto has been incompatible with the joint use of the street with other conveyances. That is, they have got to be operated, in order to carry on the business which they have, at a rate of 20 or 40 miles an hour, and no longer at the rate of 10 miles an hour, which was excessive speed when the cars were drawn by horses.

It is also obvious that, in order to perform their functions, they have got to run very large cars close together; not in consecutive trains perhaps, but as they do now in our subway. Not only that, but they have got to carry freight and perform a wholly new set of functions. They have to do this in order to fulfill their mission and accomplish the purpose for which they were organized. In other words, we are going to have in the not very remote future a subsidiary railroad system. The steam-railway system will operate over great distances, and handle business of large volume, requiring most elaborate terminal arrangements, a movement which can only be conducted by steam and by trains of great size doing the more remote or through business—that is, a business extending anywhere from 50 miles to 10,000 miles, and which we may call a through or wholesale business.

We are now seeing established a subsidiary railroad system operated by electricity and accommodating up to 50 miles. Our present legislation does not provide for it, but we are going through an experience which will ultimately lead to general legislation. It requires no great observing power to see the form it is going to take—

the form of elevated roads or subways in the large cities, such as Boston or New York. This whole evolution is now about 10 years old.

As a dynamic force it has not amounted to much until within the last 10 years. The growth has recently been very great, and so was the growth of the railroad system in its early days. Compared with what it is going to be in the year 1950, the electric or subsidiary railroad system is now just about where the railroad system was in 1845, 10 years after it got a firm hold in this country. Its appliances and its methods are all tentative and elementary. They are going to be developed to an extent beyond anything which we can now realize. We have no data upon which to work. We can only say that it is going to grow until, in proportion to the first 10 years of its existence, it will be something as surprising as the railroad development so surprising in itself. It will be, as I have said, in the form of subways or elevated roads. The traffic will then have to be separated at great expense. It will be subject to very severe municipal regulations, as it is in these cities now, where the cars go from the subway or the elevated road out into the country districts. In the country districts, instead of running on streets as it does now, it will get off the highways at the earliest possible moment on to a private right of way. It will do so for its own convenience and economy, and in order that it may not be subject to the restrictions as regards speed in operation, to which it is necessarily subjected in the narrow streets. The community will inevitably insist, and the corporations will desire, that the railway lines shall be upon streets especially designed for that purpose—broad thoroughfares, avenues of 125 to 150 feet, with provision made for both forms of transportation, and where, without interfering with the regular vehicle transportation, the electrics can run at great rates of speed, carry freight, etc., and perform their functions with a reasonable degree of convenience.

They are now trying to break through these obstructions in a blind sort of way. The tendency now is to go to the legislature and get some form of special legislation. There is a conflict existing between the street railway, as it has got to be, and the steam railroad. The steam railroad views the electric railroad with great suspicion as likely to interfere with its traffic. Our whole legislation is tending to-day, and is likely to involve the community at no remote period, in a position from which they will have to extricate themselves exactly in the way in which the railroad has extricated itself from the position in which it originally started. Now in every one of our great cities they are endeavoring at enormous cost to separate the traffic, and so put themselves in a position to perform their functions without great friction and extreme cost.

We have been studying the thing all over the country. Here in Boston we have been grappling with the question of separating grade crossings. We originally permitted them without any idea they were going to be a source of serious inconvenience; but they became intolerable, and we are separating them, at enormous cost to the municipality and railroads.

Take such a line as the Boston and Providence. Every person who remembers that road in its early days knows it ran through a region which has now become crowded, and the question is to elevate the track, which has been done at a prodigious cost to both the community and the railroad. To render it possible to conduct the two forms of travel without interfering with each other, the street railway will have to do the same thing in an aggravated degree. The present situation will become intolerable, and the traffic will have to be separated.

In Syracuse, Rochester, and other cities the separation of the highway from the railroad traffic has involved engineering feats of great difficulty and enormous cost. Perhaps the most striking case in the country is the work done recently by the Pennsylvania Railroad Company in Jersey City; and I take it that the most difficult problem in the country in that respect is that now presented in Chicago, where they have got to separate the traffic, no matter what it costs and no matter what engineering feats it may require.

I am not now prepared to formulate any system. It is a difficult problem. I merely say that the report of our commission, though only 3 years old, owing to the immense development of electricity that has taken place and the change of conditions, so far as it is any guide at all, is a false guide; and it is rapidly getting our communities into a snarl from which they will extricate themselves at some future time with great difficulty and at very large expense. This was not our fault. We made as good a report as was possible under the circumstances as they then existed. The difficulty is that those who have the shaping of our legislation have not awakened to the fact that a new power has come into existence which requires radically different treatment. They must go back in legislation and build from a new foundation. The day for treating an electric railroad like a line of omnibuses running on tracks laid down in the streets is gone, and gone forever; and the sooner they wake up to that fact and frame their legislation to meet the new conditions the better it will be for all concerned in the not remote future.

That is all I have to say. I can only add that if the legislature should ask me to-day what changes I had to propose in existing legislation, I should answer, "I am not prepared to say." It would require probably a year's study of the situation, just as before. Our commission, 3 years ago, was organized in June, reported in January, and the bill was passed in May. Therefore its work occupied just 1 year. If that same problem were to be placed in the hands of another commission to-day, to draft suitable legislation to meet existing conditions, it would require a study by specialists and men who had given much attention to the subject for about 6 months to make report, and it would then require another 6 months to shape the necessary legislation.

It is not easy to frame legislation in a way to commend itself to the interests and judgment of existing corporations. They are very jealous. They do not take hold of new ideas very readily. They look with great suspicion on innovations. They always ask how they are going to affect them. It is accordingly very difficult, as we all know, to frame legislation which will be effective, and at the same time practical.

Q. (By Mr. CLARKE.) Are the electric railroad companies of Massachusetts organized under special charters?—A. No; under a general law, but they have to obtain their franchises from each municipality; and each municipality to-day is imposing new conditions, and very properly. They are asked to give the use of their streets, and in many cases the exclusive use of streets. Therefore they exercise their ingenuity in devising new and difficult conditions which are becoming more and more restrictive so far as operation is concerned, and which the corporations are more and more anxious to avoid.

Of course the original desire of the corporation was to get the right of way given it for nothing. The railroad corporations, their competitors, had to purchase their rights of way at great cost. The franchise cost nothing at first. The company simply laid down a track, but the tracks so interfered with traffic that that half of the highway could only be used for the street railway. It then became necessary as the community increased in population, etc., to widen that highway. Then they found, as here in Boston, that they had given the half of the street to the railroad company, and were expected to widen the street to accommodate the increased traffic at their own expense. Of course that condition could not long continue. The community felt that the railroad company should bear a portion of the expense or even the whole of it, and therefore there came to be more and more conditions imposed as to speed, as to rate of fare to be charged, as to carrying school children at half price, as to the expense incurred in widening thoroughfares, as to one thing and another, until we are rapidly coming to the point where it will be felt that it is necessary to separate the traffic, just as in the case of the steam railroad. That is looming up before us.

In the West they are far ahead of us in this respect, because in the West these lines now run for miles and miles on private right of way through the country. They are accommodating themselves to the facts more rapidly than we, and saving themselves the great future expense which we are incurring.

Q. When you speak of the separation of the traffic, do you mean at the crossings of the railroad and the highway?—A. No; that will never cause any great difficulty. It will take care of itself, because it will be to the interest of the railroad to stop at crossings to take on and let off passengers. The traffic is of such a nature that, having no stations, or only a very few at terminal points, the question of local crossings will regulate itself without trouble.

Q. Do you know of the company formed to build an electric road for high speed between Boston and Worcester?—A. Yes; I know something of it, but not of the details.

Q. Do you know of the conditions imposed by the city of Newton for the franchise of that company?—A. No; I do not. There is hardly a town in the Commonwealth that is not struggling now over this question. My attention was first drawn to it by the town of Lincoln, on the Fitchburg Railroad. That is a country residence town; so much so that there is only one shop in it, a little country store, and no other place of business. It has only some 1,200 inhabitants. Two electric roads wanted to go through. Their representatives said very frankly that they wanted to pass through Lincoln to get to Concord; they wanted to run through Lincoln at a speed of 30 miles an hour; we were to give them a right of way for nothing on one of our thoroughfares to be used for an electric railroad, although the Fitchburg road, which ran through the town, had bought its right of way at an enormous expense and incurred all the expenses incident to a steam railroad. That immediately brought up the question of conditions. They were of every character, from the amount to be paid for the right of way, and the conditions the company was to enter into to protect and widen it, and accommodate it to the business, to the number of times they would stop, to the rates of fare they would charge—every conceivable condition. I presume it is the same thing in Newton.

All that is part and parcel of the old theory under which the street railroad is supposed to be a horse-car line and merely a matter of local interest, whereas this

very railroad you are speaking of (the one to Worcester), I take it, runs through a dozen towns. It has to face the regulations and the selectmen of a half dozen towns and satisfy all. I hold it is impossible.

Q. What is the distance?—A. It is 44 miles. They have got to stop frequently, and when they get to a crowded neighborhood they have to run 10 miles an hour, or whatever it is, so that when you take out the stops and the places where, for safety, they must run at a low rate of speed, there is no escape from a great speed elsewhere.

Q. As a practical railroad man, do you think that a single car, however heavy, can be run at the rate of 20 or 30 miles an hour with safety.—A. I do not know anything to prevent it. They are getting these cars up to a weight wholly different from the old car. The old car certainly could not so run. It would be off the track at every turn. But they are getting to a solidity of track not in any way different from the railroad. The permanent way is of the most solid character. I do not remember how many tons their cars weigh. I am not informed in that portion of the details of the electric business, but my impression is they are getting their cars up to a weight of 20 and 30 tons. Are they not?

Q. I am not aware of the weight of the car, but at whatever weight it will be lighter than a steam railroad train with a heavy locomotive and heavy cars which are held together by the Miller compression buffer with 80,000 pounds pressure between each car, will it not?—A. They are undoubtedly lighter, but with a weighted car of 15 or 20 tons and with a good permanent way you can run pretty fast. I must add that so far as the running of an electric road in its present form is concerned I do not profess to be an expert. There are already roads that run trains of cars. To Nantasket Beach there is a regular railroad operated by electricity. The distinction between the steam railroad to-day and the street or electric railroad is shadowy. It is merely a change of motive power; otherwise they are the same.

Q. You have been president of the Union Pacific Railway Company?—A. Yes; 10 years ago.

Q. You have traveled very extensively and are familiar with railroads in Europe and you have been the author of books on railroads?—A. They are all antiquated. Very few scientific books are worth anything after 5 years, science moves rapidly in these days. Except the report of the commission of 3 years ago, I have written nothing for 10 years whatever.

Q. Have you seen the street railroads in Glasgow which are operated by the municipality?—A. I have.

Q. What is your opinion of that system compared with our American system?—A. That Glasgow system of which you hear so much is nothing but a very imperfect American system—acknowledged to be such. The manager of it does not profess anything else. I had a great deal of talk with him. It is all rubbish what you hear of the systems in Europe. So far as they are good, they are built by American companies and on American lines, subject to such restrictions as the European communities have seen fit to impose. There is not a system in Europe that I have seen or have any knowledge of which would, for instance, bear any comparison with the system we have here in Boston to-day.

Q. What is the fare on that system in Glasgow?—A. I do not know what the minimum is; I think it is a penny—2 cents. It is according to distance, as I recollect it. You state where you are going and they punch your ticket, and you pay a penny or a penny and a half, 2 pence, and so on. The system is not adapted to our needs here.

One of the most curious facts connected with our railroad system here in Boston is what is known in summer as pleasure travel. The people living in town get into these electric cars and for 5 cents are taken out and given an exchange ticket on another line, and for 10 cents they can ride 15 or 20 miles and pass the entire evening. That is wholly unknown abroad, so far as I know.

Q. It is rather new here.—A. Here it is a system which has grown up under our American methods. We went into it very elaborately in the report I have referred to. The European principalities are very restrictive; they have been so afraid of being cheated—they are so afraid some one is going to get the advantage of them that they cheat themselves, and will not give an opportunity for that development which is essential to any enterprise. All the companies want is to get their money back, and they get it back by giving the poorest of accommodation and managing their traffic, so far as I am familiar with it, in the most niggardly way. They give a better management than the original systems of tramways to which the people there are accustomed, but as compared with what you see in American cities, I assure you there has been more rubbish and misstatement and misinformation talked on that subject than on any other subject my attention was ever drawn to. And when I went abroad and looked into it with the idea that I could learn something I speedily came to the conclusion that there was absolutely nothing for us to learn in Europe; so far as they had anything up to date it was purely American, American appliances put in by American companies. And I have no question if the theorists

who talk on this subject had made the investigation which I have made, and had done it with the intention of arriving at the facts and not supporting a theory, they would state the same thing—that we have nothing whatever to learn on that subject from Europe.

Q. Now that we have touched this subject of municipal ownership of street-railroad accommodations, are you willing to express an opinion as to the desirability of the Government taking over the entire railroad systems?—A. I think it is humbug. I do not want to talk about it. It seems to me pure trash and I do not care to discuss it. The Government has as much as it can do now. If you want to have \$250,000,000 more of a pension list, all you have to do is to go into something of that sort. If others wish to discuss it they can; to me its discussion is a waste of time.

Q. You know something of government owned and operated railroads in Europe?—A. I have no respect for them whatever, compared with our railroads in this country. The best railroads in Europe are the English railroads—by far the best—and those are left to private enterprise, and are handled accordingly. I have no faith whatever in government ownership of industrial enterprises. If left alone individual ownership will beat the government every time.

Q. We should like very much to receive your opinion on the pending consolidation of great railroads in this country, if you have formed an opinion?—A. I see nothing whatever to interfere with it. I expressed my views on that question years ago, and see no reason to change them. It is a thing that should be left to work out its own results in its own way with as little hampering as possible. It has worked far in that direction since I have had to do with railroads in Massachusetts. We have only three corporations now. The talk of monopoly has died out. It is found that a large corporation, while its political power is undoubtedly great, has proportionately increased responsibility, and it is far easier to handle it, and it gives better and more satisfactory service, than a number of small corporations that you can not put your finger on. As I say, here in Massachusetts, all the jealousy of great railroad corporations has disappeared, and it has disappeared largely in view of the fact that the people get better service, more satisfactory results, from the consolidated concern, and the dangers which were apprehended do not exist.

What I have said has taken a far wider range than I anticipated when I came in, and I state frankly that the whole subject, except in connection with street railways, has not occupied my attention for 10 years. I do not propose to give any attention to it again. It is a subject I am tired of, and am ready to leave to others. Therefore, upon everything except as to street railways and their relation to municipalities, I speak subject to correction and from impression.

Q. (By Mr. LITCHMAN.) Have you any changes in legislation to suggest that you think would be applicable to the line of thought you have presented this morning?—A. I have nothing to propose. That would be a matter for careful study. I do not myself believe in changing legislation precipitately. Such changes ought to be carefully matured. The difficulty is we toss legislation together. If we had far less legislation we would be much better off. If this matter is going to be handled, it ought to be handled with great deliberation and on a thorough understanding of the situation. And you can be very sure—absolutely sure—that whatever is formulated has got to pass through an ordeal of criticism, first from the existing street railways and then from the steam railroads. This is always the case, and, I suppose, necessary.

Q. Do you think an electric railroad could be incorporated under the general railroad act of Massachusetts?—A. I do not see why not. I am not aware of anything in the act which prescribes that the road has to be operated by steam. I do not believe, for instance, that the Cohasset Railroad had any special act. It simply adopted electricity as its motive power, instead of steam.

Q. That would carry with it the right of eminent domain—the right of taking land under eminent domain?—A. I should have to look at the law carefully before I answered that question, more carefully than I am now disposed to do. I should not care to express an opinion. I am very sure of one thing—in order to secure satisfactory results we will have to have a great deal of new legislation.

Here the testimony of Mr. Adams was closed. Later an informal conversation took place between Mr. Adams and Mr. Stimson, in the midst of which the stenographer was instructed to take it down, Mr. Litchman introducing the subject, as follows:

Mr. LITCHMAN. Mr. Stimson was asking if the local franchises were permanent, and Mr. Adams was making a statement on the subject which was important.

The WITNESS. The franchise of Massachusetts street railways has always been an indefinite franchise, granted by the localities through their streets, and subject to revocation at any time at the arbitrary judgment of the local authorities. A more absurd tenure could not be imagined, and one would not expect that any large investment of capital could have been developed under such a ridiculous practice; and yet, on the whole, that illogical, absurd tenure of franchise has worked better in its results than any other system yet devised. We went into this subject very

elaborately in the report, of which I shall be happy to send you a copy. Contrary to our whole impression, when we entered on our investigations, we were agreed that better and more satisfactory results, politically and economically, had been produced under the Massachusetts form of franchise than under any other we had heard of.

In many of our Western States the renewal of franchises has been one of the most crying causes of municipal corruption. These renewals are always coming up, and every time they come up there are allegations of corruption, and bargain and sale, which are, to say the least, scandalous. What there is in it I do not know, and it is none of my business; but that system of renewing franchises has not worked well—I mean the system of limited-time franchises, subject to renewal.

Q. (By Mr. CLARKE.) Is it not the law in Massachusetts that the selectmen of the town in granting franchises do not act as officers of the town, but as officers of the Commonwealth?—A. I believe that is the theory of the law, but it works badly, as you well know. It works badly simply because they are no longer granting a permit to run a line of omnibuses on Washington street, which used to be the case formerly; but they are now called in to exercise a partial jurisdiction. The tendency of legislation has been to leave the granting of franchises nominally as a local option, but to give more and more an appeal to the railroad commissioners in case of difficulty. We have found a way (and it is not a bad way at all; it is a very good way) of working legislation to practical results without much regard to theory; and I distinctly say it is, on the whole, the best system of street railway legislation there is.

Q. As a matter of fact, do not the people of the several municipalities take so much interest in this that they bring to bear upon the selectmen or the city councils, as the case may be, the pressure of public opinion?—A. Oh, yes. I think there is a great deal to be said in favor of the system, and if I believed that the electric railroads could go on operating forever under the joint use of the highway, etc., I should not be disposed to change the system any more than we changed it 3 years ago. We changed it but little. We then took just the position you suggest, and left well enough alone. The only thing that I say now is that a new force has developed, which has burst through its swaddling clothes, and can not be confined much longer. All that brought me here to-day is to call the attention of the community to the fact that the infant is getting to be a pretty big man and his present clothes will not hold him much longer. He has got to have a new suit; that is what it comes to.

Q. (By Mr. F. J. SIMSON.) Have you formed an opinion that this new legislation should prohibit local authorities from granting franchises on public highways?—A. I believe that matter should be left to regulate itself. If they choose to put railroads in the highways, let them put them there, and they will soon find—both the people and the railroad—that it is to the interest of neither party that they should be there. The thing I am clear about is so to expand legislation as to permit the separating of highways and street railroads, instead of which the authorities are now compelled to put the railroads on the highways and nowhere else. I should make our legislation more elastic, so that these electric railroads would have more power to develop, instead of being, as they now are, men forced into the clothes of a child.

(Testimony closed.)

WASHINGTON, D. C., March 6, 1900.

TESTIMONY OF MR. VAL FITZPATRICK,

Third vice grand master, Brotherhood of Railroad Trainmen.

The commission met at 1.45 p. m., Chairman Kyle presiding. Mr. Val Fitzpatrick, third vice grand master, Brotherhood of Railroad Trainmen, Cleveland, Ohio, was introduced as a witness, and, being duly sworn, testified as follows:

Q. (By Senator KYLE.) You may give your full name and address and your business to the reporter.—A. Val Fitzpatrick; third vice grand master of the Brotherhood of Railroad Trainmen.

Q. That is, of the United States?—A. United States and Canada.

Q. Where is your residence?—A. Columbus, Ohio. The head office of the organization is at Cleveland, Ohio.

Q. You are conversant with this Reading Railroad trouble, are you?—A. Yes.

Q. Will you state as briefly as you can to the members of the commission what there is of it, beginning at its inception and coming down to the present time?—A. I would like to submit or make a statement of the character of the organization. I would like to state that the Brotherhood of Railroad Trainmen, through its grand

master, filed certain charges with the Industrial Commission against the Philadelphia and Reading Railroad. The character of the organization is best stated in its preamble, which was formulated at the instituting of the Brotherhood of Railroad Trainmen, and which, I might say, has never been changed from that day to this, which is upward of 17 years. The preamble reads:

"PREAMBLE.

"To unite the railroad trainmen; to promote their general welfare and advance their interests, social, moral, and intellectual; to protect their families by the exercise of a systematic benevolence, very needful in a calling so hazardous as ours, this fraternity has been organized.

"Persuaded that it is for the interests both of our members and their employers that a good understanding should at all times exist between the two, it will be the constant endeavor of this organization to establish mutual confidence and create and maintain harmonious relations.

"Such are the aims and purposes of the Brotherhood of Railroad Trainmen."

The chief features of our organization are: First, education. We believe that it is easier to reason with men of education than it is to do business with men who are ignorant of those things that confront them in their employment. The wages and hours of labor are also a consideration. We have lost no opportunities to see to it that the men receive a fair compensation for their labor, and its equivalent in hours of labor.

Q. Was that not the chief object in the formation of your organization?—A. No; I might say it was not the chief object of the formation of our organization. The chief object in the formation of our organization was to insure the lives of its members and protect their dependents. To that end last year the Brotherhood of Railroad Trainmen have distributed among widows, orphans, and their disabled members \$675,000.

Q. You found, however, that your interests could be best served by organization of that kind as regards the wages paid and hours of labor, and so on?—A. The wages and hours of labor were an after consideration. The manner in which the organization proceeds to take up those questions pertaining to rules, hours of labor, and rates of pay can best be given by reading that part of its constitution, which goes to show that we have no agitators, or no one going over the country hunting trouble; that if any grievances arise they spring from the individual members. Rule No. 5 of the general rules of the constitution of the brotherhood reads:

"CONSIDERATION OF GRIEVANCES.

"No. 5. Any member considering that he has been unjustly dealt with by his employer, or that he is otherwise aggrieved, shall make a statement of the grievance in writing, securing the signature thereto of a majority of the members of the lodge employed on that division, and present the same at a meeting of the lodge. The lodge shall then determine, by a majority vote of the members present, employees of the division, whether to sustain or reject the grievance. Should the grievance be sustained the local grievance committee shall lay the matter before the train master, superintendent, or other proper officer, and use every means to effect a satisfactory settlement and report their action and all things pertaining to the case to the lodge. If the result is not satisfactory it may be referred to the general grievance committee for further action."

By following out this manner of procedure it takes a grievance out of the hands of the man who is aggrieved and places it in the hands of conservative men, men who are not in anywise interested, and who are more competent to decide whether there is a just grievance or not. It then comes before the executive officers. Before entering into a conflict the grievance has got to be submitted in writing, in circular form, to the membership. They have to decide whether there is sufficient grievances; or, in other words, whether they can enter into a conflict. Then it must pass the approval of the grand master, or his duly accredited representative. In 16 years and 7 months the Brotherhood of Railroad Trainmen have been engaged in 2 conflicts; in other words, in 2 strikes. I believe this will go to show that the organization is conservative, and that its policy is largely one of conciliation and arbitration. I might state that these 2 conflicts were settled by committees of arbitration.

Q. What years were these?—A. I think one, the first, was in 1892; the second was in 1894.

Q. Neither settled under the new bill passed by Congress a couple of years ago in your behalf?—A. No, sir.

Q. That was a bill particularly pushed for your organization, was it not?—A. Yes.

Q. The arbitration bill?—A. Yes.

Q. I remember your organization appearing before us by your representatives.—
A. Yes.

Q. And it was considered a very good bill?—A. Yes.

Q. I think your representative stated that in case that bill became a law strikes would be reduced to a minimum, and there would be practically none of them at all.—A. I think it has had some effect in reducing the number of strikes.

Q. You may state, then, before you go further, the number of railroad employees that are included in your organization.—A. The membership of the Brotherhood at the present time will number over 38,000.

Q. And the kinds of employees?—A. They are principally switchmen, brakemen, and conductors.

Q. There is a separate organization then for firemen and engineers?—A. Yes, and there is a separate organization for conductors also, but we have quite a number in our organization who have been promoted from the position of brakeman to conductorship and still maintain membership in their Brotherhood.

Q. Do you affiliate with the Brotherhood of Locomotive Firemen and Engineers in any way?—A. Yes; we do. We are closely associated with them. In fact, not only with the organizations of railroad employees, but I believe we are closely associated with all labor organizations.

Q. Exactly; but in a little different sense you are associated with those you speak of?—A. Yes; our interests are so close that it brings it closer together than it would other organizations; the relations are different. On January 14, 1900, I organized a lodge of the Brotherhood of Railroad Trainmen at Shamokin, Pa.

Q. (By Senator KYLE.) They have never had an organization of that kind there before?—A. No, sir.

Q. But you have organizations of your order along the line of the Reading road, have you?—A. Yes, sir.

Q. (By Mr. RATCHFORD.) Before you pass from the general explanation as to the purposes of your organization I should like to ask a question or two. You spoke of \$675,000 being distributed among the membership last year?—A. Yes.

Q. I should like to understand how this money is raised and what is the purpose in distributing it?—A. The manner in which the money is raised is as an assessment on the membership levied from time to time.

Q. A voluntary assessment?—A. Yes, sir. It is a condition of membership. It is levied for each month. This falls into a fund known as the beneficiary fund, from which we pay all claims that arise in that department, such as death and disability from whatever cause; it may be incurable consumption, locomotor ataxia which railroad men are frequently afflicted with, or an injury in their employment which incapacitates them to earn a livelihood.

Q. Is there any out-of-work benefit?—A. The subordinate lodges regulate that; that is within the province of the subordinate lodge.

Q. Well, now, this fund is what is known to your organization as the insurance fund, is it?—A. Yes.

Q. Have the railroad companies insurance funds also, of their own making?—A. No, not generally; it is confined to a few. The principal roads that I know of are the Chicago, Burlington and Quincy; the Baltimore and Ohio; Pennsylvania; and, I understand, the Southern Pacific are going to inaugurate the insurance features this year, sometime early in this year. Those are about the only large systems that I can recall at the present time.

Q. Well, is this insurance, known as the company's plan of insurance, generally agreeable to the railway employees?—A. I believe you mean the so-called voluntary reliefs of the railroad companies?

Q. No; I do not mean that. I mean the insurance that is gotten up by the company and managed by the company. They may call it voluntary, but we have testimony before this commission, I believe, showing that it is the reverse of voluntary.—A. I met last year upward of 15,000 railroad men who are connected with our organization and other organizations in the train service, and I have failed to find a single one that has approved of the plan or working of the railway insurance associations.

Q. (By Senator KYLE.) Will you explain to the commission the methods of the railway companies.—A. In employing men they must pass a doctor's examination, and after they are given employment they are placed upon the rolls of the relief association. They have no jurisdiction over that part of the matter. I might say they have no jurisdiction in discontinuing their payments. As long as they remain in the service of the company they have got to keep on paying these assessments.

Q. You mean a certain amount is extracted from their salaries?—A. Yes.

Q. (By Representative OTJEN.) In other words, it is not a voluntary payment?—
A. The men do not so consider it.

Q. (By Mr. RATCHFORD.) Employment as a railroad brakeman is conditioned upon membership in that association, is it not?—A. Yes; that is my understanding of the manner in which they work.

Q. Has that system the effect of exempting railway companies from liability in case of accident or death to the employee?—A. Yes; and the numerous decisions which have been rendered by the courts throughout the country are the best evidence of that. I believe they can be found in Mr. Carroll D. Wright's bulletin from time to time.

Q. (By Senator KYLE.) The employees do not sign an agreement, do they, when they become employees of the company that they will accept this insurance in lieu of all other claims against the companies for injuries?—A. Yes; I think, if my memory serves me right, that is one of the conditions.

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Q. Can you present this commission now, or at your convenience, a paper such as is presented to an employee asking him to waive such claims, by any railway company?—A. I believe I can; yes.

Q. We will be glad to have it.—A. I will try to furnish you that paper.

By Mr. KENNEDY. I suggest you go into the Reading trouble now.

Q. (By Senator KYLE.) Yes, proceed. You spoke about having organized on January 14.—A. January 14 of the present year I organized a lodge at Shamokin, Pa., and on my arrival in Shamokin I found quite a number of the proposed applicants had been discharged on account of their being about to become members of the organization. I might state that some of these men belonged to the Brotherhood in a city distant from Shamokin. Their membership was never known by the officials. It was discovered that some of these men were the prime movers in instituting this lodge. A few days before my arrival they were dismissed from the service of the Philadelphia and Reading.

Q. Will you please state to the commission the nearest city to Shamokin where there is a lodge of this order?—A. The nearest is Sunbury.

Q. How far away?—A. About 12 miles.

Q. On the same railway division?—A. Yes.

Q. So the same railway officers are in charge of the employees both at Shamokin and Sunbury?—A. I believe so, unless it would be a divisional point.

Q. Well, do these men object to the men joining their order at Sunbury?—A. Well, I do not know of any objections prior to the 14th of January, but I presume the reason why there was not any discipline or dismissal from the company sooner was the fact that they did not know that these men belonged to the Brotherhood, and they quietly went up to Sunbury and became members of the institution.

Q. Now, the lodge at Sunbury—where is the next lodge along the railway?—A. The next is Williamsport.

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Q. And how long is it since the first one was established?—A. The first lodge was established, I believe I can safely say, in 1885 or 1886.

Q. So that the lodges have been established practically 15 years along that road?—A. Yes.

Q. And the officers in charge of the road have been practically the same officers, have they, for a number of years?—A. I believe their general officers have been about the same; but there have been quite a number of changes among the division officers.

Q. Well, have you had complaints heretofore that men were discharged because of their affiliation with one of these orders?—A. Yes; we have had quite a number of such complaints for the past 10 years.

Q. So that you have reason to believe in your own mind that these men were discharged prior to your going to Shamokin because they contemplated organizing a lodge there?—A. Yes.

Q. Now, if you will, state to the commission your reasons for so believing. Of course, we want to get at the facts here.—A. My reason for believing this is that the men who were discharged called upon their division officers—trainmasters, yardmasters, and superintendents—and asked them to assign a cause for their dismissal. These officers declined to talk. They simply said to the men, "We haven't anything to say to you at all. You are discharged, and that is all there is to it. We do

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not wish to assign any reasons or talk with you on the matter at all." When I found that such was the case—that the men were discharged for belonging to the Brotherhood—I felt that we were in no position to protect them.

Q. Did the officers state these men were discharged because they were contemplating joining the lodge?—A. I will tell you just exactly what has been done at each place, and the facts as I know them at Shamokin. There was no reason assigned further than "We do not want you in the service of the company."

Q. (By Representative OTJEN.) How many were discharged?—A. There were about 8, I believe—6 or 8.

Q. They had been members of the order before?—A. Yes. There were only 2 that were not members of the organization. There were about 4 members of the organization at the time they were dismissed; but all were proposed members of this new lodge.

Q. Do you have any organization there?—A. Yes.

Q. Is it in existence to-day?—A. Yes.

Q. Are members of it working on the Reading system?—A. No, sir. There may be a few under cover—older memberships in secrecy. When I found out that the officers of the Philadelphia and Reading were objecting to the organization of a lodge there, I felt a reluctance about proceeding to organize them, as I knew the men would lose their employment.

Q. (By Senator KYLE.) You say "when you found it out." How did you find it out?—A. I found out through the men. They told me they had called upon the division officers and asked for the cause of their dismissal. They would not assign any reason at all. They told them that their service was not any longer needed.

Q. And it is simply an inference on your part, is it?—A. Yes; and the attitude of the Philadelphia and Reading in the past led me to believe that it was on account of their membership in the Brotherhood of Railroad Trainmen.

Q. Now, you are getting at what led you to believe that fact. Their relations in the past, you say?—A. The orders which they issued some 8, 10, or 12 years ago, when they made it a condition of employment that no man should belong to a labor organization. And while the road was in the hands of a receiver, under Judge Paxson, our organization went into court to establish the right of belonging to our Brotherhood and at the same time working for the receivers of that company. When I found that they were objecting to our organization being instituted along their system, and that we were in no position to protect the men when they became members of our organization, I thought the best thing to do for themselves and their families was not to organize a lodge of the Brotherhood in Shamokin, and I so advised them. But after earnest soliciting on their part, and when they showed a determination to go ahead with the organization regardless of the officials of the Philadelphia and Reading, I could not deny them the right to become members of the organization. On February 8 I received a telegram from the grand master advising me to go to Philadelphia and counsel with our members in that city employed on the Philadelphia and Reading Railroad. On my arrival there I found that about 60 of those men had prepared to inaugurate a strike independent of any organization, simply on their own account. I counseled with those men and advised them that it would not be the proper thing to do; showed them wherein it might be injurious to them, as well as to the interests of the Philadelphia and Reading, and that there would probably be another way in which we could get around this and secure justice for them. They finally consented to remain at work, those that were working, and those that were dismissed we would try to secure employment for them by some other means. I believe there were upwards of 10 discharged. One of the gentlemen is here at present.

Q. (By Representative OTJEN.) At Philadelphia?—A. Yes; one or two of the gentlemen are present. But those 10 men that were discharged produced letters showing that for faithfulness and diligence in the discharge of their duty they were complimented very highly by the yardmaster, trainmaster, and superintendent. In fact, these men that were discharged were the very best men, in my judgment, employed on the Philadelphia and Reading Railroad. We took particular pains to ascertain whether they had been guilty of destroying any property, or whether they were intemperate or incompetent, and we found in every case that the men were thoroughly competent, sober, and industrious men, had first-class records as employees. Some of these men had the matter up personally with the general superintendent, and the general superintendent said to them very plainly that they were discharged on account of affiliating with the Brotherhood of Railroad Trainmen.

Q. (By Senator KYLE.) This discharge took place when?—A. Along about the 1st of February.

Q. Reverting to the Shamokin affair, now. Did the discharge take place there before the lodge was organized, or after?—A. Just before; a few days before.

Q. Just before?—A. Yes.

Q. Well, now, what reasons can you give the commission, if any, why the Philadelphia and Reading would oppose the organization of a lodge at Shamokin, even to

the extent of discharging its employees, and at the same time permit a lodge or lodges to exist in other cities along its lines?—A. If I have left the impression that these lodges exist along the line of the Philadelphia and Reading, composed principally of Reading men, it is wrong. These lodges that exist along the lines of the Philadelphia and Reading Railroad are composed principally of Pennsylvania Railroad men, with a few Philadelphia and Reading men in every lodge.

Q. (By Mr. KENNEDY.) At junction points on the system?—A. Yes.

Q. (By Senator KYLE.) And the members employed by the Reading are under cover, you think, mostly?—A. Yes; there is a gentleman here from Reading who could testify before this commission and show that they do meet in haylofts, cellars, and dark rooms, one place and another, in order to escape the sleuths of the Philadelphia and Reading Railroad.

Q. (By Mr. RATCHFORD.) Have the Philadelphia and Reading officials cooperated at any time with your organization or had business with it?—A. It never had any occasion to meet or do business with our organization. We have never had any difficulty. I might say, talking more plainly, that the organization has never had any grievance presented to it by the men employed on the Philadelphia and Reading Railroad.

Q. (By Representative OTJEN.) Until the present one?—A. Yes.

Q. (By Mr. RATCHFORD.) You say that your organization never had any grievance presented to it until the present one by the men employed on the Philadelphia and Reading Railroad. Was that because of the good treatment accorded the men by the company, or because there was no organization there—little or no organization—among your men?—A. Well, it is due largely to the fact that there is no organization there, and the company has the men under complete submission.

Q. (By Mr. KENNEDY.) You mean they have had no grievance since the receivership of the company. You said, I believe, they had trouble then?—A. At the time of the receivership; that was a matter taken into court.

Q. (By Senator KYLE.) But you found out at the time that you had this trouble in the court that the company was opposed, and bitterly opposed, to the organization of lodges along their road?—A. Yes; and the records of the court will bear that statement out.

Q. And they made a statement here about the 1st of February, at the time the men were discharged, that you were speaking about, that they were still opposed to the organization of lodges, and that these men were discharged because of their connection with these lodges?—A. Yes.

Q. (By Mr. KENNEDY.) Do you know whether Judge Paxson is in any way connected with the management of the Philadelphia and Reading at this time?—A. His name does not appear on the official list as given in the Official Guide. As to his being in any wise connected with it, I can not say. He might possibly be a director or counselor, or advisor of some description.

I might say, in concluding, that these men are not only pleading for their liberties and rights to belong to organizations so long as they come within the bounds of the laws of the land, but they are also making their plea for their right to work. I have received letters from a great number of these men since they have lost their employment on the Philadelphia and Reading Railroad, and all of these letters show that wherever they go they are asked the question: Where did you work last, and what were you dismissed for? And when they make their statement that they were discharged for nothing, apparently nothing, so far as they know, other than to belong to a labor organization, the officials refuse to permit them to go to work until they refer back to the road from whence they came. After it is discovered that the officials of the Philadelphia and Reading Railroad disapproved of their working anywhere else, they are told that they are not needed. Some of these men have traveled since last January from 3,000 to 6,000 miles trying to find work.

Q. Do you mean to say they are placed on the blacklist, so to speak?—A. Yes.

Q. By all the railroads of the United States?—A. No. The rule of railroads is this in employing men: To make them give reference. Now, we do not wish to leave the impression here that all railroad officials are opposed to our organization, and would be guilty of blacklisting a man because he asserted his rights to belong to an organization that was for his protection. A great many of the officials, regardless of what kind of recommendation comes back from the Philadelphia and Reading, or any other road, if the man were a sober and industrious man, would be pretty apt to give him employment, but unfortunately for these men they have been traveling right along certain lines that adhere strictly to this rule—that the man must have a clear record before he can be employed on their lines. Some of these men have been injured in the service of the Philadelphia and Reading. Some of them have lost a hand, and some have lost a foot. Some have impaired their health on account of long hours and all kinds of weather. They have, as I said before, in their possession letters and statements showing that their service has always been satisfactory. In fact, they are the very best employees—the very best in their service.

Q. Now, when these men were discharged, the last men you mentioned, it was said to them that they were discharged because they were members of the Railroad Trainmen's Association?—A. Yes.

Q. And for no other reason?—A. That is apparent, yes.

Q. (By Senator KYLE.) You said a moment ago that these Philadelphia men were told they were discharged by the railroad because of their connection with your organization, or with your lodges?—A. Well, yes. They have told me at Philadelphia that they were discharged on account of their membership in the Brotherhood of Railroad Trainmen.

Q. I understood you to say they were told by the railroad officials that they were discharged for that reason?—A. That is correct.

Q. Simply because of their connection with the organization?—A. Yes, sir.

Q. (By Representative OTJEN.) Are these men here?—A. One of them is here.

Q. (By Senator KYLE.) And the railroad failed to give a certificate as to character as regards faithfulness and anything else?—A. Some of them have them in their possession.

Q. They have got to produce some sort of a certificate from former employers before they can get employment on some other railroad?—A. Yes; but this is an exchange through officials. The man must immediately have a recommendation in his pocket, but it is worthless with a great many corporations. It must pass back and forth through the officials—the official of one railroad in communication with another.

Q. (By Mr. RATCHFORD.) Have you not a law in the State of Pennsylvania which in substance provides that workmen shall not be discriminated against by the employer for their connection with a labor union?—A. That law has been declared unconstitutional by Judge Gunster, I believe.

Q. How recently has it been declared unconstitutional? Do you remember?—A. Last September or October.

Q. (By Mr. KENNEDY.) An appeal is pending now?—A. Yes; there was an appeal taken. I believe it is pending. I do not know just the status of the appeal.

I would like to read, in answer to Mr. Ratchford's question about these voluntary relief associations [reading]:

"And, in consideration of the contribution to be made to the relief fund of the said association by the Philadelphia and Reading Railroad Company, and its successors, and of the agreement of the several associated companies in respect of any deficit in the relief fund for benefits in their respective employees, I hereby agree that the acceptance of benefits from the said relief fund, or from said association for injury or death, shall operate as a release of all claims or damages against said company, my employer, and against any of said associated companies by which I may hereafter be employed, arising from such injury or death, which could be made by or through me, and that I or my legal representative will execute or, where necessary, procure to be executed such further instrument as may be necessary formally to evidence such acquittance."

Q. (By Mr. RATCHFORD.) What is that you are reading? Is it an agreement or is it rules?—A. These are the rules covering the Philadelphia and Reading Relief Association.

Q. As promulgated by the officials of the railroad?—A. Yes.

Q. The practice of the employees of the road is to sign them in accepting employment?—A. Yes. It is virtually a condition of employment, just as an applicant is required to go before their doctors and pass an examination before he can be employed. A great many of these companies to-day have the latter rule in force. If a man's measurements and weight and height do not all correspond, and if he be not sound in limb, he can not get employment.

Q. (By Representative OTJEN.) Are you sure that these employees are obliged to accept these benefits unless they want to?—A. My understanding is that they will have to accept benefits or leave the service of the company.

Q. That is, on these roads that have these associations, practically all the men belong to the association?—A. Yes.

Q. Is it understood among railroad men that they will not have a good standing in their employment if they do not join these so-called voluntary relief associations?—A. Well, I am at a loss to know how to answer that question, because you will find so very few who do not belong to the relief association that it would be hard to determine that question.

Q. (By Senator KYLE.) I understood you to state a moment ago that they could not become employees at all unless they were examined and became members of this department?—A. Yes; that is correct.

Q. Well, you can proceed now to make out your cause of complaint. We have got so far as the Philadelphia matter, where 10 men were discharged; having passed the Shamokin matter where 8 men were discharged, I believe, making 18 in all.—A. We received statements from quite a number of the members of our organization

asking us to in some way give them relief, and we knew that it was impossible to approach the officers of that company, asking for the rights of the men to belong to organizations, and, inasmuch as there was created by Congress an Industrial Commission to inquire into industrial matters, we concluded that the best thing to do was to bring it before this commission.

Q. You mean to say by that that you made no attempt whatever to reach the railroad officials in regard to this matter?—A. No, sir. We never tried to reach them as an organization. The men did. We advised the men to call on their division officers, and general officers, if necessary and if they could do so, and ask for a hearing of their case, and for the cause of their dismissal.

Q. So your reason, then, for appearing before the commission here, or desiring to appear, is because 18 of your men have been discharged without just cause, as you think?—A. Yes.

Q. And for the cause that you have interpreted—that they are members of the several lodges along your line?—A. Yes, and that we believe that relief should be afforded these men in some way or other by the provision of a law or enactment of a law.

Q. Can you state of your own knowledge that the railway officials would have received you and discussed these matters as an organization? They might possibly refuse to treat with these men individually, or a committee locally of the men, but are you sure they would refuse to receive you and 2 or 3 of your associates?—A. Yes. Their attitude to organization in the past leads me to believe that they positively would not permit me to approach them as an officer of an organization or otherwise as an individual.

Q. How many such railroads are there in the United States that refuse to do that?—A. Only one—that is the Philadelphia and Reading.

Q. And you never asked them to treat with you?—A. My predecessors, Mr. Wilkison, and, I believe, though I am not quite positive, Mr. Morrissey, now grand master of the Brotherhood of Railroad Trainmen, tried to approach the president and superintendent of one or two companies, and found they could not do so.

Q. Who is the president of this company and the vice-presidents and general manager?—A. Well, I do not know who is the president now. I think Mr. Vorhees was president at that time.

Q. And the superintendents you speak about?—A. I do not know their names.

Q. And the general manager?—A. The general superintendent's name is Mr. Swigard.

Q. (By Mr. KENNEDY.) You state as conclusive that if they would not give satisfaction to the individual members who have been discharged they would not tolerate interference on the part of leaders of the organization?—A. I felt that when they refused to entertain a committee of the employees, to listen to an honest complaint, it would not be of any benefit to the men for this organization to make an appeal in their behalf. I believe that it was on the 5th or 6th of February that the committee appeared at the general superintendent's office and asked him if he would not permit them to discuss the dismissal of themselves, and of 4 or 5 or 6 others, and he stated that he did not want to have anything to do with it—this is what they told me—that he would not discuss any proposition with them; that he had discharged them, and that stood. The chairman of the committee made the remark to him: "We will strike at your freight service," meaning that they would strike, or that they would try to establish a boycott on the Philadelphia and Reading. That had no effect on him whatever. He simply refused to do any business with them and refused to discuss the proposition with this committee.

Q. (By Senator KYLE.) And yet, he keeps in his employ how many members of organized labor, in your judgment?—A. Do you want to get them all discharged?

Senator KYLE. No. You do not need to state their names, but in round numbers.—A. I might say that we have at the present time a very conservative estimate—about 200 men employed on the Philadelphia and Reading Railroad, members of the Brotherhood of Railroad Trainmen.

Q. (By Representative OTJEN.) About how many employees are there on the Pennsylvania and Reading?—A. I have no way of knowing, but I should judge upward of about 3,500 who are eligible to our organization.

Q. (By Mr. KENNEDY.) Are the engineers on that system members of the Brotherhood of Locomotive Engineers?—A. I know some of them are.

Q. Are the firemen members of the Brotherhood of Fireman?—A. Some of them, yes.

Q. Some conductors belong to the Conductors' Brotherhood?—A. Yes.

Q. Do you know whether the company is aware of that fact?—A. Well, I do not think it is. I do not think the officers know that the men belong to the respective organizations.

Q. (By Senator KYLE.) There are 200, you think, in your Brotherhood of Trainmen that are still employed by your company; 18 men have been discharged, and 8

of them you suppose were discharged because of their connection with your order?—A. Yes.

Q. Ten of them, upon statements of the men themselves, were discharged because they were members of the order?—A. Yes.

Q. Is it possible that these 10 men spoken of last could have been mistaken as to the cause of their dismissal?—A. No; I do not think they could be mistaken, for the reason that these men had been in the service from 3 to 9 years in the capacity of brakemen and conductors, and their work was always of the very highest character; they had caused very little damage to property; they were always there when called upon to go out in any and all kinds of weather, and at any time during the day or night. Usually those are the kind of men railroad corporations are looking for, and they would much rather keep a man of that kind in their employ than to take an inexperienced man. There must have been some cause for discharging these men, and if it was for neglect of duty, or destruction of property, the officers would not hesitate to say so. Inasmuch as they refused to give them any consideration whatever other than to say, "We do not want you in our service," it is very good evidence that there is some hidden motive, which they were afraid to make known.

Q. (By Mr. RATCHFORD.) Were those men that you speak of all discharged at about the same time, or were they discharged singly, one by one?—A. They were all discharged within a few days of each other. Probably 10 days would cover the time at the very furthest.

Q. Ten days would cover the discharge of the 18 members, would it?—A. Yes. I might state that some men have been discharged that we have no record of. There is Williamsport, and there have been quite a number of men discharged in Newburyport who have gone away and found employment somewhere else.

Q. Were those men members of your organization?—A. Yes.

Q. Have you any knowledge of any discharges in which the discharged employee was not a member of your organization?—A. Not a single one. We have taken particular pains to ascertain whether any man that was not a member of the organization was discharged in the same mysterious manner that these men were discharged, and we can not cite any single instance or any single case.

Q. (By Mr. KENNEDY.) Is it customary in the railway service in giving dismissals, with the immediate cause of necessary reductions in the force, to give letters of recommendation that will enable them to get service on another line?—A. Generally speaking, that is the rule.

Q. Will a superintendent who has to discharge a man because of a necessary reduction in the force, that man being satisfactory in every way, refuse to give him such a letter if he asks for it?—A. No; he will not refuse to give a letter. As a general proposition, the superintendent of his own accord sends a letter to the employee at the time the reduction is made, notifying him that on account of depression in business his service will not be any longer required.

Q. Now, you say some of those men who have been discharged have such letters in their possession. Did they procure those letters prior to their discharge or since?—A. I believe some of them secured those letters prior to their dismissal, and some received them after their dismissal.

Q. (By Senator KYLE.) Now, I want to ask you another question. You say the Pennsylvania system recognizes your order and treats with you as an order?—A. Yes; there can not be any question about that. They have been very generous to our organization.

Q. So you have been in the habit of meeting the superintendents and managers, have you, on business matters relating to your employees?—A. Our organization has quite frequently met with the general manager of the Pennsylvania Railroad.

Q. Upon complaints of your men?—A. That is, on grievance matters that emanate from the employees.

Q. And they have never refused to treat with you?—A. No; we have never found the disposition of the officials of the Pennsylvania to antagonize our organization.

Q. And when men are discharged from the Pennsylvania Company, and you think unjustly, they will meet you and tell you why the men were discharged?—A. Yes; if it becomes necessary to meet with officers of our organization, I believe the officers of the Pennsylvania Railway would do so, but I might state as a general rule the Pennsylvania Railroad officials settle these matters with their men directly.

Q. I wanted to know what your custom was. In case a dispute arose between members of your order and the railway company, you do not think they would refuse to treat with you and to tell the reasons why they discharged 15 or 20 men?—A. We know they would not refuse to meet with us; at least, their attitude in the past leads me to believe they would not refuse to meet with us.

Q. But your organization, then, has never met any of the members of the Reading road to consult with them as to whether they would recognize organized labor or not?—A. No; they have never given us an opportunity to explain the attitude of our organization to them, and I believe that if the officials of the Philadelphia

and Reading had a better understanding of organized labor they would not oppose it so strongly.

Q. I asked these questions because I think their attitude is quite unusual, and it occurred to me to ask you the questions to know whether you had exhausted every means at your command to ascertain whether they had absolutely and flatly refused to treat with your organization.—A. Well, we know that it is their policy in days gone by, and the same general superintendent is connected with the road, and the dismissal of these men and his refusal to meet with the committee leads us to believe that it is his policy.

Q. Was it not true generally with a great many private industries 10 or 15 years ago that they refused to treat with organized labor, and that since that time organized labor has become quite generally recognized throughout the country?—A. Yes; that has been our experience. Even 5 years ago the Brotherhood of Railway Trainmen did not stand as high with the railway managers as it does at the present time, because they misunderstood the objects of the organization and its intentions, but after they have become familiar with its manner of working they know that the organization is conservative; it counsels its members to be conservative and take into consideration all things that indirectly interest the railroad properties. I might say, as the best evidence of this being true, that when depression struck this country some years ago, in 1893, the railroad men throughout the country and our organization submitted to reduction after reduction in wages for stated times until business revived and the railroad companies were in a position to resume paying their regular rates. There were no strikes and no conflict. During the depression we were willing as an organization, we were willing as employees, to help the railroad management bear the burden.

Q. Is it the fact that where a man belongs to organized labor, is a member of a lodge in good standing, it is a guaranty that they are getting a good man when they employ him; that he is known by his fellows in his lodge as being worthy of employment by the company; he stands well socially; that he is an honest man? It is sort of a guaranty that a man is a good man if he belongs to your organization. Is it not possible if a committee of 3 or 4 of your national organization were to go to the president and general manager and vice-president of the Reading Company you could settle this matter without bringing it to the attention of the commission?—A. Well, if we thought so we would not be here to-day.

Q. Exactly; but you say you have not tried it, that is all.—A. Well, when their own employees can not approach them, can not get an audience with the general superintendent, I would like to know what hopes an outsider would have of approaching a higher officer of that company.

Q. The approach is made by the members of the national order, and it would be a matter probably of greater importance to them to meet the national members of your order than it would be to meet 3 or 4 or 5 of the employees.—A. I am here to say to you, Mr. Chairman, that we will never as officers of an organization approach the Philadelphia and Reading officials, because, as I stated to you and read extracts of our constitution, showing you whenever there is any grievance matter or an employee feels that he is unjustly dealt with, those matters must be taken up by a committee of his fellows employed on the same division. That has been done in this case.

Q. (By Mr. RATCHFORD.) But I understood you to say earlier in your testimony that Mr. Morrissey and one or more of your predecessors approached the company on another grievance, and were refused and denied an interview?—A. Yes; themselves and a committee of the employees. I would like to say that a committee of employees in this case had taken up the complaints of the men carefully; the officials refused to give them any recognition or any consideration, and I do not believe that they would consent to meet those who are entirely out of their service—not employed by them.

Q. (By Senator KYLE.) Did these men say they were a committee representing organized labor or the Brotherhood of Railway Trainmen?—A. Yes, they did; they stated they were members of the organization, appointed by the membership of the Brotherhood of their respective divisions.

Q. (By Mr. KENNEDY.) Has the Reading Railroad Company's opposition to organized labor been so constant through many years that you would not think of such a thing as going to them in the interest of the men? Is that one of the grounds on which you have declined to go to them, one of the reasons?—A. Yes; that is one. I might state if they were officials that had not opposed the organization before we might do the same as we have done with a great many other officials—communicate with them and ascertain their attitude; but we know the general superintendent's attitude to organizations so well that we believe that it was not necessary to communicate with him or any of the other officials.

Q. (By Representative OTJEN.) Did I understand you to say that when there were complaints of any of your members, in order to have those complaints heard they must first secure the indorsement of one-half the membership on their division?—A. Yes; that is correct.

Q. And then it goes to the lodge, does it not?—A. Yes.

Q. And has to be approved by one-half the members of the lodge?—A. Yes.

Q. And then it goes to the general officers of the association; is that correct?—A. No; it goes to the committee representing the employees on that division.

Q. That is a committee of the membership?—A. A committee of the membership employed on that division.

Q. What is the duty of that committee regarding that then?—A. The committee are given absolute power to make a settlement. They meet with the officials to explain the matter of working. If the committee finds that there has been an unjust grievance placed in their hands, they have the power not to go any further in the investigating, or, in other words, to refer it back—make a report as to their finding.

Q. But if they find that the complaint is well founded, what then?—A. Then they proceed to adjust it, meeting with the proper officers of the railroad.

Q. In this case was any grievance presented to a majority of the membership of the division?—A. At Philadelphia, yes.

Q. At Philadelphia?—A. Yes; there was at Philadelphia. At Shamokin there was not, because I advised them not to. A committee was appointed and the matter was taken up with the general superintendent.

Q. Well, at Philadelphia did the grievance receive the majority of the employees of the district—have the approval of the lodge and then go to this committee that you speak of?—A. Yes; it got as far as the committee.

Q. And this committee, did they attempt to present the grievance to the railway officials?—A. Yes.

Q. And were refused?—A. Yes; they were refused.

Q. (By Representative BELL.) That was the official committee?—A. Yes; representing the Brotherhood—the Brotherhood men employed on that division.

Q. It was not composed of the men that were discharged at all, but just your official committee—standing committee?—A. No; they were not discharged.

Q. (By Representative OTJEN.) They were not discharged?—A. But they were discharged the next day.

Q. How many?—A. Three.

Q. Are they still out of the service of the company?—A. Yes; I have no knowledge of their going back. I might state that one of them was not discharged; he resigned, knowing that he would be discharged, or feeling that he would be discharged.

Q. (By Mr. KENNEDY.) After the other two had been discharged?—A. Before the other two had been discharged he resigned.

Q. (By Senator KYLE.) And these three members of the committee were discharged, you think, because they took up the case of these discharged men and attempted to present the matter before the officials of the railroad?—A. Yes; that is my opinion, and the opinion of all the railroad men in and around Philadelphia.

Q. (By Representative OTJEN.) Then, as a matter of fact, your organization did present this grievance, or did attempt to present this grievance, to the railroad officials officially?—A. Not officially; that is, so far as the general officers of the organization are concerned. Locally they complied with the laws of the organization and presented it.

Q. Is not this committee part of the organization—part of your official organization?—A. Yes; but I do not want to confuse the local committee with the officers of our organization.

Q. That is, what you mean to say is, that the grievance was not presented to the railroad by the general officers of the organization?—A. No; it was not.

Q. (By Representative LIVINGSTON.) Was the committee authorized to do it by the general officers?—A. No.

Q. Then it was not official?—A. Yes, it was. It was officially authorized by their lodge.

Q. (By Mr. RATCHFORD.) They were authorized to do it under your laws—under your rules?—A. Yes.

Q. (By Mr. KENNEDY.) Is there any organization known as the Knights of Labor along your line—organization of railroad employees?—A. I do not know of a single railroad man that belongs to the Knights of Labor to-day on any railroad in America.

Q. There is no conflict, then, between the workmen belonging to one organization and the other on this system?—A. No; so far as our relations with organizations on the Philadelphia and Reading Railroad are concerned, they are of the very pleasantest kind.

Q. (By Mr. RATCHFORD.) As you wish to substantiate your claims in your testimony, it might be taken from your testimony, I take it, that you have not presented direct proof of your claim. The most direct testimony might be summed up in this way: That it is the supposition, because of the general hostility of the railroad company toward your organization in the first place, and in the second place because the men who have been discharged have asked for the causes as to why their services were dismissed, and the company has refused to give such causes. Now, upon those two

grounds it is the claim of your organization that such men were discharged because of their connection with a trade union; is that correct?—A. Yes.

Q. (By Representative BELL.) Your statements awhile ago all show that every man discharged belonged to the organization also?—A. Yes; every man that has been dismissed has been a member of our organization.

Q. Now, then, who have their places been filled by, union or nonunion men, as far as you know?—A. They have been filled, so far as I know, by nonunion men; men who do not belong to the organization, and I know of it personally and had them pointed out to me at Shamokin, men who had taken the places of some of these men who have been dismissed—men that have not been in the railway service 1 year; and from their general appearance I would judge they were not experienced railroad men.

Q. There is no probability that any of these railroad men were discharged because business had fallen off or anything of that kind?—A. No.

Q. Has there been a man engaged to take the place of every man who was discharged, so far as you know?—A. Yes. I might say, Mr. Chairman, as to the question that you asked me awhile ago, if there were any other railroads that refused to meet and treat with our organization, it has come to my mind that there was a general manager who refused to meet with our organization on the Pennsylvania lines west of Pittsburg—that is, with the officers of our organization. But it is not the policy of the Pennsylvania Railroad to refuse men a hearing. That same general manager who refused to meet the representatives of the organization spent several weeks in conferences with his men relative to pay and rules to govern men in their employment; and I believe Mr. McCrea, who is the vice-president of the lines west of Pittsburg, has on several occasions, while general manager, met with the representatives of these organizations and transacted business with them.

(Testimony closed.)

Mr. HEEBNER, counsel for the Philadelphia and Reading Railway Company, states that the commission has given this company full opportunity to be heard by witnesses on its behalf on the questions raised by the testimony given before the commission at its sessions by the members of the Brotherhood of Railroad Trainmen, but that the company has no testimony to offer on the subject at this time.

CHAS. HEEBNER.

MARCH 9, 1900.

WASHINGTON, D. C., May 18, 1901.

TESTIMONY OF MR. JAMES F. JACKSON,

(Of the Massachusetts State Board of Railroad Commissioners.)

The Commission met at 10.52 a. m., Vice-Chairman Phillips presiding. At that time Mr. James F. Jackson appeared as a witness, and being duly sworn, testified as follows:

Q. (By Mr. RIPLEY.) Will you state your address, occupation, and other details respecting your business, please?—A. My name is James F. Jackson; my business address is 26 Beacon street, Boston, at the office of the State Board of Railroad Commissioners. I have a private office in Fall River, where I reside. My private business is that of a lawyer, member of the firm of Jackson, Slade & Borden.

Q. You may proceed with a general statement respecting the cost and the development of the work of the Massachusetts Railroad Commission.—A. The commission was founded in 1869. Its duties have been increased from time to time. To-day it has a general supervision over all the railroads and the street railways within the State. I know it is sometimes said that the authority of our commission is purely one of an advisory nature. It is, in a large degree, and yet there are two or three important features of our work wherein we are given mandatory power. Take, for example, questions that relate to public safety. In many instances we have absolute control, as in grade crossings of railroads and highways, railroads and railroads, and railroads and street railways. If we think there is public need for a grade crossing, we grant it. If we do not think there is such public need, we refuse it; and that settles the question.

Take again the matter of safeguards, both from the standpoint of the employees and of the traveling public. Very many matters come before our board for approval where the question is as to the construction of some safety appliance, platform gates, interlocking or other signal systems, protections of one kind and another. There again our power is one of approval, and the road is obliged to accept our judgment as final.

Then, a very important branch of our work is that which relates to the issues of stocks and bonds, or, in other words, which has to do with the financial strength of railroads and railways—at any rate, as far as the public is concerned, and perhaps they are concerned altogether. I think they are. Every issue of stock, the original issue, and all increases in the way of additional issues, are made only upon the approval of the board after an investigation. That is true in connection with bonds, also. So that there are two important features of our work where our power is more than merely recommendatory.

Then there is the work which is purely recommendatory and advisory. This is in connection with matters that affect directly the revenues—questions of rates, passenger rates, freight rates. There we investigate in all instances, and after forming our conclusions we make a report. The companies are not bound by law to follow the recommendations contained in that report or to heed our opinions. It is a question whether they will or not. As a matter of fact, during the history of the board I think I am safe in saying that it has only been in exceptional instances that either the public on the one side or the railroad corporation or street-railway corporation on the other has disregarded the views of the board or its recommendations. Perhaps I ought to limit that to recommendations, because there are matters, as you will appreciate, Mr. Chairman, where a board may desire to look into a matter and to suggest something that is not, in the opinion of the members of the board, necessary to immediately carry out—something it is looking forward to. For example, whether it is better to have certain colors to indicate safety and peril and caution. We have made in the past a recommendation upon that point, but it was made in terms understood to be simply a suggestion, and some of the railroads have adopted it and some have not. It followed a test. It was an interesting point, but the purpose of the commission was distinctly not to say to the railroads in that case, "It is necessary for you to think as we do about it."

Now, on part of the railroads, I hardly know of an instance where a recommendation of the board that they do one thing or another has been disregarded. On the part of the public, in a few instances, there has been some appeal to the legislature and some legislation. There are very few instances, and I think it is only fair to say that the railroads have not been deferential to our views merely because our views are their views. Take, for instance, the last year and a half, which is the extent of my personal acquaintance with these matters. We have passed on questions of rate, questions involving the removal of stations, the building of new stations, change in train service, and a variety of other matters overruling the contention of the railroad, and in every case they have conformed to our recommendations. In our last annual report, after investigating the question of passenger rates, we recommended the introduction of the 500-mile mileage book at 2 cents a mile, and the railroads have adopted it. This was proved to be a reduction in revenue, these books taking the place of sales of single tickets. I think it is a fact that the railroads feel that a board made up as ours is, three members, one acquainted by actual experience with the needs and conditions of the business community, familiar with all questions that affect trade and commercial interests; a second member familiar by experience with railroad construction and railroad operation; and a third member of sufficient legal ability to take care of the legal questions—the railroads feel that this board, made up in that way, has proved to be thus far a valuable aid rather than hindrance in their work. It may be dangerous for me to say what the railroads think of us. I do not want to carry that idea too far, but as far as the following out of recommendations is concerned, they have certainly done it. Matters are referred to us continually by the legislature. An instance of that sort was the investigation as to the safety of the use of vestibules on street cars. We were asked by the legislature a year ago last winter to investigate that. We did so, and made a report.

Q. (By Mr. LITCHMAN.) Will you give just a brief outline as to the nature of that report?—A. The statute itself took in hand a part of the subject. The statute made it mandatory upon all street railways outside of Boston to have vestibules on the cars during certain winter months for the protection of the motormen and conductors. There was a very serious contention on the part of the Boston Elevated Railway Company, which controls all the street railway traffic of Boston, that vestibules were dangerous in some of the narrow streets of Boston where the people were continually crossing, and making transportation something that must be guarded by the utmost care. The railway company claimed that the addition of the vestibule shut off the view and interfered with sounds to such an extent that motormen could not bring their cars to a stop with the promptness that they could if they were upon an open platform. The legislature referred to us one question. That was, whether it was consistent with safety that the company use vestibules. We had several public hearings, and made inquiries all over the United States and Canada, and, as a result, we felt they could be used with safety under proper conditions. As a result, the Boston Railway Company must equip its cars within a certain number

of years with vestibules, but in order that there might be no serious injury done we made it experimental, by interpreting the statute, as we thought we might under the circumstances. They are to test the vestibule in the most difficult places first, so that if we are wrong in our opinion we may recall our recommendation. We feel very positive about the matter, but at the same time believe the question of public safety of the greatest importance.

Q. (By Mr. FARQUHAR.) What is this contemplated vestibule, a closed vestibule or a half vestibule?—A. The closed. It has doors which are to be opened at certain times. The design has not yet been perfected, but the idea is to have them as largely as possible of glass, so that the sight will be obstructed but very little. Then again they are to be so arranged that these glass windows will drop down and the motorman can see out if he wants to. We feel that the vestibule is safe in Boston.

Another instance of a special report was that upon the contribution of street railway companies to the abolition of grade crossings. In our State there has been undertaken a very important work of abolishing grade crossings, and under a statute passed in 1890 the State contributes a certain proportion, the railroads a certain proportion, and the city or town a certain proportion to the expense. The State and city or town is limited to 35 per cent of the cost, and the railroad bears the other 65 per cent. It has often been contended that street railways ought to bear a part of the expense. We made a special investigation into that matter, and reported that in our judgment it was fair that they should. The legislature is at work now on a bill.

Q. (By Mr. LITCHMAN.) That is where the street railway and the railroad crosses, is it not?—A. Yes. It is where there is a grade crossing of the highway and railroad and the street railway, either has a location or is to get one immediately.

Q. (By Mr. RIPLEY.) You may speak, if you please, of the policy of the board in respect to capitalization.—A. It is one of restriction, on the theory that it is right that the people who furnish the income to the stockholders in the way of rates should pay it only upon actual expenditure—the actual cost, fair cost, of these enterprises. Under the laws which were passed recently (some of the most important of them in 1894) we look into the issue of capital stock and of bonds. First, the statute describes the purposes in a general way, for which stock and bonds may be issued. Then the board has to decide whether the particular purposes of the company fairly fall within the general purposes as described within the statute. Secondly, we have to decide the amount which is fairly required for that purpose. If a street railway desires to equip its road we have some skilled expert inform us as far as we are not informed of the cost. They may issue stock for this to the amount which we decide is requisite. If they are to build a road, we have an expert engineer examine into the cost of the construction, and we allow them to issue stock to the extent that is necessary to pay that cost. They may have to buy real estate for one or another essential purpose. There again we determine the actual fair value to be paid for that real estate.

Q. Do you have any authority to examine the books of the company—any powers respecting auditing?—A. Oh, yes; the books of all railroad companies and railway companies are open to our inspection at any time. They make annual reports to the board, and those reports are presented to an expert accountant who is in our employ, who compiles the figures and makes out the tables.

Q. (By Mr. FARQUHAR.) How many different companies operate surface roads in Boston?—A. There used to be a great many companies, but now they are all in one company, the Boston Elevated Railway Company. It leased these several companies. The Boston Elevated has nearly completed a new enterprise in the way of an overhead railroad—elevated railroad. It has leased the entire West End system, and is operating it to day.

Q. Are there any separate suburban companies that make Boston their terminal which are owned independent of this elevated company?—A. There is the Lynn and Boston Street Railway that runs into Boston upon the tracks of this West End system, Boston Elevated, Lessee. Aside from that I think of no other.

Q. (By Mr. LITCHMAN.) Don't the Newton cars run to Boston?—No; their system touches, but does not enter on the Boston Elevated.

Q. There are no cars running from Boston to Newton?—A. Oh, yes; but the railroad company—Boston Elevated—operates such cars as come in over its own system as it does its own cars.

Q. The Lynn and Boston secures the use of the Elevated outside Charlestown, or do they use both?—A. They simply run into the subway, into the city, over the Boston Elevated system through Charlestown.

Q. I would ask whether they use the elevated track or the surface track.—A. They use the surface track.

Q. Might it not be well either here or some point in the testimony to give a brief résumé of the problems solved or attempted to be solved by the combination subway, street traffic, and elevated traffic of the Boston Elevated Railroad?—A. I

would be very glad to furnish anything I could of value, but that belongs to history which antedates my time, and I could not now say to what extent I could furnish the information.

Q. I will ask one or two questions, and then it may develop what I have in mind. How many distinct systems of street-railway traffic have you in Boston?—A. You mean by system methods of operation?

Q. Yes.—A. There is only one to-day; two, if you count the subway—subway and surface—and there will be the elevated very soon.

Q. Within a few weeks?—A. Yes, I presume so.

Q. The elevated system goes from one side of Boston at one extreme and passes through the congested part of the city to the other end of the city, does it not?—A. Yes.

Q. And the subway is in the congested district itself?—A. Yes.

Q. And the surface roads are in both suburban and congested districts?—A. Yes.

Q. And yet they interchange from subway—that is the intention?—A. The whole is intended to work together. There is a great deal of interest in Boston to-day in the efforts to be made in the future to relieve congested traffic. There are different plans now before the legislature. I noticed in the paper this morning that a new suggestion had been made by the prominent officials of the Boston Elevated Railway with reference to a new subway.

Q. Is the general opinion in Boston that the subway is a success?—A. I think it is.

Q. Do you think from the records of the office, Mr. Jackson, that a history of the transformation of the traffic could be given as supplementary?—A. I would be glad to look into it.

Q. (By Mr. RIPLEY.) Are stock dividends permitted at all?—A. Stock and scrip dividends are prohibited by statute.

Q. How far do you examine periodically the books of the railroad and street railroad companies further than to receive reports?—A. We examine their annual reports, which are made upon a prescribed system, and then from time to time upon request they furnish us with the facts and figures that are set out in their books. We do not make personal examination of these books as an auditor would.

Q. (By Mr. PHILLIPS.) Have you a right to do that?—A. Well, the statute reads that they should be open to our inspection at any time.

Q. (By Mr. RIPLEY.) But it has not been your policy, then, regularly to audit those books?—A. It has never been the practice of the board.

Q. Do you make any distinction between bonds and stock in fixing the amount of capitalization?—A. Yes. There is a statutory distinction and there are distinctions in practice. That the bonds must be not in excess of the capital stock is one requirement. Then, although the statute says that stock and bonds may be issued for the purpose of building a road, for example, or of extension, or of equipping it, in practice we never issue bonds until the enterprise has reached the stage of completion. I think that practice has been adopted within the last year and a half. The statute requires that before approving the issue of mortgage bonds the board shall examine the assets and liabilities of the railway or railroad, and shall determine that the value of the property for railway purposes or railroad purposes, and exclusive of any value for franchise, shall be at least equal to the amount of the outstanding capital and indebtedness.

Q. In such a case as that, do you take account of the value of the terminals? The statement has been made several times before this commission that the increase in the value of many railroad stocks is not due to the increase in the value of the road as a railroad, but rather to the value of the terminals. Do you make any such distinction?—A. We do not.

Q. Does your control extend merely over corporations, or over all enterprises which have to do with transportation whether incorporated or not?—A. It is limited practically to the incorporated companies.

Q. Do you find any disposition in Massachusetts to evade the control of the commission by organizing in other ways? I refer, for example, to the Massachusetts electric companies.—A. So far as we know there has not been manifested any disposition to do it. During the past year we have looked into the issues of stock and bonds, consolidations, and leases by companies in which the Massachusetts Electric, so called, own the stock. We pay no attention whatever to the fact that the Massachusetts Electric owns the stock. We deal wholly with the company, its standing. If it has a purpose which is legitimate, and desires stock and bonds which are no more than requisite, we approve, and it makes no difference to us as to who owns the stock. We had a case last year which we always felt was an interesting case. It concerned the Lynn and Boston Railroad, and involved an issue of stock. The previous history of that railroad had been somewhat unusual. The Massachusetts Electric owns the stock.

Q. You may explain the organization of the Massachusetts electric companies in the first instance.—A. The Massachusetts Electric, to reply specifically to that

question, is an unincorporated association which owns stocks in certain street-railway corporations. These stocks stand in the names of certain persons as trustees. Under the agreement upon which this association is founded the trustees, who are 15 in number, practically exercise the ordinary duties of a board of directors of an investment corporation. They declare dividends and vote the stocks in the corporate meetings of the several street-railway companies. The association issues preferred and common shares, and has a so-called capital stock. It would be natural that in the payment of dividends upon these association shares an effort would be made to equalize things and make the prosperous companies in which they own help out the weaker companies. To do this there might be a temptation toward improper management in connection with a particular company or companies in which they have control; but, on the other hand, no issue of stock can be made in any of these companies without the approval of the board and upon proof that the railway property is worth, without reference to franchise value, an amount equal to the outstanding debt and capital stock. The board in determining this pays no attention whatever to the ownership of the stock or the dividends which the association may desire to pay to the holders of its certificates. In other words, the financial interests or affairs of this association receive no consideration whatever from this board.

Q. (By Mr. PHILLIPS.) Does not this company violate the spirit of the law?—A. Well, it is contended so. I do not believe in such organizations.

Q. Their legality has never been tested?—A. I am inclined to think that they are legal. It is done in connection with real-estate interests. One objection, to my mind, is that it gives a false impression to investors who are used to dealing in stocks and bonds and who, as to Massachusetts railway stocks and bonds, have a common impression that they are passed upon by our board. I do not know that many people are deceived. It is claimed by the "Massachusetts Electric Companies" that nobody is deceived. Perhaps that is true, but, in my judgment, it is not desirable to have this condition of things exist.

Q. (By Mr. LITCHMAN.) What is the legal responsibility of the managers of that company?—A. They have a legal title to the stock and control the management of the street-railway corporations in which they own by voting the stock.

Q. I mean, in this Massachusetts Electric Company, what personal or legal responsibility is there to the stockholders or owners of shares of that company?—A. I do not know exactly. I am not familiar enough with their methods or their articles of agreement.

Q. (By Mr. FARQUHAR.) Are these certificates issued by the directorate of the Electrics?—A. Of that association; I understand so. Their property is held by trustees.

Q. Is the directorate of the Electrics the trustee of the stock?—A. It is my very strong impression that the trustees have the entire control. They have the legal title to the stocks, and they manage them and act as a directorate. You see, that organization does not come before us, and I have to give you what is rather an impression than any knowledge officially.

Q. (By Mr. RIPLEY.) What is the relation between the aggregate amount of these trustees' certificates and the capitalization of all the companies which they control—is it greater?—A. I think that there is a watered condition—a difference between the original investment and the present amount of what they call their outstanding capital. There is something more than the actual investment value.

Q. Is there considerable more? Have you any idea of the relative amount?—A. No; I could not give you definite information.

Q. Is there any difference in principle between this organization of all the street railways of Massachusetts and the organization of the steel industries in the United States steel corporation, so far as you know?—A. I do not think my opinion on that would be worth anything.

Q. (By Mr. FARQUHAR.) I would like to ask you if you have any restrictive statutory legislation there on stock issues now?—A. Yes.

Q. Is there any part of your statute that covers the expression "certificates of stock" as representing property so that the word "certificates" could be covered, whatever form stock or its equivalent may take?—A. I think not.

Q. I am hinting now towards the decision in the Standard Oil case and the American Sugar Refining Company, where the trusteeships had the authority to take up the stock and issue certificates of stock, apparently.—A. I am not familiar enough with the proposition that you have in mind to point out differences.

Q. You would seem to suggest the possibility of this Electrics Company being able by law to issue certificates, and these certificates are probably stock, so your statute in the State does not regulate to prevent it.—A. They are not certificates of stock. Strictly speaking, the association has no stock. The Massachusetts Electrics have no shares known to the laws which cover the issuing of stock and limit the purposes for which it may be issued.

Q. (By Mr. CLARKE.) Does the commissioner of corporations of the Commonwealth have to pass upon the ownership of certificates in the voluntary association?—A. My understanding is, he does not.

Q. (By Mr. LITCHMAN.) What enforces the recommendations of the railroad commission of Massachusetts?—A. The recommendations are enforced, I think, through the feeling that the subject-matter is carefully investigated and that the attempt is made by 3 persons, who represent both sides—represent the public on the one side and the private stockholder on the other—to reach a just conclusion, aided by the feeling that unless such an error, such a mistake in connection with their recommendations can be found as to warrant an appeal to the legislature to have it cured, it is practically final.

Q. (By Mr. RIPLEY.) Have you ever had any case go to the courts?—A. Never had anything of that sort.

Q. (By Mr. PHILLIPS.) How does this company pay dividends when you have restricted the other companies not to pay over 6 per cent?—A. They have to pay out of what they get from the other companies.

Q. If I understood you properly they were not to pay over 6 per cent, and the balance would go into betterment?—A. That is the Lynn and Boston, one of those that the Massachusetts Electric owns.

Q. (By Mr. RIPLEY.) How many do they own? What territory do they cover?—A. They are very largely in eastern and southeastern Massachusetts. They cover the whole part—nearly the whole of that territory—the eastern part of Massachusetts, running from the northern part of the State down to the south.

Q. (By Mr. LITCHMAN.) Now, would it be fair to say that your recommendations are respected and obeyed by the corporations because they are sustained by public sentiment of Massachusetts?—A. I think that has a great deal to do with it.

Q. Has it not been the experience of Massachusetts, so far as your knowledge goes, that the public sentiment of Massachusetts has sustained recommendations made by the railroad commission?—A. Every time that we made a recommendation against the railroad, that has been true, and there have been a great many of those, as the record will show. This last which made them introduce 500 mile mileage books was approved. When we have made a recommendation in support of the contention of the railroad, I suppose that here and there there is criticism, but I have not within a year and a half known of very much. To illustrate, the legislature asked that we look into the question of passenger fares, and we considered first suburban fares. The city of Boston is peculiar in respect to its suburban business. It has a very large traffic to and from Boston, and these fares are generally admitted to be very low. Perhaps they ought to be very low on account of the heavy traffic, and yet there is a constant strife here and there for lower fares. There was a request for a 12-trip ticket on all the roads. The board, I think, does not believe in establishing by legislation maximum rates of fares, but in leaving the railroads to handle their rates as a business matter, and then in individual cases correct them if they are unreasonable. We felt that the suburban fares were as low as they should be. Therefore we said upon investigation, and gave the figures for our reasons, that we felt it would work a reduction of the revenue of the railroads which would be unreasonable, in view of the very active competition of the street railways around Boston, and in view of the fact that the suburban business on the railroads near Boston was then on a decline rather than on an increase. Well, the legislature, instead of overruling that conclusion, took an intermediate step. There was then in use a 50-trip ticket. These people wanted a 12-trip ticket, which we refused to recommend, and the legislature passed a law for a 25-trip ticket. The essential thing is that the prosperity of the company shall not be interfered with, and that there be a very careful inquiry on the part of the men who are trying to get at the exact facts without bias, and then if they are wrong (and no man is infallible, and no board is,) the railroad on the one hand, or the people on the other hand have a right to appeal to the legislature. I think the strength of the Massachusetts system is shown in the fact that there has been so little of that appeal.

Q. In almost every case where that appeal has been made, the legislature has sustained the findings of the board, has it not?—A. Yes; it has been generally true. I had in my mind the impression that last winter, owing to the peculiar interest in the Boston and Albany and the New York Central, the Fitchburg and the Boston and Maine leases, they worked through the legislature against our recommendation an insignificant measure, but I do not recall the statute.

Q. It has been claimed, I think before this commission, that there was some discrimination in the handling of freight in East Boston by the Union Freight Railway, as it is called. Do you know anything about that?—A. No such claim has yet come before our board. I would say on the subject of freight rates that we have pending three cases, one the coal rate in Brockton, Mass., a thriving place that has grown rapidly for the last 25 years, and another case involving rates on lumber.

Q. Who owned the Union Freight Railway?—A. I do not know.

J. F. JACKSON:—FUNCTIONS OF RAILROAD COMMISSION.

Q. As far as you know there is no discrimination in the handling of cases from one road to another or from one shipper to another?—A. As far as I know, no. Our board has to do continually with individual cases, and in this way, as you will appreciate, we have worked out general propositions that will apply to other cases. Last year we had over 300 matters, involving hearings almost every day, so that we are constantly coming in contact with the railroad on one side and the people on the other.

Q. (By Mr. RIPLEY.) Do you have the power to fix the price of stock in cases of purchase?—A. Yes; and on that question there has been a great deal of discussion. If the issue of stock is authorized and the purpose is proper and the amount is a proper amount, the law compels us to fix a value at which it shall be offered to the original stockholders. If the capital stock was originally \$100,000, and the road has improved and been prosperous and the stock has gone up to, say, twice its original value, we have to fix the value accordingly at which it shall be offered to the stockholders. That leaves a capital composed of two parts, based upon different conditions. The original amount paid in has the par value of \$100 a share. The new stock is paid in at twice that rate, so the total investment in the railway property is different from the total authorized capital. Now, it is contended that when questions affecting revenues come up, there is difficulty in dealing with these stockholders fairly and equitably. The company pays the same rate of dividend to each on each share when a man has paid perhaps \$100 for one share and \$200 for another, or one man has paid \$100 and another man has paid \$200—not paid into each other's pocket as in the market sale of stocks but into the enterprise. Up to the present time it has not been a matter of any essential trouble to us, but it is argued that it may be; that the time may come that it would have been better to have had all the capital paid in at par value and represent the actual investment in public enterprises. I believe there is force in the suggestion, but at the same time my acquaintance with these problems has only been of about a year and a half.

Q. Has any effect of the leases of the Boston and Albany to the New York Central or the Fitchburg to the Boston and Maine been observed either in rates or in service up to the present time?—A. I think it is a little too early to discover any effects in one way or the other.

Q. What dangers or difficulties, if any, are to be apprehended so far as the port of Boston or the industries of Massachusetts are concerned?—A. I have always assumed that it was generally to the public advantage, and that the port of Boston would benefit from the consolidations. It was understood that was the feeling of those that advocated it. The result of the lease of the Boston and Albany to the New York Central has been seen to this extent, that under the statute they have taken preliminary steps to issue stocks and put in more capital for terminals.

Q. What will that mean as to the development of terminal facilities in Boston?—A. It must mean a great improvement.

Q. Do the terms of the lease prescribed by the legislature require that action on their part?—A. Yes.

Q. What things are included in either of those leases, either in the matter of rates or otherwise?—A. The operation of the road and the maintenance of the road is just as fully under the supervision of the board as before, and the State's right to purchase it (if it ever sees fit) is still retained.

Q. There is no possible evasion of responsibility by the board in any respect by those leases?—A. I see none whatever.

Q. Will there be any effect in rates or otherwise in the absorption of the Massachusetts Central Railroad? Has that absorption taken place yet?—A. I suppose that the control has passed.

Q. Were you called upon to fix the price of the stock?—A. Yes.

Q. Will you explain what your policy has been, or on what principle you proceed, in fixing the price of stock to be purchased by another road?—A. In this particular case we were asked to fix, not the value, but the purchase price which the Boston and Maine ought to pay, and in doing it we considered the value of the property and the history of the property. There had been a practical agreement between the owners of the preferred stock and the Boston and Maine, and we therefore said, "As you have agreed on that, we will not disturb the agreement. It is a trade between you two." Of course there were some who claimed that they ought to be paid more, but we felt that was substantially a matter of bargain, and there was no reason in the public interest to prevent our approving it. The common stock meant practically the balance of the purchase price of the property, and we looked into the structural value of the railroad, what it originally cost, what it would cost to-day, and then we looked into the value of the property for railroad purposes, and we felt that it was a very valuable piece of property.

Q. (By Mr. PHILLIPS.) Did you take into consideration the franchises?—A. We did not have to go so far as that. We felt the fair value of that railroad property to the Boston and Maine for railroad purposes, outside of the franchise, was at least

as much as we asked them to pay by fixing the price of the common stock at 21. The Boston and Maine suggested 15, but we found 21.

Q. (By Mr. RIPLEY.) Has this policy of strict financial control worked well on the whole in Massachusetts?—A. I think it has.

Q. And there is no disposition at present observable on the part of the legislature or the people to repeal it?—A. On the contrary, I think the feeling in its favor has grown stronger and stronger. Men who come before me and discuss the question, lawyers who were formerly opposed to it, admit that the security of railway stocks has been affected for the benefit of the railways and the benefit of the people. The board does not undertake to guarantee the success of the enterprise. We say, "You have got your railway. Whether you will be able to earn anything out of it is for business men to determine. The capital has been properly invested in railway property."

Q. Do you, as a matter of policy, protect the railroads against undue competition by paralleling, or in any way?—A. There is a statute that provides that in case of any new railroad enterprise the board shall pass on the propriety of it. The street railway development is a matter of recent growth, and the proposition is before the legislature to give us the same authority. Within a week, however, a bill which contains that provision was amended by striking out that part of it. There is another bill before the committee on street railways which has the provision in it that we should pass on the propriety of any new street-railway enterprise in the same way that we would pass on the propriety of a new railroad.

Q. Do you see any objection or any practical difficulty, other than in securing the legislation, in the way of extending the powers of the Interstate Commerce Commission in a way similar to that you have prescribed in Massachusetts?—A. I am strongly prejudiced in favor of the theory that has been at work in Massachusetts, and I do not personally see any reason why such a theory of supervision could not be extended to the national board. I understand that is not what they want. They want to make rates. We think that is not desirable. I do not want to pass on the conditions that exist outside of Massachusetts. From our experience we believe in our power of recommendation and advice.

Q. The difference between the proposed policy of the Interstate Commerce Commission and that of Massachusetts is that you exercise very little jurisdiction over rates, but a strict control over the capitalization?—A. No; I would not want to admit that, because I think we exercise a very material influence over rates.

Q. Not by prescribing them in advance?—A. Only through our power of recommendation; not fixing any rates, but supervising rates in individual instances. There have been cases of that kind already decided and there will be others where I have no question whatever but the rates will be changed. We have brought about changes in the street railway and in railroad rates within a year, and there will be more within another year.

Q. Your control is to a considerable degree exercised through your power to pass on general matters of finance as well as upon the making of rates?—A. I think our control over the financial question does strengthen us in other questions.

Q. (By Mr. PHILLIPS.) Have you anything to volunteer, in your own way, that has not been covered by questions?—A. I have not. I would be glad to furnish anything that can give aid to the commission at any time.

(Testimony closed.)

WASHINGTON, D. C., May 8, 1901.

TESTIMONY OF MR. CHARLES D. GRIFFITH,

Representative of the Denver Chamber of Commerce.

The commission met pursuant to recess at 2.40 p. m., Vice-Chairman Phillips presiding. At that time Mr. Charles D. Griffith, of Denver, Colo., representative of the Denver Chamber of Commerce and Board of Trade, was introduced as a witness, and, being duly sworn, testified as follows:

Q. (By Mr. RIPLEY.) Will you state your occupation and your relation to the chamber of commerce?—A. I am in the wholesale boot and shoe business, and a director of the chamber of commerce.

Q. Do you appear officially to represent them?—A. Yes. (Producing letter and handing to chairman.)

"THE UNITED STATES INDUSTRIAL COMMISSION, WASHINGTON, D. C.

"GENTLEMEN: This is to certify that Mr. Charles D. Griffith has been appointed to represent the Denver Chamber of Commerce and Board of Trade before your commission as a witness concerning transportation topics.

"Respectfully,

"THE DENVER CHAMBER OF COMMERCE AND BOARD OF TRADE.

"By ARTHUR WILLIAMS, Secretary."

Q. Have you any general statement to make?—A. There is a general statement prepared by the freight committee of the bureau that I might read.
(Reading:)

"CONDITIONS AT DENVER.

"That Denver is what she is, is by virtue of the diversified mineral resources for which the State in which she is located is noted, and by virtue of her own inherent qualities, her superior climatic conditions, pure air and abundant sunshine, and not by reason of any substantial recognition and assistance on the part of the transportation companies. That her population now numbers, according to the census of 1901, 133,859, is a continual source of surprise to her citizens, in view of the manner in which her commercial development has been handicapped by reason of restrictions imposed by the transportation companies and by reason of the limited population of the Rocky Mountain region.

"Geographically her location from a commercial standpoint is somewhat unfortunate. Denver has never enjoyed a basis of distributive rates on either east or west bound business originating here that would enable her to compete with the Missouri River cities and points east on the one hand, or with Pacific terminal points with California products on the other hand. On the contrary, she has always been a way station, so far as general rate making is concerned, in territory west of the Missouri River. To-day, as for many years past, the Missouri River is substantially the base line of rates to and from all points east of the meridian on which that river is located. From Denver west distributive rates in effect are the results of combinations and concessions made from time to time and of character entirely local, not governed by any well-defined law.

"Denver claims, and we think justly so, that her merchants and manufacturers should reach all points West on the same competitive basis that these points are now supplied from Eastern trade centers. We believe that there is one general principle that should govern in placing Denver in this position, i. e., the removal of the present base line upon which Western rates are built, from the Missouri River to a north and south line passing through Denver and Cheyenne on the north and Colorado Springs, Pueblo, and Trinidad on the south. By such recognition only will mercantile and manufacturing interests located on this meridian be placed upon the same commercial footing as Missouri River cities.

"In a few words, the rate situation as applying to business outward bound from Denver is about as follows: The rates to Wyoming points are of an arbitrary character, dictated and controlled by the Union Pacific Railroad, and so adjusted as to throw the greater volume of business to the Missouri River and farther Eastern centers. The Utah and Montana rates are based upon the Missouri River rates, and are quite uniformly 80 per cent of that rate, a sufficiently high percentage to quite effectually deter Denver merchants and manufacturers from invading that territory. The Utah rate is also based upon the Missouri River rate and amounts on class freight to about 70 per cent of that rate, a sufficiently high percentage also to prevent any considerable business originating at Denver.

"The New Mexico rate is in the main an arbitrary, blanket rate, quite fairly conceded to Denver merchants by the railway lines distributing in that Territory. In the State of Colorado alone are Denver merchants allowed to distribute their products on precisely the same basis as governs Eastern competitive business. We therefore maintain that the only equitable basis would be as a result of the entire readjustment of rates west of Denver, based upon a north and south line through Denver.

"Again, Denver and Colorado common points are greatly handicapped by reason of the limited number of commodity rates into and out of these points. Colorado common points have to their credit about 195 commodities from the Atlantic seaboard. Utah has a list of commodities varying from 300 to 350. Montana and the Pacific coast States have a list of something like 1,136 commodities from the Missouri River. By comparison the number accorded Colorado common points is discriminatingly small. In comparison with Pacific coast terminal points Colorado common points are not to be considered. These rates occupy a class by themselves and are substantially the same from Colorado common points east and west bound as they are from the Missouri River, although the mileage from Colorado common points is approximately one-third less.

"UNIFORM CLASSIFICATION.

"It is our opinion that the adoption of a uniform classification would be alike beneficial to transportation companies and shippers. It would certainly simplify the present system of billing and make more economical this particular class of work on the one hand, and eliminate much occasion for complaint and annoyance on

the other, and at the same time would tend to equalize and prevent discriminations which can not but exist under the present system. We believe that shippers in general would greatly welcome the advent of a universal classification extending from seaboard to seaboard.

"CONSOLIDATION.

"One of the greatest evils with which a commercial and manufacturing community has to deal is the instability of rates. Rate cutting, either open or secret, is recognized as demoralizing and injurious. To a great extent railway consolidation is a corrective. Uniform and stable rates into this territory would work relief and be of benefit, and such relief and benefit would be further enhanced if, by reason of such stability and uniformity of rates, a reasonable reduction would follow, as should be expected. Colorado would greatly deprecate through consolidation any attempt to cut off the Fort Worth gateway, which constitutes at present a valuable check and safeguard over the all-rail lines.

"Present traffic conditions into Colorado on raw material have much to do with the material prosperity of the State. The difference between the raw material and the manufactured article is not sufficiently great to foster enterprises which would exist here except by reason of this fact. Present high rates on raw material act as a tariff and enable a few local industries to maintain prices such as to discourage or make impossible the proper development of our manufacturing interests.

"W. A. HOVER,

"Chairman Traffic Bureau, Denver Chamber of Commerce and Board of Trade."

Q. (By Mr. RIPLEY.) The primary ground of complaint, then, seems to be the high rates from the East into Denver as compared with the rates from the East to San Francisco, which is also a competitive shipping point?—A. Well, not so much that as it is the rate on the raw material that is shipped into Denver compared with the rate on the manufactured product, especially in the iron and steel line.

Q. Will you state to the commission at the outset the principal roads which are engaged in traffic at the city and the character of the traffic east and west?—A. There are 5 lines coming direct to Denver—the Union Pacific, the Burlington, the Missouri Pacific, the Rock Island, and the Santa Fe. The Union Pacific, of course, is a through line. Its main line goes through Cheyenne, a hundred and some miles north, while the Missouri Pacific connects and runs through on the Rio Grande via Pueblo, 115 miles south. The Santa Fe has a direct line to California through the southern edge of Colorado, and has a branch into Denver. So while we have 5 lines entering the city from the Missouri River, three of them, you might say, connect direct with the West, making transcontinental lines. Then we have a water route, as we call it, through the Fort Worth gateway—water transportation to New Orleans or Galveston and then into Denver, which works on an arbitrary rate with a differential of 39 cents per hundred. Our rate to Denver—I will speak of first class, as that probably covers more than anything else—is \$2.72 per hundred, all rail, from New York or from the Atlantic coast, and \$2.33 by way of the Gulf. They haul by way of Newport News, the Kanawha Dispatch, Cumberland Gap, and Norfolk and Western, and then through St. Louis or Chicago to Denver at \$2.33, the same as the Gulf rate.

Q. Is that route by the Norfolk and Western and the Kanawha Dispatch a part of one route?—A. Yes, and by water from New York to Newport News.

Q. And there is no further connection?—A. No further connection.

Q. Do you know the reason of those differentials?—A. The differential is caused by the length of time it takes. It takes quite a good deal longer to ship by way of New Orleans or Galveston.

Q. (By Mr. PHILLIPS.) Will you please state the distance between New Orleans and Galveston and New York?—A. I do not know that I can.

Q. Or the distance by land from each point?—A. The distance from New Orleans is something like—I am not able to give that exactly. I can add that.

Q. (By Mr. RIPLEY.) Will you now speak of the nature of the traffic and of the character of the manufacturing and of the jobbing business at Denver?—A. Our largest manufacturing industry is the cotton mills. We manufacture quite a good deal of paper that newspapers are printed on, and a great deal of mining machinery, and then we might mention, in connection with Denver, the Colorado Fuel and Iron Company, which manufactures at Pueblo a great deal of iron and steel of all kinds.

Q. (By Mr. PHILLIPS.) Is there any petroleum manufactured or refined there?—A. Not in Denver; no. There is a great deal of oil in the State, they say, but they do not refine it there.

Q. Do you know any reason why it is not refined there if there are quite large quantities produced near?—A. No; I do not.

Q. (By Mr. RIPLEY.) What is the territory within which you can at the present time carry on the jobbing business profitably under the rates imposed?—A. Colorado

is practically our ground. The local roads that are running out of there—that is, the Denver and Rio Grande, the Colorado Southern, and the Colorado Midland—add the local rate from Denver or Pueblo or Trinidad or common points to the territory within the State. The Rio Grande does not go out of the State but a very little way. They simply add to the Denver common-point rate that of the local road.

Q. How does the rate from Chicago to Denver compare with the rate from New York to Denver?—A. They charge \$2.05, first class, from Chicago and \$2.72 from New York.

Q. How do the rates from Denver to San Francisco compare with those from Chicago and New York to San Francisco?—A. They are practically the same—some difference in commodities.

Q. Does that condition give rise to complaint on the part of your merchants?—A. Our rate is practically the same from Denver, which is something over 2,000 miles nearer to the coast, as from New York and Chicago.

Q. In other words, you mean that it costs as much to ship from Denver to San Francisco as it would from Chicago and New York?—A. Precisely.

Q. Has this question of the rates imposed at Denver been officially brought to the notice of the Interstate Commerce Commission?—A. Yes; this has been before the Interstate Commerce Commission and a suit was filed called the Kindel case, I think.

Q. Did it have the desired result?—A. We hardly think so. The decision is not clear to me, but practically, as near as I can diagnose it myself, it gives us the same rate from Denver west as from Chicago west, or rather the Atlantic coast west. They could not charge us any more than they could Chicago or New York or St. Louis.

Q. (By Mr. PHILLIPS.) Could they charge you as much as those points?—A. Yes; as much.

Q. (By Mr. RIPLEY.) Did a modification of rates follow as the result of your suit?—A. They have not gone into effect yet, as I understand it. I think they are going into effect this month sometime, unless prevented by the courts.

Q. (By Mr. PHILLIPS.) Was the case appealed after being heard? You speak now of the ruling of the Interstate Commerce Commission alone, and not of the court? It was not finally adjudicated?—A. No; it was not finally adjudicated.

Q. (By Mr. A. L. HARRIS.) Against whom was the complaint—what roads?—A. I think it was Kindel v. The Atchison, Topeka and Santa Fe.¹ It commenced quite a while ago. I am not really familiar with the decision.

Q. (By Mr. RIPLEY.) You have, however, not received any benefit by the action of the Interstate Commerce Commission as yet?—A. Not so far; no.

Q. What is primarily the complaint at Denver now? This case of Kindel, I understand, was brought up several years ago?—A. Yes. We will take, for instance, the territory in Idaho and Montana where we want to job goods. It is territory, we might say, belonging to Denver, as we are the nearest large city to them and the nearest people to supply them. The rate from the Missouri River is \$2.50 a hundred, first class, to Montana common points and Idaho common points, while the rate from Denver is \$2, making a difference of only 50 cents in the first-class rate from the Missouri River and from Denver, although Denver is some 600 miles nearer to these places, and they are all the way from 400 to 1,000 miles from Denver. Now, that would make, if you combine the rate to Denver and from Denver to those points, \$4.72, while if you combine it with the Missouri River rate it is \$3.97, making a difference of nearly \$1 per hundred. Now, the Mississippi River points have a car-lot rate on first-class goods to these Idaho and Montana points of \$2.90.

Q. Do you enjoy carload rates?—A. We do not have carload rates on boots and shoes.

Q. What, then, are the exact figures on freight rates with which you are concerned in endeavoring to sell as a jobber from Denver to a Montana common point, we will say?—A. We are concerned with a \$2.50 rate from the Missouri River to these points on first class, and in car lots a \$3.10 rate per 100 from Chicago, and a \$2.90 rate from the Mississippi River.

Q. How does the rate from Chicago to Denver, plus the rate from Denver up to Montana common points, compare with the rate from Chicago directly out to the same common points?—A. It would be \$4.05 by Denver and \$3.10 direct.

Q. In other words, the jobber in Chicago is able on 100 pounds to underbid the Denver jobber by about 95 cents?—A. Ninety-five cents; that is correct.

Q. Was that the main contention in the case brought before the Interstate Commerce Commission?—A. No; the main contention there was more on the through rates to the Pacific Coast. A similar case was started by the Colorado Fuel and Iron Company on getting their steel and iron to the Coast, but they put in a rate for them of practically what they were asking for. Then the case was taken by Mr. Kindel, who is an enthusiastic freight agitator and thoroughly posted. He is a manufacturer of mattresses in Denver, and was at that time in the chamber of commerce.

Q. (By Mr. FARQUHAR.) This tariff that you are discussing now is on manufactured articles entirely?—A. Yes.

¹ See also Reports of Industrial Commission, vol. IV, pp. 251-254. Compare testimony of Mr. Stubbs, p. 759 of this volume.

Q. (By Mr. C. J. HARRIS.) Do you say they gave the Colorado Fuel and Iron Company that rate?—A. The railroads put a rate in before the decision was brought about. I think they have taken that rate away since. That is only hearsay.

Q. Does that apply to that special company or to all goods of that class?—A. They practically were the only ones that were manufacturing that class of stuff at the time. They are the only iron and steel manufacturers we have.

Q. (By Mr. FARQUHAR.) While you are discussing this are you taking in the jobbers' side of the question alone from Denver or the manufacturers' side?—A. We have comparatively little manufacturing there.

Q. So that the entire argument is as to the jobbers?—A. It is all practically on the jobbers' line, but we want to call attention to our manufactures in iron, machinery, and steel products. Those are the principal things that we have manufactured there.

Q. (By Mr. RIPLEY.) The case prosecuted by Mr. Kindel had reference, however, more particularly to possible manufactures, did it not?—A. Yes; he was taking up manufactures more especially with the western outlet.

Q. We had two distinct classes of problems, one relating to manufactured goods—that raised by Mr. Kindel—and the one you have already outlined, having reference to the position of Denver as a jobbing center?—A. We desire to represent the manufacturers as far as possible also, but the jobber is taking in all interests and we are more familiar with him.

Q. Taking up the first, then, with reference to manufactures, how do the rates on raw materials compare with the rates on manufactured products?—A. Well, they vary. There are some of the manufacturers that have been able to get in a commodity rate that relieved them; others have not. The matter has not been thoroughly fixed with all of them. In the matter of pig iron, a large manufacturer of machinery told me recently that, although pig iron was manufactured there at Pueblo, close to us—a Colorado product—they bought considerable pig iron in Pittsburgh, although the rate was high; that the Colorado Fuel and Iron Company made their price just high enough so that the freight rate covered it.

Q. The freight rate, then, on a raw material like that acts practically—A. (Interrupting.) As a tariff. That is what I claim. I think the rate is given on pig iron from Chicago to Denver as \$9.29 per ton of 2,240 pounds, and on railroad iron manufactured as \$9.60. There is not much difference between the manufactured article there and the pig iron.

Q. Is there any community of ownership, as far as you know, between the Colorado Fuel and Iron Company and the railroads, or do they operate to mutual advantage?—A. No; I do not think there is any. I do not think they are connected specially in any way. Of course, the principal owners of the Colorado Fuel may be large owners in railroads. However, I do not think that that has cut any particular figure.

Q. (By Mr. PHILLIPS.) Can you briefly state about the supply of ore and coal and limestone?—A. Well, the supply of ore and coal is practically unlimited, we think.

Q. Is it convenient?—A. Quite convenient; yes.

Q. And the coal?—A. The coal is quite convenient.

Q. Good quality?—A. Good quality; all the way from lignite coal to anthracite.

Q. Limestone?—A. Plenty of limestone.

Q. Is that convenient also?—A. Also convenient.

Q. Can they not manufacture iron as cheap there as they could in Pittsburgh, bringing ore from Lake Superior?—A. It looks as though they ought to. They get the best quality of iron from Wyoming, just at the edge of Colorado. Hartville, Wyo., is the site of the iron mines. There is quite a good deal in Colorado, but that in Wyoming is the easiest to get.

Q. And yet there is some pig metal shipped from Pittsburgh?—A. Yes; a great deal of it.

Q. Is that because the local works are not sufficient to supply?—A. I do not really know. They have very large works and they are always busy. The Colorado Fuel and Iron Company has got the ground pretty well covered in iron and materials that they need and coal; they have the territory pretty well covered.

Q. (By Mr. RIPLEY.) Are they independent of the United States Steel Corporation?—A. So they say; I do not know. I am not able to answer that.

Q. (By Mr. C. J. HARRIS.) Why would they ship in if they were in one of these syndicates? If they have all the facilities for making iron, why do they ship it in from Pittsburgh?—A. If they can buy it for less money from Pittsburgh. I have understood that the Colorado Fuel and Iron Company have not been able to take care of all their business and that they themselves have been forced to ship in material.

Q. Yes; but if you have all those conditions for making iron there, and you have this protective freight rate which you mention, one would think other local companies would be started.—A. That is true.

Q. And iron would be manufactured?—A. I presume there will be a great many more of them there. Colorado is practically a baby; she is very young.

Q. (By Mr. FARQUHAR.) Have the people of Colorado any desire to go into iron manufacturing independent of the Fuel and Iron Company?—A. That I could not say.

Q. Have there not been many attempts made to interest people in investments in iron?—A. I am not familiar with that. That is practically owned, I think, by Colorado capitalists. It was started originally by the Wolcotts—Mr. Henry Wolcott and Mr. Ed. Wolcott.

Q. Is it not a fact that you have used your capital in Colorado to make other developments in preference to iron and steel?—A. It may have been so.

Q. Has it not been a common remark in Colorado that you have mountains of iron there that you will have until you get through with other more valuable industries?—A. Well, there are many industries there to work on—iron, steel, coal, gold, and silver, and I presume there are all kinds of metals. They claim there are. How much is true, I do not know, but there are few people in Colorado to handle all this compared to what there are in the East. The population, I think, is only something over half a million, and the State is a very large place. It would cover all New England and more besides.

Q. (By Mr. RIPLEY.) Do we understand you to say that a large amount of iron ore is actually at the present time controlled by one company?—A. The Colorado Fuel has leases or the ownership of a great deal of it.

Q. It has been practically a monopoly up to the present time?—A. It could be termed so.

Q. Is it the impression of the people of Colorado that a reduction of the rates on pig iron from the East would result in a reduction of the price of that commodity as produced in Colorado?—A. The manufacturers of iron in Denver have so stated to me, that they considered that the higher rate on pig iron acted as rather a tariff for the Colorado Fuel and Iron Company. That I am unable to state myself.

Q. Has this matter been brought to the attention of the railroads concerned?—A. I do not know that it has.

Q. (By Mr. FARQUHAR.) Do you know the difference in the cost of manufacturing pig at Pittsburg and in Colorado?—A. No. They say it costs them more in Colorado. The labor is higher, and general expenses of that character would be higher in Colorado. As to the cost of producing it or putting it in the mill I am unable to state.

Q. (By Mr. RIPLEY.) Can any of the pig iron go out to the Pacific coast, or does any of the coal go to the Pacific coast under the rates now prevailing?—A. I am unable to answer that.

Q. You are not prepared, then, to say whether the supply of coal in Colorado might compete with the supply from the northern Pacific coast at San Francisco if the rates were reduced to a sufficient degree?—A. No; I am not.

Q. Taking up the question of the rates as they concern the jobbing trade, what would be the effect of establishing a new rate basis at Denver, as desired by your merchants, in the same way that the rate basis exists at Kansas City? Would that enable you to compete on perfectly equal terms?—A. I think it would enable not only ourselves, but those who are in line with us, to compete on equal terms, and would not be an injustice to any of them. We rather think that if we should have an equitable rate there that was based on our line, when there were any cuts on rates it would have to apply to everything west of it, and would operate to prevent those cuts and slashes of rates, and might bring it down to an equitable basis. We rarely hear of cut rates to the Missouri River, because if the rate was cut for one it would apply to the whole West. Now, a rate that applies to Denver does not apply anywhere else practically, and every once in a while there is a slashing of rates and down they go, and people rush in goods, and the rates go up again, and it makes it unstable and unsatisfactory.

Q. (By Mr. FARQUHAR.) What effect would the establishment of a new basis of rates, with Denver as the center, have upon the Missouri rates and the coast rates?—A. If they based it on Denver, it would depend entirely upon where they put their rates. If they left them as they are, and then put the rates West as they are, it would necessarily either reduce Denver to the rate that now applies from the river less the rate to Denver, or they would have to raise.

Q. What argument in the amount of tonnage that this new basis would make would hold good with the railroad men?—A. I would be unable to speak on that.

Q. You are aware that that is one of the greatest reasons that enter into the change of all basis?—A. I presume it is.

Q. If you can not furnish the tonnage, you can not be entitled to a base line, can you?—A. No.

Q. It would be simply a matter of division as to what there is to the west of it and what there is to the Missouri River. If you are participants in a lower rate, would

you not have to show a tonnage there to get that rate?—A. We do not want a lower rate. We want the same basis of rate.

Q. You want a prorate of the through rate?—A. A prorate of the through rate.

Q. Now, what argument can Denver give to the Western traffic lines for making a new base line?—A. All the argument we can offer is the amount of business we have already got and what this change would develop. It is a new country and it must be developed, but you can not develop a country unless it has an outlet for its products, and if you discriminate against that country it never will develop, and we can not furnish the tonnage. We can not furnish the tonnage first because the rate is against us.

Q. Your difficulty in distribution is the fact that you are paying really Missouri rates, and that in your local distribution you must add all local rates, so that you have no profit?—A. We are not minding the rates in Colorado itself because everybody has to pay the same. There are points in Colorado where the first-class rate from Denver is \$2.50. That is pretty high. We are not complaining of that because everybody east of us pays the rate to Denver plus that rate. While it is very excessive we think at the same time it does not work a detriment to Denver. We are not figuring on what the rates will be; we are simply figuring on getting to a basis where we can compete with the rest. From the railroad standpoint it might not be practical. We are not railroad men, and their side might look at it quite differently.

Q. (By Mr. RIPLEY.) Was there not the same objection to establishing a new basing point at Kansas City a good many years ago as against Chicago?—A. I do not know.

Q. If so, would there not be the same argument in favor of establishing a new basing point at Salt Lake City over against Denver?—A. That would be right.

Q. Your people, then, could not consistently ask for the establishment of a new basing point at Denver without at the same time recognizing the right of a city on the west for the same treatment, could they?—A. They could not; but now there are some goods, they tell me—I am not familiar with them—that you can ship from the East to San Francisco and ship back into Utah to the Colorado line practically for less money than we can ship them to Denver and from there to the Colorado line.

Q. Would that be possible from Chicago?—A. No; because the rate is so much less in proportion from Chicago to the coast.

Q. I thought I understood you to say that the rate from Chicago to the coast is the same as the rate from New York to the coast?—A. That is right; but our rate from Denver is so much higher to the coast than it is from Chicago there in proportion, and then our rate out to Denver from the East is so much higher. Chicago has a better rate to Utah and Montana common points in proportion than we have.

Q. Is it against the jobber in Chicago now that you contend or against the jobber in New York?—A. Well, it is against all of them in one sense, because all of them have a better rate to those points than we have.

Q. As a matter of fact, where is the center of the jobbing business with which you have to contend? Is it in the far East, in New York, or is it at Chicago?—A. Well, Chicago and the Missouri River points do the principal business there. They all cover it pretty thoroughly.

Q. What is the argument for giving Chicago the same rate to the Pacific coast that New York enjoys?—A. I presume the manufactured articles that they make similar to those made in New York justify them in having the same rate. It is a shorter distance.

Q. One is practically 1,400 miles nearer San Francisco than the other and yet they both enjoy the same rate at the present time?—A. Yes.

Q. The rate from New York to San Francisco would be conditioned by water competition, I suppose. Would that apply in the case of Chicago also?—A. No; I think not. I hardly know how Chicago could transport there by water.

Q. The difficulty, then, which you have in meeting competition from the East is from both New York and Chicago, or from any center east of the Mississippi River regardless of distance?—A. It is from any point east of Denver really. They all have a better rate or combination of rates. All the rates west of Chicago take the eastern basis of 67 cents first class; all west of St. Louis take a basis of 87 cents to St. Louis, and west of the Missouri River I think it is \$1.47. They all have this same basis and their rates are all the same to these points west of Denver. Kansas City, Omaha, St. Joseph, Chicago, St. Louis, all river points—the rates added from the Atlantic seaboard are the same.

Q. From your statement we understand that there is some ground for complaint in the granting of commodity rates to the Pacific coast. Will you explain a little further?—A. There are special rates made on certain items that have been brought before the Western Classification Committee, by which they were taken out of the class they were in and placed in a class of their own, a commodity, as they term it, having a special rate.

Q. Will you name some of those commodities which have been granted special

rates?—A. These commodities vary. From New York they are one kind and from the Missouri River they are another. They are made to fit the State.

Q. Do they apply equally to all shippers in those States?—A. Yes; I understand they apply equally.

Q. They are not in the nature of individual discriminations?—A. No.

Q. Is the practice of giving rebates or obtaining them in one form or another at all prevalent in the West?—A. It has been. There has been none of it done for quite a while that I know of.

Q. How do you account for its disappearance?—A. I presume by an agreement of the railroads to maintain the rates.

Q. Does the Western classification prove oppressive at all on the various lines of business that are concerned?—A. It may in some cases, but I am not familiar with it.

Q. Have any advances been made in rates in that territory in the last year and a half or 2 years?—A. No; the rates have practically stood the same on first-class business, such as I am familiar with.

Q. You have heard of no complaints because of a general increase of the classification?—A. None whatever.

Q. How about the distinction between earload and less than earload rates? Is that distinction usually made in the Western territory?—A. I know very little about that. I know of no items in my line, or any that I am acquainted with, where we get earload rates.

Q. Are there any commodities that go through from the East on a earload rating?—A. I do not know, except that Chicago has a earload rate into Montana common points. We have none in Denver.

Q. Does not that operate to shut you out of that territory?—A. That has the effect of operating against us.

Q. (By Mr. C. J. HARRIS.) Are you quite sure they do not have earload rates in Denver?—A. Yes; on shoes, I am.

Q. I mean on any commodity?—A. None that I am familiar with. There may be a number of items, but I am not familiar with them. I presume there are.

Q. (By Mr. RIPLEY.) How about that route by the Fort Worth gateway, which is, as I understood you to say, over the line of the Southern Pacific road? What is the reason for the differential there?—A. That is the difference by water. They haul by water to New Orleans, and then the Southern Pacific takes it to Fort Worth, and the Colorado Southern and the Denver and Fort Worth to Denver.

Q. That constitutes, then, at Denver, competition with the Union Pacific and other roads?—A. Yes; with all through lines.

Q. Suppose by railroad consolidation that gateway were closed and that differential were cut off, how would that operate as far as Denver is concerned?—A. I think it would make us all a \$2.72 rate. It might not.

Q. Is there a considerable volume of business that comes in by that line at the present time?—A. Quite a good deal.

Q. Mainly of the lower classes?—A. Of a general class. I think they haul quite a good deal of business by that route.

Q. Suppose the Union Pacific and the Southern Pacific, which had been heretofore competitors, are consolidated; would the effect of that, in your judgment, be to remove this 39 cents advantage, or would it have any effect?—A. That is problematical. It would depend entirely on the management. It might be they would think best to close it, and then, again, they might be able to haul the goods cheaper by water, and would prefer to leave it open and haul by water rather than haul by rail at a higher rate.

Q. What is the judgment of the merchants of Denver as to the consolidation which has been effected between the Union Pacific and the Southern Pacific?—A. Some think it will be no disadvantage, while others think it will. Personally I think it is problematical.

Q. Are you familiar at all with the terms on which the combination of the Southern Pacific and the Union Pacific was made?—A. No.

Q. Other consolidations in that territory have been mentioned in the papers. Have you any knowledge respecting any of them?—A. Nothing but the newspaper talk.

Q. What are some of these consolidations?—A. In the roads of Colorado, the Denver and Rio Grande, the Colorado Southern and the Colorado Midland. A short time ago the Colorado Southern, by newspaper report, acquired a half interest in the Colorado Midland and also in the Rio Grande Western, that runs from the Colorado line west to Salt Lake. They elected the Colorado Southern's president president of the Colorado Midland, and the president of the Rio Grande Western was made vice-president of the Midland. Now, since that, they claim the Missouri Pacific has acquired control of the Denver and Rio Grande and a half interest in the Rio Grande Western, and it is rumored that they are endeavoring to get control of the Colorado

Southern. In that case they would have all the roads practically in the State. We do not know what effect it would have if they did get them.

Q. (By Mr. FARQUHAR.) What transcontinental line would control these Colorado roads?—A. The Missouri Pacific has the Denver and Rio Grande and is trying to get the Colorado Southern. Then it was reported that the Union Pacific was trying to get the Colorado Southern. If the Union Pacific got it, it would amount to two different ownerships, two different transcontinental lines.

Q. (By Mr. RIVLEY.) What if the Missouri Pacific acquired it?—A. It would all be under one ownership and control.

Q. Does the absorption of the Chicago, Burlington and Quincy by the northern transcontinental lines have any meaning for Denver?—A. Not that I am aware of.

Q. Suppose all the roads in that territory are finally gathered into two or three important systems; would that in any way reduce the effectiveness of competition as it exists there?—A. It would certainly reduce competition. As to its effect, that would depend entirely on the management.

Q. You complain, as representing the merchants of Denver, of the unreasonableness of the rates to Denver and from Denver to the Pacific coast. How does it come about that the competition that has existed there between five roads has not remedied that condition?—A. I am unable to state.

Q. Is there any evidence of joint action or agreement in any way to prevent a break in rates?—A. The simple fact that they all have the same rate and have maintained it very firmly with reference to Denver would indicate that they must have an agreement to maintain that rate.

Q. Is it possible at the present time for any of these local products of Colorado to get out to the Pacific coast?—A. I am unable to answer that. The Colorado Fuel and Iron Company being the only manufacturers of iron, I presume they have their own rates.

Q. Will there be any effect on the traffic situation in that territory by the construction of this new road which is now being pushed by Senator Clark of Montana?—A. I am unable to say.

Q. There is no opinion prevailing in Denver on that matter?—A. None that I know of.

Q. You spoke some time ago about what you called an arbitrary blanket rate applying to New Mexico. Is that in the way of a discrimination against Denver?—A. No; that is in favor of Denver.

Q. Will you explain it?—A. They made a conditional rate with the merchants that if we would give them so much tonnage coming into Denver, they would give us a competitive rate going out of Denver, which would enable us to meet the rates in New Mexico and open up quite a little territory to Denver that we would not otherwise be able to get into. That was done through the Denver merchants themselves.

Q. Did the competition of any other road make that particularly easy to obtain?—A. No; there was no other road.

Q. Has the extension of the Atchison, Topeka and Santa Fe road to San Francisco had any effect upon your rates?—A. None whatever.

Q. Is there any competition in the jobbing business from San Francisco back into Denver territory?—A. Comparatively little.

Q. Or any competition of manufacturers at San Francisco with manufacturers who might be interested at Denver?—A. Not that I am familiar with.

Q. Do you know of any manufacturing establishments at Denver which have been distinctly discouraged and have failed of organization because of the rate system in freights?—A. No; I do not. There have been a number of failures, but I do not think they can be attributed to freight rates. There are other causes, probably, that have more to do with it.

Q. The statement has been made before this commission that when the paper pulp mill was founded at Denver the railroads endeavored to discriminate against it and prevent its successful operation. Have you any knowledge respecting that?—A. Well, I am not familiar with that, but I hardly think that probable.

Q. That industry is prosperous at the present time?—A. It has just gone out of the hands of a receiver.

Q. What were the causes that led to the establishment of cotton mills at Denver?—A. I do not know; they were established before I went there.

Q. Have they been successful?—A. I think they have failed once, but whether that was on the account of management or of freight rates I am unable to say. I think they are running now quite successfully.

Q. Is their labor foreign born or native American?—A. Part of it is Massachusetts imported labor and the balance is native.

Q. Do you know whether the labor conditions there were so favorable that they could establish the industry in spite of the high freight rates prevailing on cotton?—A. Our labor conditions there are not advantageous to any manufacture. Wages of labor are higher than in most places.

Q. Have you any knowledge respecting the rates on the raw cotton from the South?—A. I am not familiar with the rates on cotton.

Q. How about the rates on Colorado hard coal, of which you have spoken. Does any of that coal come east for domestic purposes in competition with the hard coal of the anthracite fields in Pennsylvania?—A. I do not know.

Q. (By Mr. PHILLIPS.) Do you have as good quality of anthracite coal as they have in the Allegheny Range?—A. Well, I do not think it is as good as the best of the Pennsylvania coal, but it is better than a good deal of Pennsylvania coal that I have used. I mean a hard coal—anthracite. There is really little difference in my estimation. I have used both.

Q. Are there large quantities of anthracite coal thereof?—A. They say there is quite a good deal. They get out considerable, and they say there is plenty of it to be had in the mountains.

Q. (By Mr. RIPLEY.) That hard coal might be placed in Chicago, I suppose, in competition with the production of the Pennsylvania fields?—A. That makes a long haul.

Q. Is the supply very large?—A. They say it is quite large out in the mountains in Routt County; and where they are able to get at it, there is abundance of it.

Q. In the case of Kindel v. The Atchison, Topeka and Santa Fe Railway Company, I find that the Southern Pacific Railroad voluntarily acceded Denver Missonri River rates on west bound business—but refused to accord it on east-bound business. Does that difference still prevail?—A. I am unable to state.

Q. Are the same rates in force on west-bound business?—A. To the coast?

Q. From Denver to the coast?—A. No; those rates were to go into effect some time this month unless they were stopped by the court.

Q. Will that affect business to any considerable degree in Denver?—A. I do not think that it will. I am unable to state.

Q. This case which was prosecuted before the Interstate Commerce Commission was decided in 1900, and the decision was apparently favorable to the contention of Denver. Has any modification of rates by the railroads followed?—A. Not yet. They were to take effect some time this month, as I have stated.

Q. In that case, then, the recommendations of the Interstate Commerce Commission have been actually effective?—A. Not until the courts pass upon it; until the courts have decided favorably to the Interstate Commerce Commission's report. Now it is a question whether the railroads will put that into effect or carry it higher.

Q. In other words, they are entirely independent of these decisions?—A. So far.

Q. Are the merchants of Denver, then, favorable to the enlargement of the powers of the Interstate Commerce Commission or a rearrangement of appeal to the courts in such a way as to make its decisions effective and binding at once?—A. Yes; we think the Interstate Commerce Commission ought to have more power than it has.

Q. Representing the Denver Chamber of Commerce, would you say that the provisions of the Cullom bill were regarded as fair to both interests?—A. I am hardly familiar enough with the provisions of the Cullom bill to answer that for the chamber.

Q. Take the provision enlarging the powers of the Interstate Commerce Commission, giving it the power to approve the rates promulgated in the first instance by the railroads. Would your chamber favor such a provision?—A. I think so. I would personally.

Q. Would they go further than that and favor the granting of power to promulgate rates in the first instance?—A. I think not.

Q. What would be the objection?—A. I think the ownership of the railroads ought to have the right to name their rates in the first place, because conditions vary so materially that members of a commission who are not in the railroad business would be unable to state what a rate should be. A rate that would be considered very extravagant from here to Denver would not be extravagant in Colorado.

Q. Are the rates the same from the East into Colorado that they are from Colorado to the East on the same commodities?—A. I think they are. There may be some difference in them, but, as a rule, I think they are the same.

Q. The statement has been made before this commission that you can sometimes transport commodities west bound over the transcontinental lines at very much cheaper rates than you can transport those same commodities back to the initial point.—A. It may be so when there is a cut in rates, but I think, as a rule, they are about the same. There may be exceptions, too, in rejected or damaged goods coming back this way, that may be returned in a certain time at a half rate to the East. The rule varies materially; so I do not think we could cover that by "yes" or "no."

Q. Are the transportation facilities in that country, as a whole, satisfactory to shippers in time and service?—A. They are very good, indeed; there is no complaint.

Q. And it is perfectly easy to obtain a settlement and satisfaction of claims?—A. We have very little trouble on that score.

Q. Relations, then, are generally harmonious?—A. Generally harmonious.

Q. (By Mr. FARQUHAR.) In what sections in Colorado and elsewhere do you market your goods?—A. We practically cover all the State.

Q. Is there much difference in the wages paid in Denver and in Chicago in boot and shoe manufacture?—A. We do not manufacture any shoes in Denver at all.

Q. You job them entirely?—A. Altogether.

Q. (By Mr. A. L. HARRIS.) When would you have the finding of the Interstate Commerce Commission go into effect—direct from the finding of the commission, or should it be merely the basis for a suit?—A. I think it should be direct from the commission, giving sufficient time.

Q. Subject to appeal?—A. Subject to appeal, certainly; I think there should be ample time to take the matter up.

Q. (By Mr. CLARKE.) In case of appeal would you have it go into effect immediately or await the judgment on appeal?—A. I should think you would have to wait for judgment on appeal.

Q. (By Mr. RIPLEY.) How about meeting the expense of prosecuting a case in that way? In this leading case prosecuted by the Denver Chamber of Commerce was that expense considerable?—A. Yes; that was paid partially by the chamber and partially by donation of Mr. Patterson, of the Rocky Mountain News, who took quite an active interest in it.

Q. (By Mr. PHILLIPS.) I wish you would give us some information concerning irrigation and water storage. Have you anything prepared along that line?—A. No; I am not prepared to give any particular information. We would like to call the attention of the commission and would be glad to have you look over our conditions out there.

Q. Have you a system of irrigation there now?—A. They do a great deal of irrigating privately.

Q. (By Mr. FARQUHAR.) Have you any public or national irrigation?—A. No; we have not.

Q. (By Mr. PHILLIPS.) Has the private irrigation been profitable and advantageous so far?—A. It has been very advantageous. Where they irrigate they raise splendid crops. They have been testing the sugar-beet industry, and that has proven to be a great beet sugar country. The Rocky Ford district claim that they have produced more saccharin and with a greater degree of purity than any other place in the world.

Q. And that is done by irrigation?—A. Altogether; it gives them a longer season. They say they can run a sugar factory quite a good many days longer than they can in any other district, owing to the dryness and to their ability to irrigate. They have now 3 beet-sugar factories running—1 being constructed this summer—and they are preparing for another. There is a vast territory of splendid soil—I could not say how many million acres; Mr. Harris may know better than I do. How many million acres are there east of the mountains?

Mr. C. H. HARRIS. Millions and millions of acres, but the trouble is there is not water enough. All the land is good, but I do not suppose a hundredth part of it is under irrigation.

Q. (By Mr. PHILLIPS.) Would you not have the water to irrigate a very considerable portion of it?—A. People who are familiar with it say that with reservoirs in the mountains, that could be built easily by blocking the gullies between the mountains, we could irrigate a very considerable portion of it. There is an awful snow-fall in the mountains, and it runs off rapidly.

Q. You have quite an industry in raising cantaloupes?—A. The Rocky Ford.

Q. Are they raised by irrigation?—A. Altogether.

Q. I know they are shipped East.—A. We get very little rain there at any time.

Q. What crops chiefly are raised by irrigation in your section?—A. In the valleys there is a great deal of wheat, potatoes, and hay, and a great deal of fruit. Over in the Grande Valley they raise very good fruit; they do not raise much grain.

Q. Have you agitated the subject of public irrigation by the State or Government?—A. It is only recently they have commenced agitating it. It has been agitated to some extent for quite a while, but not strongly; but now we feel it is time to advocate it pretty strongly, especially since they have developed what beets will do there, and for a while they thought they could not raise anything hardly. But now that we have got water in and irrigated the ground we find we can raise almost anything out there.

Q. Have you anything to volunteer further that we have not covered?—A. Nothing, I believe. I am sorry I have known so little.

Mr. PHILLIPS. We think you have given us a great deal of information. In behalf of the commission I desire to thank you for your appearance before us and for your very interesting and profitable statements.

The WITNESS. If I have been of any benefit I am glad of it, and I thank the commission for their invitation.

(Testimony closed.)

WASHINGTON, D. C., April 3, 1901.

TESTIMONY OF MR. JAMES MORTON LANGLEY,

Representing the Merchants' Association of New York.

The commission met at 10.55 a. m., Mr. Farquhar presiding. At that time Mr James Morton Langley was introduced as a witness, and, being first duly sworn testified as follows:

Q. (By Mr. FARQUHAR.) You may now give your name and address.—A. James Morton Langley, New York Life Building, New York.

Q. Do you hold some official position with the Merchants' Association of New York?—A. You could scarcely call it official; that is, I have no title. I am directly in charge of transportation matters for the association.

Q. How long has the Merchants' Association been established?—A. Four years.

Q. Of what class of business men is it composed?—A. All classes. It has 1,300 members, and is not restricted to any particular class; it includes merchants, manufacturers, bankers, and it ramifies generally into all lines.

Q. Have you an established headquarters in New York City; and if so, where?—A. New York Life Building.

Q. What is your form of membership, simply voluntary, or do you have a regular membership with annual fees, etc.?—A. We have two classes of members; direct members and what we call associate members. The direct members pay an annual fee of \$25; the associate members pay nothing. The associate members are distributed throughout the United States. I think there are thirty-odd thousand on our books to-day.

Q. Can you state briefly the aims of the association?—A. Well, as stated it is to foster the trade and welfare of New York, but that is comprehensive enough and covers the ground.

Q. Was it brought into being on account of discriminating rates as against the city of New York and differentials in favor of other cities?—A. It became necessary through the practice on the part of certain railways to make cheaper passenger fares from certain points to trade centers. Take, for instance, St. Louis. There is a certain territory which is assumed to be tributary to St. Louis as a market. The railroad introduced the system of excursion rates with the object of encouraging merchants to go to market. That was granted to western competing points, and it naturally had an influence in diverting trade from New York. Take a merchant out in a small town, and if the question arises in his mind as to whether he should buy goods in St. Louis, or Chicago, or New York, the existence of these reduced rates would assist him in making up his mind which trade center he would visit; and naturally after having gone to that trade center the dealers there would probably sell him all the goods he would require. In a sense that was a discrimination against New York.

That was perhaps the main reason why the Merchants' Association was established. There are other discriminations, but the one I have just referred to brought the matter to a focus and resulted in the creation of the association.

We have always taken the stand in New York that if there were no discriminations New York would stand, figuratively speaking, upon its own bottom; and we have never since we have been in existence asked a concession from a railroad. All we ask is equality of opportunity.

One of the first active steps taken by the association was to try and have the railroads grant to New York the same privileges that they were granting to other trade centers; that is particularly in connection with this reduced rate matter. Instead of charging 2 full fares, the roads had charged in some instances a fare and a fifth, and in other instances a fare and a third for the round trip.

Q. Were Philadelphia and Boston enjoying excursion rates at that time?—A. I think not.

Q. New York competes quite as directly and severely with Philadelphia and Boston as it does with St. Louis and Chicago, does it not?—A. I should say yes.

Q. Then, in asking for discriminating rates in favor of New York, you ask to have an advantage over Philadelphia and Boston, do you not?—A. We do not ask for discriminating rates. That is hardly a correct way to put it. We have taken the position that we would prefer to have this entire practice abolished. We have told the railroads time and again that whenever they were ready to stop that practice we would stand with them and assist them in doing it; but so long as they would persist in granting them to other places, we asked to be put on a relative basis of equality. I would scarcely call that asking for discriminating rates.

Q. Do you not call excursion rates discriminating rates?—A. Yes; they are discriminating when made in favor of some points and denied to others.

Q. (By Mr. FARQUHAR.) Was there any action on the part of Boston, Baltimore, or Philadelphia merchants to adopt the same plan that you have?—A. Yes.

Q. They have had no success in it?—A. I am not familiar with the success that Boston or Baltimore have had, but Philadelphia at times has had the benefit of these same rates.

Q. You would say, then, that your plan was to abolish the advantageous discriminating rates received by Chicago and St. Louis?—A. Yes.

Q. So that all would be put on the same plane?—A. That is, charged the full tariff rates; we would prefer to see that. That has been our position from the first. In fact our position is well known to the railroads. We have gone on record before them to that effect.

Q. Have you any formal statement to make to the commission; any tabulated statement of discriminations?—A. No; I have not. I had started to prepare such a statement, but after reading it over I considered it was not comprehensive enough, and I thought I had better first find out what sort of information the commission desires.

Q. Have you any fault to find with the freight classification, as now adopted, from the North to the South?—A. Yes.

Q. Would you state that to the commission, and give specific cases, if you can?—A. Perhaps it might be well to establish a starting point by giving my idea of what a freight classification is. Of course, in the effort to systematize traffic, there must be a standard of some sort established in order to group miscellaneous merchandise. A classification perhaps bears about the same relation to rates of freight that the yardstick does to the price of cloth, for instance, or that the bushel measure does to the price of a commodity. It is the gauge.

The railroads have two systems of making rates. One of them is what they style "commodity rates," which covers traffic that moves in bulk, such as grain or flour and various other products. In miscellaneous freight they have arranged 6 classes of freight rates. Under those 6 classes they arrange, say, 3,000 or more separate items. That will give you some idea of just what an undertaking it is to properly classify freight.

Prior to the enactment of the interstate-commerce law, which went into effect in 1887, each individual line made its own classification. I think there were 138. As soon as the interstate-commerce law went into effect it was found that in applying these classifications to the scale of rates in effect in numerous instances the long and short haul clause was violated. In the effort to get the rates in line, the railroads held a convention, and attempted to adopt a uniform classification. That was found to be inexpedient, and they were only partially successful.

The United States is arbitrarily divided into territories. The territory from New York to Chicago and north of the Ohio River is what is known as the Official or Trunk Line territory; east of the Mississippi, but south of the Ohio, is what is known as the Southern territory; west of Chicago is what is known as the Western.

After this convention three classification committees undertook to classify the freight that is moved in their separate territories. There was very little complaint from 1887 until January 1, 1900.

At that time the Official classification committee made wholesale advances in their classification without any notice to shippers. They advanced in class 818 items out of the 3,000 in their merchandise list. Taking the scale of rates from New York to Chicago as a basis, these advances represented an average increase in the rate of freight of 35.5 per cent.

That was followed by the Western classification committee on January 25, 1900, advancing the rates on 240 of the items in their list. The per cent of advance in this instance, using Chicago-Missouri River rates as a basis, was on an average 47.4 per cent.

Following that again, the Southern classification committee on February 1, 1900, advanced their classification. Out of 2,600 items in the Southern classification they advanced two-thirds of them, ranging from 30 to 50 per cent.

As I have said, that was suddenly done, and the railroads did not seem to take into consideration the fact that merchants are in the habit of making contracts ahead based on existing rates, and the effect of that is apparent. If you make contracts to deliver goods, and your freight rates are advanced, it simply means that you lose the difference between the advanced rate and the rates that were in effect when you made the contract.

The Interstate Commerce Commission had their attention called to the matter, and in December they held a session in Washington to investigate and find out what might be done to prevent the railroads from putting the rates in effect. There does not seem to be much certainty as to whether the Interstate Commerce Commission has control over matters of classification. The investigation finally assumed the shape of having the matter drawn to the attention of the Attorney-General of the United States, but after considering the matter, he came to the conclusion that there was no ground for interference by him.

It then seemed to be a question as to whether the railroads and shippers could not

get together and jointly agree on some basis that would be satisfactory to both. In response to a suggestion to that effect, the Official classification committee met with the shippers and subsequently modified the advance, but they did not go back to the original basis.

Q. Do you know whether the Attorney-General found that the advance in the rates was justifiable?—A. I do not believe that he did find they were justifiable.

Q. Did the Interstate Commerce Commission, in their submission of the matter to the Attorney-General, call attention to the fact that they were exorbitant? Do you recollect that?—A. I am not sure as to how the case was presented by the commission. I think, however, that the position taken was that the action of these committees was in defiance of the antitrust law; in other words, that they had come together by joint agreement to make these advances; but the Attorney-General did not seem to take that view of it, or, in any event, he decided that he could not interfere.

Q. Was the position taken that it was a quasi conspiracy as against the spirit of the interstate-commerce law?—A. Yes; that is the idea.

Q. (By Mr. A. L. HARRIS.) Did you file a complaint with the Interstate Commerce Commission setting forth the disabilities that your association was laboring under?—A. Our association did not do that; but I think there were a hundred-odd complaints filed in connection with this matter.

Q. Were they ever investigated?—A. I do not believe a formal investigation was ever made; it was informal.

Q. Was any reason assigned for not investigating the charges of the complainants?—A. Not to my knowledge.

Q. (By Mr. RIPLEY.) Do you understand that the Interstate Commerce Commission has jurisdiction over classification or not? That is to say, could it entertain a complaint of this kind and pass upon it?—A. I am of the opinion, from the way that the present law reads, that it would be utterly useless for the Interstate Commerce Commission to attempt to do anything, because the law seems to me to be vague. It hinges upon a question of reasonableness, and there is no power that I have discovered that can determine what is reasonable and what is not. Of course there are two sides to the question, but in the absence of any arbitrary power to make a decision as to what is reasonable and what is not—

Q. (By Mr. A. L. HARRIS, interrupting.) Do we understand there is a grievance here with no remedy?—A. That is it; yes.

Q. Either on the part of the Interstate Commerce Commission under the interstate-commerce law or under the antitrust law?—A. That is it.

Now, there is one point about this matter, and that is that shifting or advancing items in the classification has really the effect of advancing the rates, so that the classification committees—although it is not generally admitted—really possess what is known as the rate-making power. It is particularly burdensome upon merchants for the reason that when they advance the item from one class to another it is very difficult to ascertain just what the ultimate effect of that is going to be or how much it will advance the rates. If they advance the scale of rates themselves it is a much simpler matter for the merchant to tell just what the effect is going to be upon him. That is the direct method. By using the other system of advancing it in the class, it is an indirect method and it is hard to tell just what the effect is going to be.

Further than that, in making the classification they have certain classes for carloads—that is, for merchandise that moves in carloads—and then they make the higher classification for less than carloads. The effect of that is that shippers who buy in large lots have, through that system, a tremendous advantage over merchants that deal in smaller lots.

Further than that, the system of carload rates tends to establish what has been styled spheres of influence or commercial basins. To illustrate that: If a merchant in New York wishes to make sales in territory that is nearer to Chicago than it is to New York, it is possible through that divergence between carload and less than carload rates, when applied to the scale of rates in effect, for the Chicago merchant to buy in carloads and distribute to that territory which is nearer to him than it is to the merchant in New York, by reason of the lower rate of freight. If you ship from New York to Chicago at a low rate of freight and, in distributing that carload shipment, then ship backward into this territory at a less than carload rate, the ultimate expense is less by that system than if you shipped in less than carload lots from New York to that territory.

Q. (By Mr. RIPLEY.) Could you give an illustration of it that would make it definite?—A. I do not know that I could do that without a tariff.

Q. Simply by naming cities without naming freight rates. Take some interior city in Ohio or Indiana.—A. [Indicating on map.] Take for instance, Connersville, Ind. A merchant in Chicago selling dry goods, groceries, or hardware can get a lower rate of freight on goods purchased in the East in carloads and shipped from Chicago to Connersville in less than carloads, than a merchant in New York could ship in less than carloads from New York to Connersville.

Now, there is another effect in this manipulation of classification matters, and the illustration I have just given would also govern in this case. Take the Southern group of railways. If they are particularly interested in building up Southern territory to the exclusion of merchants in the territory north of the Ohio River they can continue this practice of making such a wide difference between the carloads and less than carloads so that it would be utterly impossible for the outside merchant to make any sale whatever in Southern territory. They can build, so to speak, a wall around themselves.

Q. You do not mean by that that they exclude the wholesaler, not the producer but the jobber?—A. That is it.

Q. This whole question you are discussing concerns the jobbing interest, does it?—A. More particularly.

Q. That is to say, the goods might come originally from New York, but the question is whether the jobbing trade would be located in New York or Atlanta, Chattanooga, or some other place of that kind.—A. That is correct.

Q. (By Mr. PARQUHAR.) There is one question not made clear yet. Is it not natural for the Southern railroads to build up their local jobbing trade as high as they can?—A. I think it is. Their selfish interests would inspire them to do that, you know.

Q. Does not the same complaint that you make in respect to Chicago, St. Louis, Louisville, or Cincinnati, from a New York standpoint, apply also to the Southern men in their great central markets?—A. Yes. It has always been our desire to be as impartial as we can in these matters. We recognize the fact that the railroad operates both ways, and it may be that they are excusable for protecting their own interests. But we do not like to have them go to extremes, as we claim they have done in these classification matters.

Then, again, they exercise a power frequently that is almost equivalent to taxation, and we are excluded from any representation whatever. Their actions are purely arbitrary, and are governed by their consciences solely. You might say, as Lord Clive did in regard to his acts in India, that, considering his opportunities, he had been very modest.

Mr. CLARKE. His exact words were: Considering his opportunities, he was astonished at his own modesty.

The WITNESS. That is it.

Q. (By Mr. KENNEDY.) You say you have no representation before these classification committees?—A. No; they are governed solely by the provision in the interstate-commerce law which requires that if it is proposed to advance rates there must be ten days' notice; if they are going to reduce the rates they are required to give three days' notice.

Q. When the change in classification is made you may appear before their classification committee and argue against the change?—A. Yes; we may present arguments, but that is as far as we can go. There is no power we can invoke.

Q. Are the changes never of avail in your interest?—A. They have been. The Southern classification committee is not so responsive to argument as the others. I have made arguments before them and have covered the ground quite fully, but they have not yet made any response, and that is a year ago. They ruled me out on the basis that my complaints were too general; but when you consider that they had advanced two-thirds of their classification, I do not see how anything else but a general complaint would cover it.

Q. (By Mr. RIPLEY.) Would you specify exactly what some of the advances were, as done in the typewritten statement which you prepared?—A. Yes. I could prepare something and furnish it. It is my idea to find out just what the commission would like to have, and then I can be specific or give practical illustrations.

Now, to be specific in regard to the Southern classification. A comparison of the old with the new classification shows that since January, 1900, 1,977 articles have been advanced in class out of a possible 2,600. They have, I think, 9 different classes of rates. They have more classes in the Southern territory than in the other territories. Of these, 32 articles have been advanced from second to first class; 38 from third to second class; 69 from fourth to third class; 36 from fifth to fourth class; 10 from sixth to fourth class, and 46 from sixth to fifth class. There are many instances in which advances were made from fourth to first and from third to first. In addition to that the classes which were among the lowest are beginning to disappear from the classification list altogether. They are eliminating the lower classes and gradually advancing these articles from class to class. There were 109 of the lower classes and commodity rates in the classification which governed prior to February 1, 1900, and in the new classification, which went into effect on that date, there are only 58 of these left. In addition to these advances there were 75 new instances of discrimination made by widening the difference between the carload rate and less than carload rate.

Q. (By Mr. LITCHMAN.) I would like to know in some way whether these changes in classification apply exclusively to St. Louis or New York or any other particular

place, or whether they were general increases in classification to all places?—A. What we are discussing now is the classification that governs in the territory south of the Ohio and east of the Mississippi. The advances that were made govern generally from all points.

Q. Then they were not a discrimination against any particular point?—A. No, sir; except through that practice of widening the difference between carload rates and less than carload rates.

Q. Is not that a universal custom?—A. You might say that it is.

Q. Is it not true that the carload rate is always lower than the broken carload rate?—A. Yes.

Q. Is that of itself, then, a discrimination?—A. It would not be a discrimination if there was any fixed rule for the difference, but the committees observe no fixed rule. For instance, in classifying freight they take into consideration the cost of handling and the value and the bulk and the inherent liability to damage. That is a general practice.

Q. Is not the classification lower on perishable than on unperishable goods?—A. That is what I say—they consider the inherent liability to damage. If there was a fixed standard as to just what the difference should be, gauged on the cost of handling as between carloads and less than carloads, there could not be much complaint. It is undoubtedly true that it costs more to handle a miscellaneous lot of freight than a carload; but at the same time the railroads have been in existence a good many years and they have a record of their business, and it ought not to be a difficult matter to establish a fair difference based upon the cost of handling the carloads as compared with the less than carloads. They do not seem to have reduced their business to a system as yet for some reason. For instance, they have not yet gotten it down to the basis that the life insurance companies have. A life insurance company can quote figures to cover almost any contingency. A railroad company ought to be able to tell just how much more should be paid for a less than carload lot than a carload lot, and let that be recognized as a standard and let that govern.

Q. Do I understand that whatever classification is adopted it applies equally to all shippers?—A. Yes; there is a provision in the interstate-commerce law (section 10) that makes it obligatory on the part of shippers to observe the classification, and it affects all shippers alike.

Q. Then where does the discrimination come in?—A. The discrimination comes in by making a difference between the carload and less than carload rates that is not justifiable.

Q. Now, can you give some instance of that unjustifiable practice?—A. I think it would be better to let me provide that in an exact way, too. I can hardly explain why it is impossible to do that with the information I have in hand. You must have your exact scale of rates—tariff rates—which I have not got with me. I will willingly provide all those instances, but I must have the data so that I can figure it out at something like a mathematical calculation.

Q. (By Mr. RIPLEY.) Will you name a few specific commodities which were formerly fourth class and moved up to first class, simply naming the classification, leaving the rates out?—A. I have in my office a quite complete list compiled specifically mentioning these advances. I would take pleasure in giving you a copy of that, and that would answer your question. I thought I had it included in this statement here, but I find it is missing.

Q. (By Mr. KENNEDY.) Well, can you say whether the difference between the carload lots and the broken lots is a very wide one, or whether it is wider than it should be, considering the cost of handling?—A. Well, that has been our contention in most of these cases where the difference has been increased. The contention was that they were not governed at all by the difference in the cost of handling it; it was merely an arbitrary advance, and, taking in consideration the results that are produced by that advance, we assume that it was intentionally done to exclude merchants outside of that particular territory—to give the jobbers in the South an advantage over jobbers elsewhere.

Q. (By Mr. FARQUHAR.) Well, the jobber in Atlanta or any great Southern market there has an advantage, of course, in the carload lot in its original shipment, but in his distributions he has got to pay the Southern tariffs, just as the Northern man does?—A. Yes. Now, there is another peculiar condition in respect to Southern territory—that is, that the Southern classification governs on interstate traffic all through that territory, but the various States, through the State railroad commissions, have never authorized the Southern classification as promulgated by the Southern classification committee. In the various States the old basis is still in effect on State business, and you can see what an advantage that is to the merchants of those States. They can distribute on the basis of the old classification, whereas the merchant outside must observe the advanced classification.

Q. Do you pretend to say that in the regulation of State traffic within the State that there are State boards that have power above that of the Interstate Commerce Commission, even of Congress?—A. Not over interstate traffic, but intrastate traffic.

Take, for instance, Mississippi. A merchant can buy his supplies on the basis of what is known as Southern classification and distribute in his State on a much lower basis of classification, whereas an outside merchant shipping to the point in that State is governed solely by the Southern classification, which is about 30 per cent higher than the one governing in the State.

Q. (By Mr. RIPLEY.) You mean where he ships direct to the locality or direct from New York?—A. Direct from his own city to a local point. I attended a convention of State railroad commissions at Lookout Mountain last summer and they unanimously agreed that they would not recognize this new classification.

Q. Their policy, then, is distinctly to build up, of course, the jobbing business within their own borders?—A. Yes.

Q. And those State railroad commissions are bound to look after that interest, whatever happens to the general Southern classification?—A. That is the idea.

Q. (By Mr. LITCHMAN.) Have you any information that shows a comparison between the classification on the different lines of goods in this Southern territory with that of the classification in the Northern territory?—A. Yes. I can illustrate that to you. I had started to make some remarks in regard to uniform classification.

Uniform classification is a good thing to have, but you must take into consideration when you make your classification the scales of rates that are in effect. Suppose that we want to make the Official classification a uniform classification. The Official classification is made to correspond with a scale of rates, which are as follows, based on the rate from New York to Chicago:

	Cents.		Cents.
First class	75	Fourth class	35
Second class	65	Fifth class	30
Third class	50	Sixth class	25

Those are cents per 100 pounds. Now, of course, in arranging their classification the official committee have in a measure been governed by that scale of rates. For instance, the committee know that, if they put an article in the first class it means that the rate from New York to Chicago would be 75 cents. They keep that in view. Well, now, take the same distance running South—New York to Atlanta, for instance; the scale of rates is as follows:

First class	\$1.14	Fourth class	\$0.73
Second class .....	.98	Fifth class .....	.60
Third class .....	.86	Sixth class .....	.49

From this it is plain that there are three classes of rates in the Southern territory which are higher than the highest class for similar service in the territory north of the Ohio River. Now, take the Official classification again. If an article is in the first class it is 75 cents, but if it is first class it would be \$1.14 going South, for the same distance; so that there is no justice or equality in applying the classification universally, when there is such a wide difference in the scale of rates themselves.

Q. Is that illustration typical of the whole Southern territory?—A. That is a fair illustration.

Q. Of the difference for an equal distance between the charge in the Official and the Southern territory?—A. Yes; in the Southern territory they have always had an exceedingly high scale of freight rates. That has been complained of not only by commercial interests but by connecting railway lines as well.

Q. (By Mr. LITCHMAN.) Is it not true that the railroad facilities are very far superior in the Northern district than in the Southern?—A. Yes; that was true until very recent years. Recently there has been an era of improvement generally throughout the South in railways.

Q. Do you think that the South even at the present time is comparable with the North in the development of railway facilities?—A. I do not think they are quite up to the standard.

Q. Would not that have an effect on the classification and rate charge?—A. Yes.

Q. If the expense of doing business is higher in the South, necessarily the price charged must be higher?—A. There is another element to take into consideration there, too, and that is the fact that the return traffic from the South is quite light—that is, the traffic moving North.

Q. (By Mr. RIPLEY.) How about cotton?—A. Well, that would not apply in cotton. That traffic would be pretty heavy, but that don't compensate for the difference, for instance, between the quantity of coal moving in the North. The North has the coal interest, the grain, flour, and heavy products that are raised in the West that keep their traffic up to a pretty high standard.

Q. (By Mr. LITCHMAN.) How large a proportion of the cotton crop is shipped by water?—A. I can not answer that question.

Q. Is it true that a large proportion of the crop is shipped to foreign countries?—A. Yes.

Q. Then that portion of the cotton crop would not enter into this calculation you are now making?—A. No; it would not move North; it would move, perhaps, South or East. That would be short hauls.

Q. It would not enter into a comparison of rates between the Northern territory and the Southern territory necessarily?—A. No, sir.

Q. Now, I want to return to the point which I am trying to bring out. This classification and the rates charged under it apply to all consumers in the South, do they not?—A. Yes.

Q. Then where is the discrimination if all in a certain territory are charged alike?—A. There is no discrimination in its application. The discrimination is in the way that the classification is—I do not hardly like to use the word, but it covers the point—manipulated.

Q. You think the discrimination is between sections, then, to the detriment of the South? Is that the point you desire to make?—A. Well, I have made that claim. I don't suppose it will be accepted as correct, but that is the way it looks to me.

Q. You think this alleged discrimination is to the detriment of the development of the South?—A. Yes; any restriction in action of that character I think is detrimental. We have always taken the position there that the less interference and the fewer obstacles there are thrown in the way of development, the better it will be for the country generally.

Q. You think that the price charged should be sufficient to cover the cost, do you not?—A. Undoubtedly.

Q. Have you gone into an examination as to the element of cost?—A. We can not get at it.

Q. Can't you get at it as well in relation to the South as in relation to the North?—A. We can't get at it in the North.

Q. (By Mr. CLARKE.) Is it your contention that the changes in classification have been an indirect way of raising the rates?—A. Yes; there would have been very little complaint, I think, if they had advanced the scale of rates themselves; that would have been direct. There was a time, perhaps, when the merchants were inclined to complain of freight rates, but in later years they have reached a conclusion that the rates of freight of itself is not so material as the universal application of it. They want everybody to be charged the same rate, whatever that rate might be.

Q. Then you think that the changes in classification have induced great confusion and inequality?—A. Yes, sir. We have sometimes thought that while the railroads want to increase their revenues, they did not care to assume the responsibility of advancing the rates; it might create too much of a furor, and they have adopted this other method, which, to my mind, is equivalent to taking a handful of pennies and throwing them in the air and letting them come down. Then there would be so many heads and so many tails, and let that represent the protest. They will have a great many protests. Other changes would not be noticed by people not affected, and out of the toss-up there will be a certain percentage of advances that will remain. That was brought to my mind by reason of the fact that after these advances were made, and numerous protests were filed, certain powerful interests had their protests recognized, and the basis of classification was put back to almost its original standard, while others secured no changes whatever.

Q. (By Mr. CLARKE.) Then you think that a change in the classification was haphazard and not scientific?—A. That is it; and this method of making changes has a further advantage. Not all merchants are familiar with transportation methods, and particularly some are unfamiliar with the effect that the classification has upon a freight rate. They know their rates were advanced, but they do not understand just how it was done, and they might protest and finally forget all about it. Well, it is that percentage that makes an advantage to the railroad people. Now, I suppose in that classification of 2,600 items perhaps, conservatively, one-third of them will continue to remain as they were advanced, due to the fact that the merchants affected have abandoned all hope of ever securing a return to the original basis.

Q. (By Mr. RIPLEY.) Would you specify any recessions from this position of advance taken in respect to particular commodities? Do you recall any?—A. Yes; in the Southern classification I happen to recall from memory—coffee was advanced one class, both green and roasted. The green coffee remains as advanced, and the roasted coffee went back to the original basis.

Q. What is the effect upon the distributive trade of the Southern States as to the jobbing of coffee?—A. Well, I do not think that question, as to the effect of jobbing, enters much.

Q. Would it affect the place where the coffee is roasted? Would it determine the center of roasting?—A. I am not positive, but I think it has that effect. I guess it is well understood that coffee is controlled by a trust—that is, roasted coffee—practically a trust. Now, it seems singular to me that they should not go back to the

original basis of classifying green coffee, and yet saw fit to reestablish the old order of the classification of roasted coffee. How that was brought about I do not know.

Q. But the return to the old basis was advantageous to the coffee interests?—A. Yes; to the roasted-coffee interests.

Q. It enabled them to crush out competition of other parties, or, at least, it might have that effect?—A. It might have that effect.

Q. To crush out competition of persons in other parts of the country who wished to establish a local industry?—A. Yes.

Q. Can you recall any other instance of that kind of a specific commodity which was advanced in the classification and then by virtue of strenuous protest was placed back again to its old basis?—A. That is the only article I can recall from memory.

In checking over the official classification I noticed that a good many of the items that are under the control of these industrial combinations were not advanced at all.

Q. No attempt was made to advance them?—A. No. Take, for instance, paper. I also have a list in my office of that class of articles made by combinations that I would be pleased to provide, if you think it wise.

Q. In other words, you imply that by these changes in classification discrimination between distinct producers can be induced without the giving of personal rebates or preferences?—A. Certainly.

Q. In other words, that by a device by which apparently everybody is treated alike, there is nevertheless the effect of granting a definite discrimination to certain interests?—A. That is right. That is the reason I used that term "manipulate."

Q. Can you specify any influence of this kind at work in fixing any of the dry-goods or woolen classification? Has there been any change in the woolen classification?—A. No; dry goods is in the highest class now, the first class in the Official, in the Southern and also in the Western. There is what is known as cotton piece goods—that is in the lower class. That is supposed to be goods that are made exclusively of cotton. Our organization had, 2 years ago, I think, endeavored to have the classification of cotton piece goods simplified. The classification committee had attempted to subdivide cotton piece goods in accordance with the list that they had established, and it made it very difficult to pack goods. We wished to have it simplified, and presented an argument, and they simplified it by advancing it in class. That is, for instance, they advanced it from a third to an intermediate class which they had established, which was 15 per cent less than second.

Q. Will you, by illustration from that classification, show how complicated the cotton schedule is?—A. Now, this is a Southern classification.

Q. You may read a few of those items under the cotton schedule.—A. They have here calicoes, cambrics, caution flannels, plain or dyed, canvas, checks, domestic, cheviot, and so on. There are 35 different terms of that nature that they have assumed to cover everything that was made wholly of cotton. As a matter of fact, most of these terms are trade names. For instance, you take teazle cloth. It is a patented name, a sort of copyrighted trade name; only one person can make it; and they have endeavored there to condense into these 35 terms at least between 2,000 and 3,000 different styles of goods made of cotton. I might say further than that, that each year there is some new name attached to some product made of cotton, to make it attractive, and it is difficult to tell just how to classify an article that is in reality made wholly of cotton, and that sells for the same price as some of these other products that they have included in this list. When a shipment is made, although it may be cotton piece goods really, the inspectors who are maintained by the classification committee will use their own judgment as to whether the goods in that shipment may be included under these 35 terms or not. If it seems to them that it don't come under those 35 terms, instead of the shipment going forward at the fifth class, it will be advanced to first. That was our idea in having that list entirely eliminated, and having the entire subject covered by the simple term of cotton piece goods. Then the question of trade names or terms would not enter into the proposition at all.

Q. Are those 35 articles classified differently?—A. No; all in one group—fifth class. I am not very well posted on the dry-goods business, but I know that it is a most difficult matter to include under these 35 terms everything manufactured of cotton.

Q. What would be the effect if a bill of lading was made up specifying calicoes or some other article, and in fact including in that package another one of those 35 articles; would that be a misclassification subject to shippers' penalty?—A. Well, yes. For instance, if you had a shipment of cheviots and you had room in the case in which they were packed for a small quantity of what is known as dry-goods—that is, goods made partially of wool, which is first class, the inspector would raise that shipment up to first class even though 75 per cent was cotton piece goods.

Q. That would amount to an advance in freight rates approximately of what per cent, 50 or 25?—A. That is contingent upon the distance transported. That is the reason why it is so difficult to answer offhand a question that involves freight rates.

Q. But it would amount to a very material advance in rates?—A. It might be well for you to answer the question in the way you did for this reason—it will serve to bring out the fact that the percentage of advance which is made by this manipulation of the classification is contingent entirely upon the distance hauled. That is, for instance, in some cases the same goods might be going to a point where the advance would be only 1 per cent, but if they were going farther the advance might be 30 per cent.

Q. The shippers, then, would desire a great simplification of these different schedules?—A. Not only that, but as in the matter of classification, I have always taken the position that while there might be reasons at times that the rate of freight of itself should be advanced, after a classification is made, and made by men who are experts in the business, there is no reason I can see for again disturbing that classification. That should be a standard. When these classifications are made the questions heretofore have been thoroughly weighed, and there was a considerable length of time for the committee to act in, before they classified anything brought to their notice. After being experienced in that line of business for years, if you bring to them a piece of merchandise or a new production and ask them to classify it, and they do classify it after thoroughly considering the question, I do not see any reason why that should be changed again. That should be just as fixed, as I said before, as a yardstick.

Q. The protest of the Merchants' Association, then, is not primarily that freight rates have been advanced, but that they have been perhaps unequally advanced?—A. Unequally advanced and advanced in a way that adds burdens to the small man and the small shipper. You can always look for that effect if this indirect method of raising freight is going to be continued. The small man will get the worst of it. That has been our experience in the past, and we expect to have more of it unless some way is found to stop it.

Q. In your judgment, then, ought the classification for the country at large, or for the different sections of the country, to be drawn up by a representative body, including representation of the shippers and of the railroads and with publicity to the conferences, this classification then to be effective either throughout the United States, or through merely the Official, Southern, and Western territory, as the case may be?—A. Yes.

Q. And your protest is against a system by which discrimination, rebates, and disadvantages of various sorts are introduced indirectly?—A. I would not like to include the word "rebates" in classification.

Q. But it amounts to the same thing?—A. Yes; it is a different means of obtaining the same end.

Q. (By Mr. CLARKE.) You speak of inspectors. Who are they, and by what laws or rules are they governed?—A. That is purely arbitrary, too. They have this classification, and naturally they are not going to trust to the honesty of the shippers to observe it. If it is not observed there is an opportunity of one shipper securing an advantage over another, if his conscience is elastic. For instance, if the commodity in which he is interested is really first-class, and he marks on his box, on his case, something that comes under the fifth-class rate, he naturally makes a difference between the first and fifth class rates. But the railways maintain the system of inspection, and if they have reason to question a shipment they will open it and look it through and classify it in accordance with their classification.

Q. What class of employees does this opening, inspecting, and reclassifying?—A. They are a separate and distinct class by themselves. I do not know from what source they draw them, but they are maintained at the expense of the various railroad associations, and are under a chief inspector. They are stationed at transfer points.

Q. (By Mr. RIPLEY.) Do they not have it in their power, if they were bribed or otherwise induced, to change the freight rates which parties pay?—A. Yes; and it is also possible for them to look the other way on occasion.

Q. Is that practice known to exist to some extent?—A. Well, it is like a good many other things in connection with transportation matters. It is a thing that everybody knows, but it has not yet been proven.

Q. Would it not be likely that the large, powerful, important shipper would be less severely treated by the railroad in the matter of inspection than the small shipper who ships less frequently?—A. Yes; there are certain railroads who use that very thing as a method of cutting the rate. They, for instance, might instruct the shipper in New York, if he is agreeable, that he should misclassify his freight, and thereby get a lower rate of freight.

Q. And they would instruct their inspectors to take no note of it?—A. I do not know that you can say they would instruct the inspector, but the inspector will be friendly with them.

Q. (By Mr. FARQUHAR.) What would the other parties in the same business do in that case?—A. Well, if any other shipper could secure the facts they would probably go to law about it.

Q. But if the others secured the discrimination, would they go to law?—A. No; I think not, if they were benefited by it. [Laughter.]

Q. Now, you seem to make a charge of venality against inspectors. What reason have you to know—have you ever known of a case of venality on the part of inspectors of railroads?—A. I do not know of any. As I said before, it is one of these things that everybody knows.

Q. (By Mr. CLARKE.) Irrespective of the question of honesty in the administration of this practice, let us see if we can't find out a little more about the practice itself. Is it a fact, as you understand it, that all the railroad companies employ inspectors at shipping and transfer points?—A. Not all railroads; no. The railroad associations employ them. For instance, the trunk-line railways which govern transportation matters in the territory extending from New York to Chicago and north of the Ohio have their group of inspectors, the Western Railway Association have theirs, and likewise the Southern.

Q. Is it generally understood among merchants that their packages of goods are subject to be opened by the inspectors of the freight associations?—A. Yes, sir.

Q. And compared with the invoices?—A. Not compared with the invoices; compared with the shipping receipt or the bill of lading.

Q. Is there any contract in the bill of lading or any other paper that passes between the shipper and the railroad company which authorizes the railroad company to open the packages?—A. No, sir; they assume that right.

Q. Do the merchants object to it?—A. No, sir; they do not. I should not think, to express my own opinion, it would be to their interest to object to it.

Q. Is it common practice among the merchants to ship in a lower classification than goods should honestly go into?—A. I should not think it would be right to call that a common practice. That is another thing I can't state of my own knowledge. I think that there is a record statement that covers that point, and I attended a session of the Interstate Commerce Commission that was held in New York when they took up that very point. They had the inspectors before them, and I think the chief inspector testified that that practice was going on. If I remember correctly, he gave the percentage of instances of which his attention had been called to.

Q. You saw the statement of the late George R. Blanchard, made before this commission on that same subject?—A. Yes, sir; I was present when he made the statement. He was qualified to speak; he had access to these records. They keep records of cases of misclassification. The inspectors know just where to put their hands on parties who are given to that sort of thing.

Q. Do you understand that this matter of inspection is in any way regulated or provided for by law?—A. No, sir; I do not believe that it is provided for by law.

Q. Would the merchants feel better protected if it were provided for by law, the same as the inspection of imported goods by the Government is?—A. I think they would. Section 10 of the act to regulate commerce covers that point—that is, in regard to misclassification, and provided a penalty, but nothing is said in it about inspection. That seems to have been left to take care of itself.

Q. (By Mr. FARQUHAR.) Would not a railroad naturally have a right to examine any article for transportation on a road, provided it was in a hazardous schedule—gunpowder, chemicals, or anything else?—A. Well, they only accept those articles by special contract. They have a right to determine that before they accept it.

Q. But you think they have no right to discover fraud at all in transporting a first-class classified article for a fourth class?—A. I think they have a right. If they have not, they ought to have.

Q. At least they exercise it?—A. Yes.

Q. (By Mr. CLARKE.) Do disputes ever arise between these inspectors and shippers as to the reclassification?—A. Yes; that is brought about by the difficulty of correctly grouping various kinds of merchandise or articles in a way that will correspond with the classification as promulgated. Take a variety of things, for instance, in hardware. The shipment may be composed of a variety of different things, the classes of which do not agree. If you want to put that in one class, it is puzzling to know just how to properly group it and yet be in line of the classification. For instance, shelf hardware might be fifth class, pocketknives might be first class. If you have a package of pocketknives and shelf hardware, all of which is a small shipment, in order to agree with the classification, instead of making 1 package you would have to make 2 packages. That is one of the things that is so disturbing to commercial interests. Their packers get accustomed to classification and suddenly it is changed, so it is hard to know how to group shipments again. It requires a man quite expert, and the packer must have a high degree of intelligence to analyze that classification and comply with it in a good many instances.

Q. Do you understand that these inspectors are employed on account of their expert knowledge of classes of goods?—A. Yes; they are supposed to be expert in classes of goods, and also particularly familiar with the classification itself and the grouping of various articles into one shipment.

Q. It is an arbitrary act on their part in transferring from one classification to another, is it not?—A. Well, they have got to justify themselves by the classification. Their actions at times are complained of. When an increased rate of freight is demanded through their act, it will quite frequently happen that the shipper will contend that he was right, and they will have to argue the point.

Q. Would the matter be simplified and made clearer if each bill of lading was practically an invoice of the goods in the package?—A. They do that so far as it is possible now, specify on the shipping papers what the shipment consists of. They do not include the whole invoice.

Q. It is a matter of convenience among merchants, is it not, to put a considerable variety of goods into a single packing case sometimes?—A. Yes, sir; they do that for reasons of economy in their packing department, and also to comply with a minimum weight rule that these classification committees have in their classification. I will illustrate that: They have a rule which is to the effect that no single package of a small lot of freight of one class will be taken at less than 100 pounds at first-class rate, and in no case will the charge for a single consignment be less than 25 cents. Now, the shipper will endeavor, of course, to put as many goods as possible in the one case in order to get the benefit of the weight of the larger shipment, rather than pay a hundred-pound rate on a good many small cases.

Q. Well, since these goods are to be inspected and possibly reclassified arbitrarily in his absence, would it not be some protection to him and some aid to the inspectors if an invoice accompanied the bill of lading?—A. It might be. Yes, you might say it would be. It would be an open question as to whether the advantages would offset the trouble of making an extra invoice.

Q. (By Mr. RIPLEY.) Suppose a jobber in New York is endeavoring to compete with a jobber, we will say, in Montgomery, Atlanta, or some point in the South; do these jobbers in the South deal in a larger number of commodities than would a jobber in New York, as a rule?—A. Well, I should think not.

Q. The jobbers in New York will deal with either dry goods or hardware, or some particular line of commodities?—A. Yes.

Q. In some of these Southern centers are there not jobbers who job in a number of different commodities at the same time?—A. Yes; a sort of a general store.

Q. Would not the jobber with the general store in that locality have a distinct advantage over his New York competitor, in being able to put together a number of commodities in small packages into a large case in shipping out to his customers?—A. The railroads object to that. They have a rule that covers that point also. "Shipments of property combined into package by forwarding agents claiming to act as shippers will only be taken when the names of individuals and final consignees, as well as the character and contents of each package, are declared to the receiving agents, and such property will be waybilled as separate consignments and freight charged accordingly."

Q. No matter even if all boxed together?—A. If I understand your question, he will ship to a certain point to a number of merchants in that point and have one of them distribute packages to the other merchants in that city?

Q. I want to bring out this point, whether the jobber in New York dealing in a single line of commodities is on a par in competition with the jobber in a moderate-sized town in the South who may conduct a business in several lines of commodities, and who, in shipping from that small local center out to little towns round about, may combine his shipments into packages of more than 100 pounds, whereas the New York shipper, dealing in only 1 line of commodities, could not afford to ship direct to the small country store?—A. Yes; the local jobber might have an advantage there.

Q. And no railroad tariff or discrimination could affect that—that is, the nature of the business?—A. No.

Q. (By Mr. KENNEDY.) I would like to ask you whether the increase in rates by this indirect method that you are speaking about is justified somewhat on the ground of the general prosperity of the country—that the prices of commodities are going up throughout the country and railroad rates should also follow?—A. That was the only reason assigned by the railroads for this advance. They claimed that the price of materials had advanced, and that for a long period of years the tendency of railroad rates had been downward, and that they were justified in making that statement. But those were the only reasons assigned for this advance. I took occasion to look into the earnings of railways to a considerable extent and, so far as the Southern railways are concerned, I found that their net earnings were 20 per cent higher—at least 20 per cent higher—than they had ever been in the history of the roads. Yet they claimed that, because of the advance in the prices of materials, etc., they had to have more money. It did not seem quite consistent. It is a well-known fact that in transportation matters an increased volume of traffic produces great results. It seemed to us that the railroads ought to have been satisfied with that increased volume of traffic which produced that 20 per cent increase in their net earnings. There is another point that we do not seem to have touched upon yet.

Whereupon, at 12.55 p. m., the commission took a recess until 2 o'clock p. m.

The commission met at 2.20 p. m., pursuant to recess. At that time the witness again took the stand and resumed his testimony as follows:

(Witness, continuing.) There was one point that I think was not made sufficiently clear this morning, if, indeed, it was touched upon at all. The merchandise traffic, which comes particularly under these classifications, moves in smaller volume, of course, than what are known as "commodities," such as flour, coal, grain, and articles of similar nature that move in carloads, and this class of merchandise pays the highest scale of rates. For instance, the rates on flour from Minneapolis to the seaboard—that is, New York, Washington, and Philadelphia—are comparatively moderate. When this classification was advanced the railroads by that action placed almost entirely upon the merchandise classes the burden of the increase in freight rates, which they claimed were required to meet the demands made upon their revenue by the increased cost of materials, etc. They did not at the same time advance the rates on the coarser commodities to which I have referred. That does not seem to us to be entirely equitable. If the railroad revenues required an increase for any purpose we can not understand why it is that the increase was not assessed upon the entire volume of traffic moved. That seems to us to be in the nature of a discrimination.

Q. (By Mr. KENNEDY.) Is there any feeling among your people that the railroads favor the export traffic of the country as against the home traffic and distribution?—A. They certainly do make lower rates on export business than they do on local business, but I do not know that there is any serious objection to that. That seems to be reasonable.

Q. (By Mr. FARQUHAR.) Do you know of any case where a through foreign rate there has been diverted into the local market in the East?—A. I can not state that specifically. In order to be specific about these matters you will have to have before you a complete file of freight tariffs, which show the scales of rates themselves. There are, perhaps, a hundred thousand or more of those tariffs in existence, and it is like going to a library to look up certain information; it is almost impossible to carry it in your head. If you attempted to be specific offhand it would be merely guesswork, and it is for that reason I made the request that I should be allowed to insert those matters. I do know of such cases, but I can not at the present time state them specifically. I would like to look that up and provide the information.

I was speaking before of export rates. Take, for instance, flour; not for any special purpose, but simply by way of illustration. On flour from Minneapolis to Liverpool the inland rate is less from Minneapolis to New York than it would be on a shipment of flour to be delivered at New York locally and consumed there. The difference, I think, is about 2 cents a hundred pounds.

Q. (By Mr. CLARKE.) Did you notice the news of this morning that the flour mills in the Pennsylvania district have consolidated, with a view to competing with the Western mills for the export trade?—A. I did not see the news. I have known, in a general way, that such action was contemplated. With the exception of two the Western mills at Minneapolis, Duluth, and West Superior are now consolidated. It is in the direction perhaps of creating a trust, but my own opinion is that a trust, as applied to the manufacture of flour, is an impracticable thing.

Q. I understood you to indicate that, in your opinion, there is no particular objection to a through export rate from the interior of this country and the far West, half way across the Continent, and then across the Atlantic Ocean.—A. I had better qualify that by saying that I do not believe it is proper to export the raw material in that way—for instance, wheat—because the ultimate effect of that is to deprive the home manufacturer of the opportunity to get the profit in the manufacture of that staple. The effect of making what you might term excessively low rates on wheat seems to be working in favor of the foreign miller as against the home miller, with whom the home miller has to compete in the foreign market.

Q. You are aware, I suppose, that there are through import rates to the interior of our country?—A. Yes.

Q. And that these are lower than the rates for shipment from certain manufacturing centers in our country, like Pittsburg, to certain distributing centers, like St. Paul? Do the merchants of New York object to that?—A. I would not say that we would object to it. It is a most difficult thing to answer that question in an intelligent manner, taking into consideration the conditions as they exist. The principle that seems to underlie or seems to govern the promulgation of freight rates is in favor of the longest haul. There is not any relative equality as between the rates for a short distance hauled and a long distance. For instance, if a shipment originating in Liverpool is destined to Chicago the conditions would seem to be beyond the control of any influence, dictating that the rate from Liverpool to Chicago shall be almost as cheap as the rate from Liverpool to New York.

Q. Which, in your opinion, has the greater power in fixing these through rates—the railroad or the steamship companies?—A. If there is any advantage in the matter,

it probably lies with the railroads. The inland rate, I think, has a greater influence over the through rate.

Q. Apparently a through rate of that kind is a discrimination against the domestic producer and the domestic distributor or merchant. Now, can you tell us what offsets of an advantageous character there are to that?—A. No; I can not.

Q. (By Mr. RIPLEY). How does that affect the competition between jobbers in Chicago and in New York? Is it possible that jobbing merchants in Chicago can on a low through import rate reship their commodities and compete with you in territory which otherwise would be tributary to New York?—A. Yes; they do it.

Q. Will you explain further about that, as to the nature of that competition?—A. For instance, Marshall Field & Co., of Chicago, will sell in territory that is within 50 miles of New York the same kinds of goods, bought, perhaps, in the same market abroad, that the New York jobber will buy. That does not seem to be reasonable on its face, but it is a fact nevertheless; and in trying to discover the reason for it we can only reach the conclusion that it must be through some advantage in the matter of the through rate.

Q. In other words, do you mean that the whole through rate to Chicago, plus the local rate from Chicago back to the point of destination, is less than the rate which the New York merchant will pay from the foreign point to New York and from New York to destination?—A. That is it.

Q. Does this affect the nature of the commission business as distinguished from the jobbing business? Will you explain the difference between those two if there be any?—A. Well, as I understand the commission man, he is an intermediate or third party that does not invest his capital directly in the business, nor does he carry an extensive stock of goods. He has what they term accounts with certain mills, and, in a sense, is their selling agent. On the other hand, the jobber buys his goods outright, takes his chances of whatever element of risk there may be in conducting ordinary business; he is under the expense of maintaining a store and having his capital locked up a certain length of time, and the circumstances surrounding him are entirely different. There is one difference there that is very significant. In the commission business it is possible to ship from the mill to the buyer in, say, Central or Western territory direct—only one haul and one expense of freight rates. With the jobber, he has two hauls and the expense of paying freight twice—that is, in the accumulation of his stock and in the distribution of it.

Q. In other words, the jobber pays the shipment from the mill into New York, the goods being unloaded, and then he pays another shipment from that point out to the consumer?—A. Yes.

Q. Or to the general store which sells to the consumer?—A. Yes.

Q. Would it be to the interest of the railroad to foster the jobbing trade, then, in order that it might retain 2 hauls instead of 1?—A. It might look so on its surface, but when you consider that railroads seem to be favoring large shipments and large shippers, I think the reverse would be the case. You might think that the railroad would rather have a man pay freight twice, but the trend of things indicates just the opposite—that their interests lie in the direction of doing business in large lots.

Q. In other words, do you mean to imply that the industrial combinations which manufacture in different parts of the country are shipping direct to the consumer and eliminating the jobber?—A. Yes.

Q. And that railroads are assisting in this transformation by the distinction which they make between carload and less than carload lots, or in other ways?—A. Most decidedly, yes.

Q. The increase, then, in the Southern classification in the proportion of distinction between carload and less than carload lots is directly in line with this tendency which has been indicated?—A. Yes, that is the case.

Q. How does this affect New York as a distributing center or as a center of jobbing trade?—A. Well, now, I scarcely like to deal with family secrets. We will put it this way: a few years ago there were 28 dry goods jobbing houses in New York, to-day there are 4.

Q. Does that necessarily mean that the 4 may not have the control of just as large a volume of business as the 28 formerly had?—A. I think not.

Q. In other words, there has been a proportionate shrinkage in the amount of jobbing business done from New York?—A. Yes.

Q. Has there been any compensation to New York in return for that?—A. Not to my knowledge.

Q. Is that typical of other lines of industry, so far as your information extends?—A. Yes.

Q. What is the ultimate effect likely to be?—A. The elimination of the jobber as a factor in commercial affairs.

A. This will tend to lessen the importance commercially of many of the large centers in that respect?—A. In that respect, yes.

Q. (By Mr. KENNEDY.) Does that mean the removal of one item of cost between the producer and the consumer?—A. Possibly. It means a closer connection between the producer and the consumer, and naturally that will have a certain economic effect.

Q. (By Mr. LITCHMAN.) How far is that condition of affairs the result of the growth of the department store?—A. That has an influence as well, and the introduction of trolley lines, and the maintenance by department stores of their free-delivery systems.

Q. And the mail-order system also?—A. Yes.

Q. Well, would that not be a very large factor in the elimination of the jobber?—A. That competition could probably be met if it were not for this matter to which we have been referring here of the difference in freight rates.

Q. Is it the custom of the department store to deal directly with the manufacturer?—A. Yes; as I once heard it expressed, the department store does a retail business in a wholesale way. That is a paradoxical expression.

Q. That is exactly it, however. You think, then, that this discrimination in classification and other ways that you have described is the principal factor, do you?—A. I do; yes. That is the basis; that is the starting point. The existence of the department store simply emphasizes and exaggerates it. It puts the jobber, as the expression goes, between the devil and the deep sea.

Q. How long ago was it that there were 28 jobbing houses in New York?—A. I was trying to fix the date in my mind. I will have to answer that afterwards.

Q. By these jobbing houses, do you mean jobbing houses connected entirely with the domestic trade or with the foreign trade, or both?—A. Both.

Q. So far as you have observed, how far has this elimination of the jobbing interest been affected by the change in the tariff system of the United States?—A. I am not familiar with that phase of the question.

Q. Do you know whether these jobbing houses were at some time agents of foreign manufacturers?—A. They might be in some instances, but those are exceptions. They are a different class. They have their own agents solely. The foreign houses in many instances have their own representatives here.

Q. If the market formerly occupied by them has been absorbed recently by domestic manufacturers, that also would be a factor in the elimination of the jobber to that extent, would it not?—A. Yes.

Q. (By Mr. FAIRHUR.) What is the difference between the profits of the jobber and the commission man?—A. I am afraid that I can not answer that question. I have never been in the mercantile business myself, and I am not posted in reference to it at all.

Q. Well, then, in the elimination of the jobber the expense attendant on the whole jobbing trade is eliminated as between the manufacturer and the distributor?—A. Yes.

Q. Would you generally say that that conduces to cheaper goods to the consumer?—A. I should think so.

Q. Is it a fact that most of those large department stores, like Siegel, Cooper & Co. and Wanamaker and others, take the entire product of mills and dispose of it without the interposition of either the jobber or the commission man?—A. I think that might be true. For instance, I have noticed that John Wanamaker is handling the output of the Chickering piano factory and one or two others. There is another point—about the effect of the community of interest.

I scarcely know how to present that in a simple way. We had better start off with the idea that it is assumed that competition among railways is a benefit to commercial interests. That may have been true to some extent, but after New York has suffered so much from the competition of other trade centers, many of which had railway lines that were interested in building up these centers, we have come to the conclusion that competition is not so beneficial after all, and we look to this so-called community of interest to eliminate a great many of the complaints that we have heretofore had. And we take a broad view of it—that the interest of certain railways to their local territory will not be so great as it was heretofore; that by grouping these railways together there will probably be no such thing as a local interest to a railroad, and that, because there is no local interest to a railroad, they will not favor one point at the expense of another, and they will put them all on a basis of equality.

Q. (By Mr. RIPLEY.) Has New York suffered in the past specifically by the operation of such causes?—A. I might say that New York has been discriminated against for 20 years in the scale of rates in force east and west. Boston is in the same fix as we are in that respect. Beginning at Boston and down to Newport News, there is in existence what is known as a differential scale of rates; that is, take a common point, Chicago, the difference in the rate from Boston, New York, Philadelphia, Baltimore, and Newport News is about 2 cents per hundred pounds. I will make that specific when I get my scale of rates. That, of course, is a discrimination in

favor of the Southern ports on business originating in Chicago, or originating at the seaboard and moving to Chicago.

Q. Does that apply to west-bound business?—A. Yes; it applies east and west.

Q. Do you understand that there is a differential, then, by which New York is discriminated against in shipments to Chicago?—A. Yes.

Q. West bound as well as east bound?—A. Export and import.

Q. On through export and import rates?—A. Yes.

Q. And on business originating at New York?—A. On business originating at those points. Take the same illustration I have used, flour. Baltimore gets the flour from Minneapolis for about 5 cents per barrel less than New York gets the flour from the same point.

Q. But in the opposite direction does it cost New York more per 100 pounds in shipment of merchandise than it costs Philadelphia and other cities?—A. Yes.

Q. Is this a subject of agreement between the railroads?—A. Yes.

Q. Practically a pool?—A. Well, that went into existence before pools were ever thought of. That was a question that was submitted to arbitration at the instigation, I think, of the New York Central and Pennsylvania railroads, and a commission was appointed which consisted of Allen G. Thurman, ex-Senator Washburn, and Judge Cooley; and they investigated the question and made that recommendation, and it has been in force ever since. I think that was 20 years ago.

Q. Have the organized merchants of New York attempted at any time to induce the New York Central to break that agreement and to give them as low rates to Chicago as Baltimore and Philadelphia secure?—A. The merchants were opposed to it at first, but I think when they reflected that that condition of things was practically forced upon the New York Central to protect its earnings, they ceased to make strenuous complaint about it. It was practically a blackmailing scheme on the part of lines competing with the New York Central.

Q. By that do you mean that the railroad rates are made by the circuitous roads rather than by the most direct and best equipped ones?—A. Yes.

Q. (By Mr. LITCHMAN.) What is the rate to Boston as compared with New York?—A. Boston, I believe, takes a rate of 2 cents per 100 pounds higher than to New York.

Q. From New York?—A. Yes.

Q. Then Boston is worse off than New York in that scheme of discrimination?—A. In domestic business it is, but in export business it takes the same rate. There is a difference made there to equalize—to put Boston on the same basis as far as export.

Q. (By Mr. RIPLEY.) What is the reason of the special advantages which Baltimore and Newport News have enjoyed under this system?—A. Well, the only reason that can be assigned, perhaps, is that it represents the price of peace as among the lines to the seaboard.

Q. Have the merchants of New York any remedy to suggest for this discrimination under which they labor in competing with the Western territory?—A. The only one that we could suggest would be for the New York Central to break away from the agreement and insist that rates from these seaboard points or to and from these seaboard points should be the same.

Q. (By Mr. CLARKE.) New York merchants have the benefit of the competition of the trunk lines so far as there is competition, do they not?—A. If there was any competition we would probably get the benefit of it; but I question very much if there is any.

Q. Do not large quantities of freight to and from New York pass over the several trunk lines?—A. Yes.

Q. Do you mean to intimate or say that competition is entirely eliminated by this differential rate that has been agreed upon?—A. It has practically that effect. I am speaking now, of course, of what is publicly done. As I remarked this morning, there are some things that everybody knows, but that have not yet been proven, and I would not want to go into the question of what is not done openly.

Q. (By Mr. RIPLEY.) Have you reference to the Eastern Trunk Line Association in speaking of this agreement, or is this broader than the agreement of the Eastern Trunk Line Association?—A. No; all the roads concerned in that are members of the Trunk Line Association.

Q. Does the Eastern Trunk Line Association cover the Norfolk and Western and Chesapeake and Ohio?—A. Yes.

Q. (By Mr. FARQUHAR.) Were not these the differentials made by the arbitration board?—A. Yes.

Q. They were agreed upon by all the railroads?—A. Yes.

Q. Agreed upon by the Interstate Commerce Commission?—A. I do not know whether the Interstate Commerce Commission has indorsed that or not.

Q. That it was a fair differential at that time under the conditions?—A. At that time, yes; and I believe that the commission stated at the time they rendered the

decision that they did not expect it to be operative perpetually, that conditions might arise—

Q. (Interrupting.) Since the establishment in these Southern ports of regular lines between the United States and Europe, has not that lessened the New York trade itself?—A. Oh, most undoubtedly.

Q. Just on direct shipments?—A. Most undoubtedly.

Q. Well, have not also your terminal charges in New York had a great deal to do with the differential?—A. It is claimed that that is true. Personally I have never thought that they had much to do with it.

Q. Would not the same rule hold good of your transfer charges in New York as they would in Buffalo, in respect to diverting it by the Canadian lines?—A. Yes.

Q. In other words, do you think it is a rule of business, without any sentiment or any feeling about the thing, that commerce takes the cheapest route, as long as it is feasible and safe?—A. Commerce follows, as they say, the line of least resistance, and always will do so, I presume.

Q. (By Mr. KENNEDY.) Is there a probability that by means of this community of ownership of railroads, or consolidation, these differentials in favor of Baltimore and Newport News will be done away with?—A. There is a possibility that that will be brought about, I think.

Q. Through those means?—A. Yes.

Q. (By Mr. RIPLEY.) If this community of interest plan does not extend to all the trunk lines, but separates them into two great groups, might it not be possible that warfare of a very exaggerated sort might arise between the two giant interests?—A. I think that the method of settling those questions by so-called warfare is a thing of the past. I would rather take the other view of it. If there were two giants they would embrace each other. They would do practically what was done in the steel business. There were two strong lines there—I do not mean lines of railway now—that crossed one another, and the way out of the difficulty was to consolidate them.

Q. (By Mr. KENNEDY.) How do the merchants of New York view the railroad consolidation which is going on as affecting their interests or affecting the increase in rates that has come about in the way you describe?—A. We have never objected to direct increases in rates. We are more particularly interested in the question of having each merchant or each shipper secure the same rate, so that there shall be no advantage—there shall be no commercialism in the rate of freight. That is, difference in the rate of freight practically has the effect that a man who is securing an advantage in the rate of freight and using it in his business is simply using as capital money that rightfully belongs to the railway. He has that much added capital in his business if he has an advantage in the rate of freight, and he is getting that right out of the railroad treasury, and also at the expense of his competing merchants.

Q. Many transportation experts and some railroad presidents have said that the great cause of complaint was not that the rates were high, but that there was discrimination between individuals, etc., but now that there is stability of rates and no discrimination. We have a good deal of testimony to that effect.—A. I do not think they have exactly reached that state of perfection yet where there is no discrimination and no secret rebates; but I expect this community of interest to abolish—perhaps entirely abolish—all those practices; for, as I say, there will be no longer any reason to put out these inducements. They are bound to get the business—that is, by close community of interest they are bound to get the business. There is no reason why they should seek it or try to induce it by any secret practices; it would be against their own interests.

Q. (By Mr. RIPLEY.) Would you speak of the combination between St. Louis and Chicago and against New York as applied to the great central territory of the United States?—A. Do you mean the relative possibilities?

Q. The relative importance as distributing centers. Is New York holding its ground as a distributing center throughout the middle west as against Chicago and St. Louis?—A. I will have to say no to that question.

Q. Your protest as I understand it, representing the Merchants' Association of New York, is that the freight rates and classification recently put in force tend to hamper the extension of New York's influence in the Southern States?—A. Yes; but it likewise hampers in the same way Chicago and St. Louis; that is, this particular matter of classification.

Q. Is there then no competition as between New York and Chicago for this Southern territory?—A. Oh, yes.

Q. What form does that competition take, or what is the nature of it?—A. It is the same kind of competition that exists anywhere else. The question of transportation does not enter there.

Q. Can you ship from New York as cheap or cheaper into Atlanta as a merchant in the same line of business in Chicago?—A. If there is any advantage in the scale of rates itself, New York has it against St. Louis and Chicago.

Q. In other words, you can lay down goods in any one of the main centers of the Southern States cheaper on the basis of freight rate than the Chicago or St. Louis merchant can?—A. Yes; due to another agreement between railway lines that dates back perhaps 30 years. It was an unwritten agreement among all railroads that merchandise should enter the South from the East—that is, from her seaboard.

Q. Do you mean that it was agreed that that was the natural inlet?—A. I do not know what brought about that agreement. I only know that agreement in a general way; I can make that specific too; I have a record. The idea was to exclude the Western lines from any participation in business that moved into the South from the West. That was the general effect of the agreement. Why that was done I do not know.

Q. (By Mr. CLARKE.) Can you tell whether or not the Wabash or Illinois Central are parties to that agreement or understanding, whatever it may be?—A. They are all concerned in it. It was sort of a general agreement.

Q. (By Mr. RIPLEY.) Does that condition prevail at the present time?—A. Yes.

Q. How far would it be due to the effect of cheap water rates which New York enjoys through to Southern ports?—A. Well, if there are any cheap water rates from New York to Southern points, I am not familiar with them.

Q. Do you mean that you have no knowledge of their existence?—A. I mean that I do not think that they do exist. There is no competition between the coastwise water lines and the railroads. In fact, this very classification that we were discussing this morning, although it is designed to fit railroad conditions, applies via the steamship lines as well.

Q. (By Mr. KENNEDY.) Does the community of interest between the railroads and steamship lines bring that about?—A. It is entirely community of interest; I can say yes to that, that competition between the coastwise lines and the railroad lines is more apparent than real.

Q. The community of interest then is likely to deprive the people of the advantage of the cheaper shipment by water?—A. Yes, it will certainly do that; has done it, in fact. For instance, you would naturally suppose that the influence of the lakes was of some significance, but every merchandise line on the lakes is owned by the railroads. The same way with the Erie Canal, which runs from Buffalo to the Hudson River; there are merchandise freight lines owned by the railroads operating on the canal.

Q. You recognize, then, that it is at the present time possible to lay down goods from New York in the Southern States cheaper than it is from Chicago or St. Louis, by virtue of this agreement?—A. Yes; I said if there is any advantage east of the Mississippi we have it.

Q. Is there any recent movement of the Western lines, such as the Illinois Central and the lines from Chicago to the Ohio, intended to equalize those conditions?—A. That is a question that they can not govern for themselves. The lines east of the Mississippi in the South refuse to cooperate or prorate with the lines west of the Mississippi.

Q. How about the Illinois Central's having a continuous line from Chicago to the South coast?—A. If they attempted to take independent action, it would simply precipitate a rate war.

Q. Will you speak of the peculiar conditions which enter into commerce between New York and San Francisco—that is, transcontinental rates?—A. You refer to what is known as transcontinental freight rates?

Q. Yes; is it possible for a New York merchant to do business in California territory in competition with San Francisco?—A. Yes.

Q. Will you explain further?—A. I was going to refer to the fact that on business destined for California and the Pacific coast there is another classification in effect which is peculiar to that traffic. It is made in a different way from the Official or the Western or Southern. It is made by making groups and naming rates to cover groups rather than items—that is, rather than separate items. There has been a contention by commercial bodies of the Central West, particularly Chicago and St. Louis, that the scale of rates and also the classification in effect from Chicago and St. Louis was detrimental to their interests. Chicago and St. Louis claim that the transcontinental lines are using this same difference between the carload and less, to exclude them from the Pacific coast territory. On the other hand, the Pacific coast jobbers maintain that Chicago and St. Louis have no right to do business out in their territory, and there is a case now before the Interstate Commerce Commission in which that whole question is involved. It is of a rather complicated nature. For instance, a rate from New York to San Francisco, and from Chicago to San Francisco, is the same. Chicago claims that because she is nearer San Francisco—and St. Louis makes a similar claim—the rate to San Francisco should be relatively less than it is from New York to San Francisco.

As a matter of fact the rate from New York to San Francisco on transcontinental business is what should be properly styled a compelled rate—that is, a rate that is

not based on the cost of service rendered, or distance hauled, or anything of a similar nature. It is a compelled rate, because it is fixed by the rate by ocean from New York around Cape Horn and up to San Francisco. The correct position, from a rate point of view, of Chicago to San Francisco is in reality the rate from Chicago to New York plus the rate from New York to San Francisco. What the interests of Chicago and St. Louis seek is to have that compelled rate used as a basis and then oblige the railroads to grade the rates from the Eastern seaboard to the Pacific coast. That would bring about this result: That, instead of the rate being \$1, for instance, from both New York and San Francisco, it would under a graded system be 75 cents from Chicago to San Francisco.

Q. The rate of \$1 being fixed as a minimum on the basis of water competition?—
A. As a maximum.

Q. Does the city of Denver make a similar contention that it is entitled to still less than the Chicago-San Francisco rate?—A. Yes; there is one of the difficulties. If the principle involved in the compelled rate is not recognized and protected, and this graded system of rates is introduced, you can at once see that with the rate from New York to San Francisco of \$1 to begin with, to grade that westward you would soon reach a point, perhaps after you left Denver, where there would not be any rate to decide. You would be carrying goods for nothing.

Q. Under present conditions a jobbing merchant in Chicago can compete on even terms with one in New York in the whole California territory?—A. That is apparently true, but not wholly true for this reason. The Chicago merchant has against him the rate that it originally cost him to get his stock from the East to Chicago, which must be added to that rate which he must pay from Chicago to San Francisco. There is that much against him.

Q. You have testified that the through export rate would be almost as low to Chicago as to New York.—A. Well, on imported goods that statement which I have just made would not apply. I was speaking of a shipment originating in the East and rehandled by a Chicago man dealing in San Francisco.

Q. (By Mr. CLARKE.) Do the New York merchants generally favor the building of the Nicaragua Canal?—A. I do not think I am qualified to answer that question. I would like to explain that our association has undertaken so much that there are some matters we have been compelled to overlook. That canal question, although of very great importance, we have not had time to take up as yet; but we propose to do so.

Q. (By Mr. KENNEDY.) Do I understand you to say that you believe the inequalities and evils in the classification, from your point of view, would be cured by the combinations and consolidation of the railroads?—A. No; not the classification matter. They seem in that respect to have adopted a new system of advancing rates. We do not know that they are going to continue to do it, but they have the opportunity to do if they desire. There is not anything to restrain them.

Q. What is it that will be cured by consolidation?—A. Other practices. For instance, rebates or discriminations of other nature, particularly in the matter of scaling rates.

Q. You said this morning, I believe, that these discriminations which were effected by the advances in classifications were practically rebates, did you not?—A. I do not want to be understood in just that way. The idea I wish to convey was that by manipulating the classification there was an opportunity to accomplish the same thing as is accomplished by rebates.

Q. You spoke this morning about some classes of articles that were not discriminated against in these recent changes in classifications and mentioned paper as one.—
A. Yes.

Q. Do you attribute that to the influence of the paper trust, or to a fear of the influence of the newspapers in case paper was advanced?—A. No; that was merely an assumption on my part that that was done. I arrived at that by checking from the list when the advances were made, and I was very much surprised to find that a good many of these articles that are controlled by these combinations were not disturbed; and naturally the question arose in my mind as to why that should be, and the answer suggested itself.

Q. (By Mr. RIPLEY.) I would like to ask whether there is any complaint about the regulations as to the style of package, as to the make-up of freight in these different classifications?—A. Yes.

Q. Has the Interstate Commerce Commission any power whatever to prescribe such regulations as those of which you speak? Has it any supervision over classification or the detailed regulations for shipment of freight, or in this matter are you entirely at the mercy of the railroad?—A. Entirely so. Referring to that style of package again. The Southern classification has a clause to this effect: "Property presented to carriers packed in so-called boxes or cases made from strawboard, leatherboard, wood-pulp fiber, wire-split wood, and other analogous material included in wooden frames, will be charged 10 per cent higher than the classification provided for such property in boxes or cases."

To illustrate that: A fiber box has a frame, or more correctly speaking, a crate, made of strips of wood to form the corners, and instead of wooden boards for the sides and bottom and ends and top, they use this fiber board which produces a case weighing very little, and which is quite strong and waterproof. Naturally it is light in weight, and being light in weight makes a shipment made in that style of case weigh less than one shipped in a wooden box. The railroad loses the freight on that extra weight, and in order to restrict the use of these fiber cases which are used by milliners and merchants who ship the finer styles of dry goods, they make this discrimination, and charge 10 per cent higher rate on all freight shipped in these boxes.

Q. Is there a similar complaint respecting discrimination as between barrels and boxes, or other arbitrary distinctions made by railroads against which the shippers have no remedy?—A. Yes; in hardware there are instances in which they charge a higher rate for goods packed in boxes than in barrels. The railroads explain that by claiming that the shippers will put goods in boxes—particularly hardware, and if it is a high class hardware they will call it low class hardware, and thereby get a lower rate of freight.

Q. The point I wish to bring out is simply this: Would the merchants welcome some extension of the powers of the Interstate Commerce Commission which would enable them to pass on the reasonableness of such regulations as these, or such regulations as those of which the ones you mention are typical?—A. Yes; it seems to us that, in the absence of the privilege of representation by shippers on these classification committees, there should be at least a power lodged somewhere that could take up questions of this nature, and determine what is reasonable and what is just. It is entirely optional with the railroads now, however strong or meritorious your case may be, whether they will pay any attention to it or not. Take this same southern classification committee. They have had arguments presented to them that we think ought to convince anybody, and they do not make any response.

So far as our views in relation to that question are concerned, I would like to read an extract from a statement I made at the commerce convention in St. Louis. We have taken this position, briefly stated: (1) "That the Interstate Commerce Commission should consist of at least 8 members, among whom shall be lawyers, railroad experts, and representatives of the shipping public; (2) that the commissioners should be appointed to hold office during good behavior, as in the case of the United States Supreme Court; (3) that common carriers should be given the right to enter into agreements, approved by the commission, in respect to interstate commerce only for the purpose of carrying into effect the provisions of the act." That was in connection with the effort that was made to pass what is known as Senate bill 1439, known as the Cullom bill.

Q. (By Mr. KENNEDY.) There is a probability that there will be such a community of ownership of railroads that there will be nobody to enter into an agreement—it will be all under one head?—A. Yes; that is a possibility.

Q. There would be no use for such a provision as the third one read, then. I want to ask you if your people have any complaints to make against the commodity rates of the railroads?—A. None of our members have as yet asked us to make any complaint. The commodity rates, I may say, are very low. I have never known of a case where it has been necessary to complain of them. At times they discontinue some of them, and you may then hear some complaints seeking their reestablishment. But, generally speaking, I am not familiar with any complaints made of commodity rates. I might add to that the statement that these commodities are, most of them, controlled by combinations—industrial or trade combinations.

Q. (By Mr. RIPLEY.) The whole question of classification of all the higher classes applies primarily to the small shipper?—A. Yes; the small shipper is the one who is suffering and the one who is being pinched by these advances in classification.

Q. (By Mr. A. L. HARRIS.) I have a few questions I would like to ask that have been partially covered. You stated this morning that the net receipts from the Southern territory had increased about 20 per cent, as I understood it?—A. Yes.

Q. Can you give the per cent of increase of net earnings in the Trunk Line territory?—A. I have that information [addressing Mr. A. L. Harris]. I will not be positive, but I think it is somewhere in the neighborhood of 30 per cent.

Q. Can you give it for the Western territory?—A. I have not as yet seen any figures on that.

Q. By this reclassification in the different territories, can you even approximate the increase in freight rates?—A. I covered that this morning, I think.

Q. In all the territory?—A. I think I gave the per cent in each.

Q. You gave the per cent of articles that were reclassified.—A. I will give that again for your information. The official classification committee on January 1, 1900, advanced in class 818 articles on the merchandise list, in which there are a few over 3,000. These advances, taking the scale of rates from New York to Chicago as a basis, I may say it is a physical impossibility to ascertain what the advance might

be from all points to all points upon all classes for all distances; so for that reason I have endeavored to get at it by selecting the New York-Chicago rate as a basis. The advance was 35.5 per cent.

Q. You have given that for each one of the 3 divisions that you named this morning?—A. Yes.

Q. Now that was done not by increased freight rates, but by change in classification?—A. By change in the classification entirely.

Q. Would there not have been more complaint made if they had allowed the classification to remain, and had changed the scale of rates?—A. I think not.

Q. There would have been no objection?—A. Not the same objection, because if you advance the scale you assess the advance on the entire value of the traffic moving; by the other method you can advance the rates on just a portion of the traffic. This method exempts the commodities from any advance, because the commodity rates are not covered by the classification at all; they are separate and distinct from the classification.

Q. Now you spoke of the Cullom bill, approving its general provisions. If the railroads agree upon a classification in these different territories, would there not be some protection in having somebody like the Interstate Commerce Commission authorized to approve that classification and not permitting it to be changed for a certain period of time?—A. Yes.

Q. Would that steady conditions to some extent?—A. It would.

Q. Can you see any objection to that on the part of the railroads after they have made their own classification?—A. I can not; no. In protesting before the official classification committee in January, 1900, I called their attention to the fact that their classification had been in existence then 13 years, from 1887 to 1900. It had been established by a committee of experts who naturally would be supposed to sift every item that was brought before them for classification, and I put it to them this way: "If you insist upon these advances, you must either admit that your experts did not know their business, or you must defend the charge of being arbitrary in your advance." Now, for 13 years practically the same men had handled classification matters for them, had adjusted all these matters. Then, all of a sudden, they reached the conclusion that everything they had done had been wrong, and they revised it in a wholesale way. We can not understand why it is that a classification after it is once established is not as permanent as any other standard of measurement. It is a standard of measurement after all.

Q. You spoke of the consolidation, of community of interest of railroads. Does that relieve the general public from the need of protection through some body like the Interstate Commerce Commission?—A. Not necessarily so.

Q. Would a body like the Interstate Commerce Commission, constituted as you have defined in your paper, be more or less needed as the railroads became consolidated?—A. I am inclined to believe it would be less needed in this way, that there would not be so many complaints, perhaps, but the complaints that were made would be just as important.

Q. Wherein would the general public be protected?—A. By this community of interest. They would be only protected by the elimination of competition, which I regard as a dangerous thing in transportation matters.

Q. The elimination of competition is dangerous?—A. No. I say competition itself in transportation matters is, to my mind, a dangerous thing. This community of interest would eliminate that competition by grouping the roads together, and practically making one family of them all.

Q. Are you of the opinion with the common carriers of the country that nobody should have any control over them?—A. No. I think they should have.

Q. As competition is being eliminated, does the importance of some controlling power become greater or less?—A. Well, I think the necessity for control would still be there. As I have stated, the Interstate Commerce Commission might not have so many complaints presented to them, but those they did have would be just as vital; and it is important that a supervising power should be lodged in somebody, not leaving it entirely to the railroads to exercise their own will.

Q. Is the existing power of the Interstate Commerce Commission satisfactory to the general shipper?—A. No. They do not seem to be able to enforce their orders.

Q. Why is it that they are not able to enforce their orders?—A. Well, there is a legal point involved there that I am not familiar with.

Q. Does the law give the power? Is it the fault of the Interstate Commerce Commission?—A. It is the fault of the law itself. The law is vague and indefinite.

Q. Has the Interstate Commerce Commission as much power now as it had when it was first organized?—A. I think not. I think the Supreme Court has curtailed its power to some extent.

Q. Is there any encouragement at the present time for the shipper who feels that he has been discriminated against or injured to file a complaint before the Interstate Commerce Commission?—A. No; not the slightest. They simply regard the Interstate Commerce Commission about the same way as you look upon a sifter—that

they sift these matters and arrive at certain conclusions, and that is all they can do. Their order practically amounts to a recommendation; that is as far as I can say.

Q. You would enlarge the members of the Interstate Commerce Commission so as to take in the various industries so that they would be able—A. (Interrupting.) We had thought that over and it seemed to us that if it was made too large they never would be able to accomplish much. There would be too many conflicting interests. For that reason we cut it down to 8 members—some lawyers, some railroad men, and some shippers.

Q. Would you compel the carrier complained of to come in and make his defense before the Interstate Commerce Commission?—A. I should think so. For instance, when they take an action similar to that taken by these classification committees I think they should be compelled to present some reasons and defend their course.

Q. What is the practice now with the carrier complained of? Does he make any defense before the Interstate Commerce Commission, as a rule?—A. Oh, yes; he is represented by counsel, and they plead, in a way, about the same as they do in the courts.

Q. Now, when a finding is made by the Interstate Commerce Commission, how soon is that executed?—A. That I can not answer. I do not remember as to whether the law is specific in that respect or not.

Q. Is it or is it not a fact that years frequently intervene before there is a final hearing and decree?—A. Yes; they have on their docket numerous cases that they have never reached as yet, and some of them have been pending for years.

Q. What effect does that have on the complainant? Is it any encouragement to him to pursue a line laid down by the interstate-commerce law?—A. Not the slightest.

Q. (By Mr. CLARKE.) Is the delay of which you complain regarded as the fault of the law or the fault of the commission?—A. I do not know that any fault in the law could keep them from rendering a decision.

Q. (By Mr. A. L. HARRIS.) Is the delay caused by the Interstate Commerce Commission or is it caused by the circuit court?—A. There may be various causes why they do not operate more quickly. Take, for instance, that transcontinental case which is before them, and has been before them for, I think, a year or two. That is a very much-involved subject. If the commission decides that the grounds taken by St. Louis and Chicago interests are good and sufficient, and decides in their favor, it would practically amount to a readjustment of rates almost the world over. Naturally, with a question like that before them they are excusable for being slow.

Q. Would you have a provision in the law to advance cases taken to the United States circuit court on the docket so they could be tried within a reasonable time?—A. Yes.

Q. Would you be willing to give to the Interstate Commerce Commission jurisdiction to permit their finding or judgment to go into effect at once, subject to appeal to the circuit court?—A. If it would be of interest, I have a statement here that covers a good many of these points, and if there is no objection I will read it.

Q. I would like to hear it, so far as I am concerned.—A. This was before the Interstate Commerce Law Convention, held at the Planters' Hotel, St. Louis, called for the purpose of taking action to secure the enactment of Senate bill 1439, known as the Cullom bill, which was on the calendar of the United States Senate at its last session.

(Reading:) "In representing The Merchants' Association of New York I desire to state that there are some matters connected with the measure now under consideration that we felt should be further discussed; or, to put it in another way, we think that the bill pending before Congress should be amended so as to embrace some features we have in mind.

"So far as the bill in its details is concerned, our association has already put itself on record before the Interstate Commerce Committee of the United States Senate. This position was set forth by me, under instructions from our officers, when I had the honor to appear before that committee last spring. It was then stated that we were convinced of the necessity of amending the 'Act to regulate commerce' in such manner as would remove defects therein which the test of 13 years' experience in the practical application of the present form of the law had developed. It still seems to us that the proposed measure, with the changes I am about to indicate, will effectively strengthen the weaknesses that have been made apparent. But, on the other hand, we are convinced that in the criticism that has been aroused against, and in the arguments that have been filed in opposition to, the adoption of the proposed measure as it now stands, there are some features which are of sufficient merit to indefinitely postpone its enactment, or possibly to accomplish its ultimate defeat.

"It will not be denied that the proposed amendment imposes upon the commission vast responsibilities and duties involving matters of grave importance, and in amending the law this should not, in our opinion, be lost sight of. In the judgment of those

I represent, the Interstate Commerce Commission should be removed from all suspicion of political influence, so far as that is possible, in its make-up and in its life, so that in the eyes of the public it may stand upon a plane similar to that occupied by the Supreme Court of the United States. If it is to make decisions on the intricate and far-reaching questions which are to come before it under the enlarged powers which it is proposed to give this commission in this bill, conservative people would feel far safer if they knew that the commission was removed from politics and all political influences.

"I do not mean to imply by this hint that the present body is susceptible to political influences, but in the very nature of things such influences are almost certain to have weight in the determination of questions, unless its members feel that they do not owe their existence or continuance in office to any political backing, or are to be plunged into the midst of political agitations for the purpose of holding themselves in power.

"In fact, I think we ought to go a step farther in amending this bill and provide that the number of commissioners shall be increased so as to include among them, first, men trained in railway freight management, and, second, men who are thoroughly familiar with commercial affairs, who could act as advisers in the practical and technical questions which are sure to come before them.

"The adjustment of rates in interstate commerce is a delicate task, involving intricate questions. While, undoubtedly, an administrative body of proper jurisdiction may determine principles which are supposed to underlie matters of this sort, yet, in deciding the proper application of those principles and the equitable-ness or reasonableness of rates under the complex conditions existing in this country, there ought to be among the members of that body those who have made a study of the subject in all its involved ramifications.

"I think you will find, as this question is agitated in the public press and elsewhere, that the principal opposition from conservative people, and the principal opposition as heretofore expressed by the representatives of the railroad corporations, against giving to the Interstate Commerce Commission the enlarged powers proposed in this bill arises from the fear that the questions of great import to be decided will be passed upon by men not trained to regard the subject from other than elementary, purely legal, or political standpoints.

"Briefly stated, we believe—

"1. That the Interstate Commerce Commission should consist of at least 8 members, among whom shall be lawyers, railroad experts, and representatives of the shipping public.

"2. That the commissioners should be appointed to hold office during good behavior, as in the case of the United States Supreme Court.

"3. That common carriers should be given the right to enter into agreements, approved by the commission, in respect to interstate commerce, only for the purpose of carrying into effect the provisions of the act.

"Our reasons for the first two propositions have been set forth above. With respect to the third, we may say that aside from the fact that it is our belief that no amendatory legislation can be passed unless this feature is included, we are convinced that the changes in business methods and conditions which have been wrought by the consolidation of industrial, manufacturing, and business interests make this privilege essential to the successful administration of the act. The foundation for this belief is the thought that powerful corporations which have in the past become accustomed to ignore the law when they felt that its strict observance by them was detrimental to their interests, will continue to find secret and illegal ways and means to compete for the large volume of traffic controlled by commercial combinations, notwithstanding the stringency of any laws that may be passed. Legalized right of contract among carriers will, we feel, minimize the incentive to practice illegal acts and bring to the aid of the commission, in the discharge of its important functions, that degree of cooperation on the part of railway managers that heretofore has been so necessary, but at the same time is so conspicuously absent. It also removes the objection that the proposed legislation is solely in the interest of shippers.

"By adopting these suggestions and making the changes in the bill outlined above, it seems to us that the principal points of the opposition heretofore strenuously made by the representatives of the railroad corporations to this measure, and the opposition in the minds of conservative people, now raised and which will be raised in the future by agitation on this subject in the press, will be eliminated. That, too, at no sacrifice whatever of the object which you are desirous of and striving to attain, namely, an equitable adjustment of maintained and reasonable rates throughout the United States.

"In conclusion, I am authorized to say that if it shall prove that the interstate-commerce law can not be amended in a manner that will assure its successful administration, we shall energetically labor for its repeal and a return to the condition existing prior to 1887, from which the entire subject can be opened up anew under the changed conditions now existing in the country.

"The law in its present form, as construed and applied, is a conspicuous failure. Ineffectual attempts to administer it result not only in the useless waste of at least \$250,000 public funds per annum, but it is continually used as a screen to conceal the very practices it was designed to prevent. It serves to operate as an inducement to secret bargains and agreements, and encourages a growing indifference to the majesty of the law, which the interests of the business public demand shall be checked. This can best be accomplished by wiping it out of existence."

Q. (By Mr. A. L. HARRIS.) One thing more: As the railroads become more and more consolidated, will not that to some extent simplify the objection to fixing rates by these large corporations to be approved by the Interstate Commerce Commission?—A. Yes.

Q. And in that way, at least, will aid in simplifying the work of the Interstate Commerce Commission, properly organized?—A. Undoubtedly.

Q. And will not the people be greatly protected, or feel, at least, that they are greatly protected, if the Interstate Commerce Commission is reorganized on the plan that you have outlined?—A. Yes.

Q. (By Mr. KENNEDY.) What do you mean by approving the rates? Do you mean that the Interstate Commerce Commission might not have such an intimate knowledge of the rate question as to be able to intelligently pass upon all the rates?—A. Yes; that is absolutely essential. The commission must have some knowledge of the subject, otherwise they can not say what is reasonable. A man must have some knowledge of a subject or he can not see a fact when it is right before him. This subject of classification is one of the most complex subjects that there is on the face of the earth to-day. It does not respond to logic or mathematics or any other treatment. It is a separate and distinct study.

Q. Do not some railroad people contend that it is impossible to set up a body of Government commissioners who can pass upon the rates, or practically make the rates?—A. Yes; and they are right in that.

Q. They are correct in that?—A. Yes.

Q. (By Mr. A. L. HARRIS.) But suppose the Interstate Commerce Commission has a life tenure or long tenure?—A. Take, for instance, the present commission. They have now had 13 years' experience. They ought to be educated up to the point where they are quite expert in these matters.

Q. (By Mr. KENNEDY.) Practical railroad?—A. No; not railroad, but the rate questions. I must say I sympathize with these people—these traffic managers. Anybody who has had any experience with the business knows just what a difficult undertaking it is to handle a railroad properly from the rate point of view. We do not take the position that all traffic managers are corrupt. Some of them mean to do just as correctly as may be possible, but it is quite often the case that their hands are tied. They can not do what they want to do and what they think is right, because of the existence of conditions over which they have no control whatever. Now, it is that training that the men should have who possess the rate-making power. There should be railroad men on the commission—not entirely railroad men, but enough there to assist the others in arriving at conclusions.

Q. I heard one railroad man say that there were hundreds of thousands of different rates, and it would defy any body of men to get together and be able to pass on that intelligently.—A. Yes; that is all true.

Q. Do you not think the better way would be to let the railroads make the rates and then let the Interstate Commerce Commission have the power to simply change them when they were found on complaint to be unjust?—A. That is practically the rate-making power. If you have the power to change the rate, it is practically the rate-making power. I would not want to have the power to make the rates taken entirely away from the railroad.

Q. (By Mr. A. L. HARRIS.) The Cullom bill does not provide that.—A. No.

Q. (By Mr. KENNEDY.) I suppose you know what a certain railroad president said in New York—that he would rather have a place on the Interstate Commerce Commission, if he was venal and inclined to make money, than to have a free license to loot the United States Treasury?—A. Well, he might with just as good grace have made the same remark of the Supreme Court. We have to trust somebody. I do not see why a man can not be just as honest on the Interstate Commerce Commission as he can sitting on the Supreme bench.

Q. (By Mr. CLARKE.) However great may be the intelligence or expert knowledge of the members of the commission, still you would not have them decide a question without hearing evidence, would you?—A. No.

Q. Then practically the commission becomes a judicial body, does it not?—A. Yes.

Q. You consider that the decisions of the Supreme Court of the United States on a question appealed to it from findings below should be respected, even though the members of that great tribunal may not be expert in their knowledge of the questions involved in the case; therefore, if the Interstate Commerce Commission have

the power to fix rates, is it not more important that it be composed of gentlemen of good judicial minds than of men who may have had some service as freight clerks?—A. Well, I think a judicious mixture of both is the proper thing. I would not question a decision or ruling of the Supreme Court on ordinary matters, but I do know that in this particular question it is hard to get at the facts and give them in such a way that they will be understood by a person who has not had actual contact and actual experience. For instance, I have frequently talked with gentlemen who were as brilliant and brainy as they could be on other subjects, and they would not understand what I was talking about at all.

Q. I have not yet heard you answer Governor Harris's question as to whether or not you would give the Interstate Commerce Commission power to fix rates, and have it provided by law that those rates should go into effect even though appealed from by the railways.—A. I do not know any other way than that of accomplishing the thing in view, which is that there must somewhere be lodged power to do the thing that you want to have done. Now, leave it the other way. If a commission appointed to take charge of matters of this kind and of this importance can only go up to a certain point, and when the time for action comes they can not go beyond that point, I do not see the use for their existence at all. If they can only recommend, they can not produce results.

Q. What is the universal effect of an appeal in law?—A. That I can not answer; I am not lawyer enough.

Q. Does it not vacate a judgment or suspend its operation until final judgment is given by the appellate tribunal? In practice, if a different rule were to be adopted, would not inextricable confusion result?—A. It might in other matters; but, as I have stated, I am not one of those who would like to see the power to make rates taken away from the railroads themselves; but there must be a governing body somewhere.

Q. If you give the Interstate Commerce Commission power to disapprove a rate agreed upon by the railroads, do you not thereby give them power to fix the rate?—A. That depends upon the strength of that disapproval—the conditions under which that power to approve or disapprove is given.

Q. You say you wish to increase their power?—A. Yes.

Q. If the railroads agree upon rates which are satisfactory to everybody, there is no need for the commission to have anything to do with it, is there?—A. That is true.

Q. Then your desire is to give them power to disapprove a rate and prevent it from going into operation, is it not?—A. Yes.

Q. In practice, therefore, would not that give them power to fix the rate?—A. It would be equivalent to the power to fix rates.

Q. Suppose they fixed a rate and the railroad people appealed, and then in 6 months the appellate tribunal reversed the decision of the Interstate Commerce Commission disestablishing that rate; then the railroad companies would have to make the rates themselves, would they not?—A. Yes.

Q. Would not the conferring of that power on the Interstate Commerce Commission result in very great confusion in rates and in the business of merchants with railroads?—A. You mean if the case was decided against the railroads and appealed by the railroads?

Q. Certainly.—A. The appeal, as I understand it, operates to set aside the decision. Would not that leave it on the basis upon which it began? Would not the rate complained of then be in effect just the same as if there had been no action brought before the commission?

Our reason for desiring to put more power in the hands of the commission is this: It is a well-known fact that if the railroad takes action they might carry that out as soon as possible. If a shipper feels himself aggrieved and presents the matter before the commission and secures a judgment, the next thing they can look for is an appeal by the railroad, and the railroad can afford to spend \$20,000 or \$30,000 for the cost of legal action, but there are not many shippers who can do that, and it is through abuse of those privileges that this question has been brought to the position it is now in. We had a case against the express companies. It cost us \$30,000 before we got through with it; it went right up to the Supreme Court.

Q. The point I wish you to be very clear upon is whether putting a decision of the Interstate Commerce Commission into immediate effect, notwithstanding it may be appealed from, would not induce great confusion?—A. Not necessarily so; no.

Q. Supposing the whole thing were reversed in a very short time—now, you have been pleading for steadiness of rates?—A. Yes.

Q. Would this induce steadiness?—A. I can't see why it would not. It is not fair to assume that a body as dignified as that is would trifle with a question and jump in and begin slashing right and left, simply because it had the power to do it. I do not think that is a reasonable expectation. They would be just as cautious as could be expected. I think that is one of the difficulties. It seems too often to be assumed

if you give a commission the power they seek they are immediately going to run away with it. I don't look for anything of that sort.

Q. Wholly irrespective of whether the commission will be better than the law, do you think it would be a wise law to authorize the immediate execution of a judgment which can be appealed from?—A. That is another legal question that I am not qualified to deal with.

(Testimony closed.)

SUPPLEMENTARY STATEMENT OF PROF. FRANK PARSONS,

President of the National Public Ownership League.

As the vice-president of the Western Union and the general manager of the New York Telephone Company have referred to parts of my testimony in criticism, questioned my sources of information in relation to two of the facts cited by me, and misunderstood my position in some respects, I trust it may be deemed proper for me to make some explanation and suggestive comment in the interests of thorough understanding.

Remarks were made by the general manager (somewhat modified in his revised testimony) tending to throw discredit on my sources of information in respect to two cases without inquiring what those sources were. In fact, they were of the highest character in both instances. I got the data relating to the Cooperative Telephone Company of Grand Rapids, Wis., from Mr. John A. Gaynor, the first president of the company, a man of excellent repute and thoroughly familiar with the facts. At the time of my testimony I held in my hand a letter from Mr. Gaynor, written a few days before, and from that letter I took the facts about lines, cost of construction and operation, net charges, etc., that I gave the commission. The facts about the Government telephones I obtained directly from the books of the Department by a personal visit to the Patent Office building in 1896. The general manager said he thought it perfectly safe to say that the expenses of a man to attend to the maintenance of the plant were not included in the \$10.25 total cost per phone. The fact is, however, that one of the items in the Government account was \$300 a year for the services of an expert electrician under contract to attend to the maintenance of the plant, which duty took only a part of his time. The general manager's statement as to the use I made of the Government data is also incorrect, as may be seen by examining my testimony. I used the data to show that the Bell Company was wrong in that case in its refusal to reduce rates, wherefore it may be mistaken in other cases as to the practicability of low rates. At the time of my testimony I did not know that the Department exchange had been given up, but on inquiry I find that it has; that the installation was not satisfactory (a thing that has happened many times in private systems also), that a wider service was needed, and that the Bell folks withdrew their refusal to make reasonable rates to the Department and now supply such wider service, long-distance facilities, and all, at rates that come down close to the cost under the Department system with its comparatively narrow service—all the way down, perhaps, considering the additional facilities now enjoyed.

The statement I made about the wages of telephone girls related to the general situation in this country, and is not met by a comparison of foreign wages with those in New York City, one of the highest wage centers in the United States. I am informed on high authority (that of a leading telephone official) that in the smaller places the companies pay many of their telephone girls only \$10 and \$12 a month, \$16 being considered good pay. Compare what the general manager says about wages of telephone operators in France and Switzerland.

My position on the flat-rate question was misunderstood. I believe in the measured service plan for large places, but think the double flat rate (residence and business) simpler and better for small exchanges. If the message charge is carried too far it limits communication where no end is gained by the limitation, as well as where limitation is useful.

The general manager's data of telephone development are of great interest, but the comparisons made do not have the bearing impliedly given them in reference to the influence of public and private ownership on telephone development, because of the mixture of other causes, and because of the selection of American cities entirely from the list of those most highly developed. That New York City has 26 telephones per 1,000 people while Paris has 13 per 1,000 proves nothing as to public ownership, because there is even a greater difference in favor of New York in respect to transit and other interests which are private in both cities. Moreover, the heart of New York (Manhattan and Bronx) is selected for comparison with Paris instead of taking the whole city, Greater New York. It would be fairer to compare London's 7 telephones per 1,000 people, under private ownership, with the 13 per 1,000 in the public

system of Paris, for general conditions are more similar in London and Paris than in New York and Paris. It should be noted also that the 7 per 1,000 of the private system in London, and the low development in Warsaw and Moscow and other half civilized places are among the principal factors in pulling down the average of the European cities dealt with by Mr. Bethell. Instead of comparing the 26 telephones per 1,000 of population in the heart of New York with the 25 per 1,000 in the whole of Berlin, why not compare Greater New York's 20 per 1,000, or Brooklyn's 11 per 1,000, or Philadelphia's 16 telephones per 1,000, or St. Louis's 17, or Washington's 14 per 1,000 with Berlin's 25 per 1,000? With smaller places, Larchmont's 180 phones per 1,000 people is contrasted with Trondhjem's 38 per 1,000, but it is not explained that Larchmont is a gilt-edged residence town filled with wealthy New Yorkers, while Trondhjem is a city of more than 30,000 with the various classes of people in ordinary proportions. It would be fairer to contrast the 6 telephones per 1,000 in the Bell system in Chester, Pa. (34,000 population), or the 10 per 1,000 in Camden, or the 19 per 1,000 in Trenton, N. J., or the 14 per 1,000 in Wilmington, Del.

If a city of low general condition shows a higher telephone development than another city that is in general more civilized and progressive, then some valid inference may be drawn as to the effect of differences in rates and management. But if the more civilized and progressive city has the higher telephone development, that is what might be expected even in spite of overcharges. The truest comparison is between public and private ownership in the same place, and Mr. Bethell's statements about Stockholm¹ and the movement from private to public telephone systems in Amsterdam, Denmark, Sweden, Austria, Switzerland, France, and England are of the deepest moment.

In view of the importance of the subject of telephone development, and the fact that the true test of it is not the phonage of a few of the most progressive cities but the average development throughout the country, I have drawn up a comparison which includes a number of other places besides those mentioned by Mr. Bethell. It would be desirable if still more numerous comparisons might be made, and the data for 1880 included as well as those for 1900.

	Population, 1900.	Rates.	Telephones per 1,000 inhabit- ants, Jan., 1901.
New York City (proper)	2,050,000	\$60 to \$240	26
Berlin*	1,884,000	16 to 45	25+
Paris*	2,540,000	80 (60 new).	13
London	5,631,000	60 and 100	7
Manchester, England	544,902		19.6
Amsterdam,* Holland	513,000	\$36 and \$46	8.7
Boston	560,000		42.3
Vienna,* Austria	1,635,000	\$40	8
Budapest,* Hungary	729,000		8—
Brussels,* Belgium	560,000	\$50 and \$70	8+
Antwerp,* Belgium	278,000	50 and 70	10
Zurich,* Switzerland	152,000	10 to 160	40
Louisville, Ky	204,000		25
Trondhjem,* Norway	30,000	\$8 to \$16‡	38
Copenhagen, Denmark	312,859	27 and 48	49
San Francisco	342,782		62
Stockholm,* Sweden	320,000	\$13 to \$27	69

* The places marked with a star have public systems, Stockholm having also a private company in competition with the Government exchange.

The data down to and including Larchmont are simply a tabulation of the principal facts given in the general manager's testimony, except the rates in Trondhjem and the population of Berlin, which he did not state, merely saying that it was about the same as New York. The exact figures, however, for 1900, as given in the Statesman's Year Book, show a difference of 166,600. The last 5 ratios of the table are probably too high, since the telephone stations are taken from the June book, 1901, while the population data are from the census a year before. The difference in most cases is only 6 months, as in Mr. Bethell's data.

¹ When the Government entered the field in Stockholm, Mr. Cederger, manager of the private company, had 5,000 subscribers, and was running along with single overhead wires. The Government started by bringing rates down from \$22 and \$28 to \$16.50 and \$22, putting in metallic wires against single wires, underground against overhead wherever possible, direct connection with long-distance trunks, and free connection with all places within a radius of 43 miles. The company met the competition nobly, gave free service within 43 miles, put in metallic circuits, so that in 1894 there was not a single wire circuit left in Stockholm; and, with the aid of their big start of 5,000 subscribers, the genius of Mr. Cederger, one of the leading telephonists of Europe, the wealth of the owner who could get along whether he got any profit or not, and the aid of the municipality, which took sides with the company against the State, the private exchange has been able to keep ahead of the Government exchange in its membership; but it is clear that the impulse for development came from the Government and not from the company, as Mr. Bethell indicates. (See pp. 335-336, Telephone Systems of the Continent, by A. R. Bennett, a leading English expert and former general manager of the Mutual Telephone Company, of Manchester, England.)

	Population. 1900.	Rates.	Telephones per 1,000 inhabit- ants, Jan., 1901.
Larchmont			180
Chester, Pa.	34,000		8 +
Philadelphia	1,293,697		16
Washington	278,718		14
Wilmington	76,500		14 +
Trenton	73,300		19 +
Camden	76,000		10
Newark	216,000	\$60 to \$150	17
Providence	175,597	78 to 120	38
Rochester*	162,600	36 to 48	25
Indianapolis*	170,000	24 to 42	47
St. Louis*	575,200	36 to 60	17
Toledo	131,627	54 to 72	24
Detroit	285,700	24 to 72	24
Buffalo	352,380	36 up.	17.7
Springfield, Mass.	62,500	72 to 93	41
Baltimore (2 companies)	500,000	60 to 125 ↑ 36 to 48	16
Cincinnati	325,900	60 to 150	36
Harrisburg	50,000	48 to 80	22
Greater New York	3,437,000		20
Brooklyn	1,166,582		11
Richmond Borough	67,021		18
New Brunswick	20,000		22
Jersey City	206,000		10

* Means independent company with a Bell Company also in the field. All the telephone stations of both companies are included in estimating the number of telephones per 1,000 of population, but the rates given are those of the independent companies, as the lower rate schedule ought to govern development where it has once secured a strong exchange.

It is clear, even from this little table, that other causes than the system of ownership are vigorously at work. The variations between 6 telephones per 1,000 of population in Chester and 7 in London to 62 in San Francisco and 180 in Larchmont, all under private ownership, are much greater than the difference between the public group and the private group.

On page 801 of his revised testimony Mr. Bethell says: "January 1, 1901, London, with a population of 5,633,000, had 41,111 telephones; that is, 7 per thousand. * * * Among European cities of its class London's development is exceeded only by that of Berlin." This is clearly incorrect, for, on the general manager's own data, London has less development than Vienna and only about half that of Paris. In fact the private system in London has a lower development than any public system in any city of its class (over 1,000,000) for which Mr. Bethell presents the figures—a lower development than any system, public or private, in any civilized city of 500,000 or more for which I have the data.

I have taken Mr. Bethell's estimate of "54,647 stations" for New York (Manhattan and Bronx), or "26 per thousand;" have used that estimate also in figuring the telephone development of Greater New York, and have shown that Mr. Bethell's case is not good, even on his own data. It must be noted, however, that these figures and Mr. Bethell's estimate of \$85 as the average rate are not the fair data for New York in comparing it with European cities, for the reason that these data are based on figures which include the telephones in the private branch exchanges in New York. Most of these private telephones are for communication between different parts of the same establishment, and are used little or none in connection with the city telephone system. These branch phones are very numerous in New York, but are not much in use in European cities. The number of stations in New York exceeds the number of lines connecting such stations by about 42 per cent, while in European cities the number of stations substantially represents the number of lines in connection with the city exchanges. The number of lines in New York January 1, 1901, was about 31,750, or 15 to 16 per thousand of population. President Thomas, of the Independent Telephone Association of the United States, to whom I am indebted for these facts, tells me that 15 telephones per thousand is about the fair figure for New York in comparison with Berlin's 25 per thousand. Some of the branch phones, however, are used in connection with the city exchanges, and New York, moreover, is entitled to some credit even for private phones; wherefore I think the fairest comparison probably lies between Mr. Bethell's figures and those of President Thomas—18 or 20 per thousand for New York, perhaps, and 16 for Greater New York. Similar considerations apply to Mr. Bethell's comparisons of European cities with Boston, San Francisco, etc.

The \$85 average rate is the average for all the stations, including the private branch phones, for many of which the company receives only \$8 and \$12 a year, as Mr. Bethell has himself informed us, while the European rates with which it is contrasted are rates for direct-line service. President Thomas says that the average rate in New York, on the basis of direct service, is \$183. "From the records of the New York Telephone Company (Mr. Bethell's company), we find that the average number of calls per subscriber's line per day is 10.6. Assuming that the average user has 10 calls for each working day, he will use 3,000 calls per year, the rate for which, according to the schedule of the New Telephone Company, direct-line basis, is \$183 per year."

Mr. Clark began with a statement which shows an entire misapprehension of my testimony. He says the evidence given the commission in favor of the public ownership of the telegraph was chiefly based on the conditions of the telegraph in Great Britain, Switzerland, and Belgium, and proceeds to point out the disparity of conditions as to population, wires, wages, distances, etc. In fact, however, the said evidence was chiefly based on the broad principle that the fundamental test of any system is its effect on character, justice, government, civilization—the human effects being far more important than any material considerations—and upon the broad facts: (1) That a normal public plant aims at service and benefit for all, while a private monopoly aims at dividends or profit for a few; (2) that public ownership tends to superior harmony of interest and fuller cooperation, removing the vital antagonism of interest that private monopoly creates between the owners and the public and transferring the interest of wealthy and influential men to the side of good government and honest administration; (3) that private monopoly means congestion of power and benefit, while public ownership favors diffusion of power and wealth and service; (4) that private monopoly means taxation without representation, with power to make and unmake the fortunes of individuals, cities, States, and nations—sovereign power in private hands; (5) that in the same country, and under similar conditions, otherwise than as to ownership, the change from private to public ownership has resulted in superior service, lower rates, better treatment of employees, less corruption of government, improved citizenship, nobler manhood, and higher civilization; (6) that the movement of civilization is toward the public ownership of monopolies, etc., facts entirely independent of the "disparity of conditions" in wages, wires, offices, rates, distances, etc., to which Mr. Clark directs attention.¹ These material elements are of much importance and furnish, I believe, strong evidence for public ownership, but not the chief evidence. The philosophy of public ownership and cooperative industry rests primarily on considerations entirely above the material plane and wholly out of range of these statistics of dollars and wires and offices and telephones—as far out of range as good government, public spirit, partnership, and brotherly love are out of range of the stock exchange.

As to the data of miles and wires, etc., 1 mile of wire to 76 people in the United States against 1 mile to 130 people in Great Britain proves nothing except the relative sparsity of population in the United States, even if we take no note of the evidence that the wire mileage tabulated by the Western Union includes all the old rattletrap and worthless lines that were bought up solely to get rid of rival companies and that were built solely to be bought up.²

The vice-president's statement relating to offices—76,000 post-offices and 39,000 places reached by the telegraph companies and their telephonic connections in the United States, against 40,000 (estimated) post-offices and 10,816 telegraph offices in Great Britain—shows the telegraph reaching 50 per cent of the post-offices here and 25 per cent in Great Britain, as Mr. Clark says. I suggest, however, that the statement is invalid: (1) Because the witness's own Exhibit B shows that only 29,000 places are reached by telegraph and telephone, 39,000 being there given as the total number of telegraph and telephone distributing offices in the country; (2) because

¹ Mr. Clark did not touch these fundamentals except where, in answer to questions after he had finished what he wished to say, he denied that the Western Union's distribution of franks is intended to influence legislators, etc., and where he answered "No" to the question whether or not he approved of the principle (adopted in Europe, Australia, and New Zealand) of administering the telegraph to secure the greatest public service, rather than for profit, expressing personal dissent from a principle, which, if admitted, establishes the case for public ownership and cooperation, since philanthropy is not practicable as a general business foundation, and public ownership or cooperation are the only other things that can make it an aim to forego profit and so extend the service to its widest limits. Private monopoly must say "No" to the greatest service principle, for profit is an essential condition of its continued existence, and profit is inconsistent with greatest service, for without the profit rates could be lower and service greater.

² See Senate Doc. No. 65, Fifty-sixth Congress, first session, p. 30; Blair (Senate Committee on Education and Labor) Report on Labor and Capital, 1883, Vol. II, p. 1277; Bingham Hearings on Wamaker Bill of 1890 (House Committee on the Post-Office), p. 76, and House Report 114, Forty-first Congress, second session, p. 85, giving the statement of G. S. Thompson, a prominent telegraph builder of New York, in which he says, "It must be remembered that the estimate (in its report) of the quantity of lines owned by the Western Union has been predicated upon a computation made by simply adding together all lines that have come into its possession. Many of these wires have now ceased to exist, and others that are still standing are not in operation."

the number given for the British telegraph offices is the figure for more than 2 years ago, while the other factors in the comparison are brought down to date; (3) because the British post offices are overestimated. The 1898 report gives the number of post-offices as 21,197 and the telegraph offices 10,483; (4) because telephone connections are included in the American figures and not in the English; (5) because about three-fourths of the Western Union offices are railway offices if the same ratio holds as a few years ago,¹ while less than one-fourth of the British offices are railway offices; (6) because there is no mention of the fact that in Great Britain every post-office and every post-box is a place of deposit for telegrams. Lastly, the figures, even if correct, would only show that Great Britain had a much greater relative development of post-offices than we have. The implication that the telegraph development in Great Britain is relatively less than in this country is wholly unwarranted, even on the figures as they stand, since 10,816 offices is a more extensive service for the United Kingdom, with 120,973 square miles, than 39,000 for the United States, with thirty times the area.

Later in his testimony, the vice-president says: "If you are going to extend the telegraph . . . as was done in Great Britain, to carry it to every hamlet," thus admitting that the development of the telegraph in Great Britain is greater than it was in England under private ownership. Afterwards he says he thinks "it was the policy of extending the telegraph to unprofitable places that caused the deficiency."

I suggest that the vice-president's comparisons of American rates from New York with European rates from London are invalid. (1) Because the American rates are internal, while the European are international, the messages passing through 2, 3, and 4 countries, each of which adds its tariff; (2) because the American rates are land rates, while each of the European routes includes the cable from England to the Continent, and, as Mr. Clark admits, in answer to a question later in his testimony, the cable service is "infinitely" more costly than the land service.

I suggest further that all his rate comparisons are vitiated by his assumption of 11 words as the average of address and signature, making 21 words to the ordinary message as a basis of comparison. In the first place, the addition of 11 words as the average for address and signature is not justified by experience, or by Western Union testimony in the past. President Green, of the Western Union, some years ago placed the average number of words in address and signature at 7 per message.² In the second place, even if the average ordinary message here were 21 words, the comparison would not fairly present the situation, for, whatever may be the case here, it is perfectly certain that the average message in England is not 21 words, but about 15 words.

The vital matters are the minimum rates at which messages can be sent, and the actual average charge, for these are the things that in connection with the extension of facilities really govern the use of the telegraph, and give the English people about double the per capita use of the wires that we attain. A few words more or less to the message is of comparatively little consequence, but the ordinary minimum rate at which any message may be sent determines the strata of the population that can afford to use the telegraph and the frequency of its use by the whole middle class. The internal rate in Great Britain is 12 cents; that is, a message from any point in Great Britain to any other point in Great Britain may be sent for 12 cents. From a point in Massachusetts to another point in Massachusetts the ordinary rate is 25 cents. In New York State the internal rate is 25 cents; in Connecticut, 25 cents; in New Jersey, 25 cents, etc. The average charge for all messages in Great Britain is about 15 cents, against 31 cents in the United States. By Mr. Clark's admission 3 cents a message added in Great Britain would pay for all extensions and cover the interest charges on a debt overloaded by the purchase of the lines at about 4 times their value.³ By Western Union data less than 3 cents of the 21 is due to distance,⁴ and the evidence does not favor the idea that our telegraph runs up its expenses by paying high wages.⁵ If, then, the 31-cent charge is not due to

¹ Bingham committee, hearing of Mr. Thurber, testimony of Mr. Winan, a director of the Western Union, p. 22. (See, to same effect, testimony of President Green, Blair committee, Vol. I, p. 881.)

² See Senate Doc. 65, Fifty-sixth Congress, first session, p. 14.

³ The Telegraph Monopoly (Equity Series, 1520 Chestnut street, Philadelphia), p. 145.

⁴ Senate Doc. 35, Fifty-third Congress, first session, p. 16, n. 1, and p. 83, n. 3.

⁵ According to the Tenth Census, volume 4, the average telegraph salary in the United States for 1872 was \$360, against \$288 in Europe, and in 1880 the average telegraph salary was \$327 in the United States and \$320 in Europe, showing a large increase in Europe and a fall in the United States. In view of the facts that further reductions were made in the United States, causing the great telegraph strike of 1883, that the company won the strike and have continued their policy of wage reduction (Senate Doc. 65, Fifty-sixth Congress, first session, pp. 38, 39, and authorities there cited), that English wages are above the general European level, and that the British reports show a rise of telegraph wages from 55 per cent of the total expenditures in 1881 to 65 per cent in 1895 (the last report I have in which I find this item dealt with), and from 44 per cent of telegraph receipts in 1880 to 67 per cent in 1899, while since 1881 the hours have been reduced in England from 56 per week to 48 day and 42 night. In view of all these facts it seems clear that the average telegraph wage is higher now in Great Britain than in the United States, this roundabout method being the only one available since the average telegraph wage in this country is not attainable.

distance or wages, and the efficiency of labor is greater in the Western Union system than in the English—more messages per employee here!—then, what is the reason for the 25-cent minimum and the 31-cent average?

The vice-president says that the Baltimore and Ohio telegraph (which maintained a 10-cent rate on 19 long routes and other low rates averaging 16½ cents a message on the whole system) became bankrupt in consequence of its low tariff. But Mr. D. H. Bates who was manager of the Baltimore and Ohio telegraph system, testified at the Bingham hearings,² that the Baltimore and Ohio made a profit in spite of its low rates, and that the Western Union succeeded in buying up the Baltimore and Ohio lines, not because they proved unprofitable, but because disaster overtook the road in other departments, and it sold its telegraph business as the most available source of realizing the funds necessary to right itself.

Speaking of the charge that inventions have been suppressed by the Western Union, the vice-president says: "If the person or persons who make that charge will kindly name the apparatus I should be very glad to know it." The gentleman will find a list of inventions on pages 144-146 of Wanamaker's Argument on the Postal Telegraph, 1890, in respect to which the Postmaster-General said (p. 11): "I have had enumerated, perhaps, a score of devices already patented for the purpose of cheapening and quickening the telegraph service, which find no use and no profit under the present condition. I am not an expert in electrical matters, but I know that all of these inventions can not be wholly bad. I am sure that many of them are good, but they can not be got into operation with the field monopolized. The public can not have the benefit of this rare class of American brains, nor can the inventors find a deserved remuneration for their work. The Western Union Company, having the control of the telegraph business, has no use for devices which cheapen and quicken the telegraph service and warrant a claim for reduction of rates. The public, not knowing what it misses, can not become aroused to the defects in methods now in vogue. If once a break is made in this rampart of telegraph monopoly, not only will the men and women who build and use the telegraph wires find a better market for their fidelity and skill, but inventors, knowing that their cases are to be tried before an impartial court, will also find a spur to better efforts."

The statement about the potential pressure for the withdrawal of the postal telegraph bill of 1890 made to me by Mr. Wanamaker, in the presence of several others, is said by the vice-president to be without justification. Mr. Wanamaker's high honor and excellent judgment make me feel otherwise, but I suggest that the correctness of Mr. Wanamaker's information is not incompatible with Mr. Clark's belief in the matter. The witness does not seem familiar with this side of the company's affairs. He even says that the giving of telegraph franks is entirely a personal courtesy, and that the company does not expect any favors, nor get any. But the president of the Western Union, in his report some years ago, said that the judicious use of complimentary franks among Government officials had been the means of saving the company many times the money value of the free service performed.³ It is admitted that the franks are still given to the same class of beneficiaries, and I submit that the purpose and results are probably similar to what they were when the above confession appeared.

The vice-president gives a table of the deficits in England footing up \$37,600,000, but the estimates of deficiency are made by including the cost of new construction, extensions, and improvements every year in the expenses to be subtracted from income, whereas they belong in the capital account and are so included by the vice-president in another part of his testimony, making them do duty on the deficit and on the capitalization also. Suppose a manufacturer operates at a cost of \$50,000 and sells his product for \$60,000 and builds a new mill costing \$15,000, has he made a profit of \$10,000, having cleared that amount above expenses of operation and maintenance, or has he made a deficit on the year's business by building the new mill? It seems clear that he has made a profit. The cost of the mill belongs in the capital account, and he has the mill to show for the expenditure. The difference caused by the wrong use of construction cost is very great, turning a small deficit into a big one, and in some years changing a profit into a deficit. For example, in 1880, the vice-president's statement gives a deficit of £29,909, whereas there was a profit of £7,187 above all cost of operation and maintenance and interest on the debt.

¹ Senate Doc. 65, Fifty-sixth Congress, first session, pp. 18, 19, n. 3, giving the facts from the Tenth Census.

² House Committee on Post-Office, hearings in reference to the Wanamaker bill, 1890. The following are examples of the Baltimore and Ohio tariff: New York to Portland, Me., and intermediate points, 10 cents; New York to Philadelphia, Baltimore, and Washington, 10 cents; New York to Chicago, 15 cents; New York to St. Louis, 20 cents; to New Orleans, 50 cents; to Galveston, Tex., 75 cents. The average charge on all messages was 16½ cents (Bingham Hearings, pp. 21, 62, 76, and Senate Doc. 65, Fifty-sixth Congress, first session, p. 21).

³ See full citation, verbatim, and references, in my testimony.

Here are some other instances of the same sort, taking my figures from Mr. Morley's returns to the House of Commons:

	Deficit by vice-presi- dent's state- ment.	Profits by re- turns to Commons, putting new construction in the capital account.
1881.....	£264	£125, 048
1882.....	112, 524	31, 442
1883.....	142, 234	36, 611
1884.....	346, 114	4, 418

The postal statements put the deficit sufficiently high without magnifying it. The Government believes the country gets more than a full return for the deficit in the development of business, etc., through low telegraph rates, while experts say that if a fair division of expenses were made between the mail and the telegraph there would be no deficit at all—a 2 per cent change in the line of division would do it. If the telegraph had remained in private hands the service would have cost the people many millions more than the total governmental cost, deficit and all.

The English deficit is no argument against public ownership of the telegraph, any more than the postal deficit here is an argument against public ownership of the post, or the political condition of Philadelphia or New York is an argument against government by the people. There are plenty of countries that do not make any such deficit with the telegraph, and we can follow their example until it is deemed wise to throw the electric wires open to public use, just as the roads are now, the whole cost of which is a deficit, but a most beneficial one, which brings me to my last point in this connection, viz, that a deficit is not necessarily a bad thing—it depends on what you have to show for it.

The vice-president states the Western Union stock and bond capitalization at \$645 per mile of line and \$130 (\$129.80) per mile of wire, and compares it with the British capitalization, which he estimates at \$1,530 per mile of line and \$216 per mile of wire, by adding to the outstanding capital debt the whole cost of extensions and improvements from the start (although these were included in current expenses in an earlier part of his testimony dealing with the English deficit) and making no allowance for depreciation. "Men may come, and men may go, but I go on forever," is the song of capital when a monopolistic corporation writes the music. Private monopoly does not believe in burying its dead capital, but keeps it on the register as a basis for taxation, not of itself, but of the people. Monopoly's census of capital includes as present population all the inhabitants who have ever lived in the building since it was put up. Besides this gratuitous inflation of the British capital, by applying corporation methods to its estimate, it is well known that England paid the companies at least four times the value of the lines, and probably five or six times their value. I suggest that it would be better to take for comparison the capitalization in some country that has not made such a dropsical purchase—France, or Belgium, or Germany, making due allowance of course for difference of wages, etc. Better still, to compare the \$645 a mile with the cost of construction in this country,¹ or with the Western Union's claim in recent tax litigation in Ohio, that its whole property in that State did not cost over \$103 per mile of line.²

¹ Western Union reports show cost of construction varying from \$75 to \$100 per mile of line and \$21 to \$70 per mile of wire, on an average for large blocks. For the year ending June 30, 1894, President Eckert reported the construction of 1,300 miles of new poles and 22,000 miles of new wire, one-half of it copper, at a total cost of \$557,021, or \$21 a mile of wire. In the report of October, 1895, President Eckert says that \$574,639 was spent during the year in putting up 15,784 miles of new wire, two-thirds of it copper, and part of it on new poles (817 miles)—about \$76 per mile of single line and \$36 per mile of wire. Colm Fox, a Western Union builder, testified that he had built lines for the company from 1868 to 1876, constructing 500 to 800 miles of poles in Michigan (some of it 2 or 3 wire, but generally 1-wire line) at a cost of \$75 a mile and \$30 a mile of additional wire. (Senate Report 577, Forty-eighth Congress, first session, p. 6.) In 1884, Dr. Green, president of the Western Union, testified that the average cost of the Western Union lines was about \$45 (*Ibid.*, part 2, p. 227.) During the year ending June 30, 1895, 2,584 miles of poles and 20,370 miles of wire that constituted the American Rapid Telegraph Company has been bought by the Western Union for \$550,000 in its stock at par, or \$27 a mile of wire (Western Union Reports 1894, 1895, and United States Statistical Abstract for 1894, p. 363.) The actual market value of the stock payment was \$22 a mile, and the Rapid lines were among the very newest and best the Western Union has ever bought.

See further Senate Document 65, Fifty-sixth Congress, first session, pages 27-30, where many data on construction cost are collected from various sources—public, private, domestic, and foreign—al- tending to confirm the drift of the figures given above.

² Western Union Telegraph Company v. Auditor of Ohio, 61 Fed. Rep., 447; State v. Jones, 51 Ohio St., 492; 165 U. S., 194, Feb. 1, 1897; and see 64 Fed. Rep., 9, reversing the decision of 61 Fed. Rep., and holding the Ohio law constitutional, the State supreme court in 51 Ohio, and the United States Supreme Court in 165 U. S., having sustained the validity of the statute.

Even this contrast probably does not show the real inflation in Western Union capital, for the vice-president took the whole mileage of poles and wire reported by the company, which, as we have seen there is reason to believe is the sum of all the lines bought and built from the start, many of them now in the junk heap. Allowance for this would make the divisor smaller and the quotient larger.

The vice-president says that the "capital of the Western Union Company has resulted from the amalgamation of a large number of telegraph companies from the beginning," and every business man knows that when companies amalgamate the resulting capital is usually a good deal more than the sum of the former separate capitals. What the people want to know in this connection is the relation between capitalization and the real value of the plant. The practice of heavily capitalizing franchises given by State and city, thereby compelling the people to pay dividends on legislation and interest on abstract privilege, is a very questionable practice. Labor and capital actually invested are the only things that ought to draw income. It is so with the ordinary merchant and manufacturer, and it ought to be so with a telegraph company. The merchant can not make the people pay interest on a blue book, or on dead capital; neither should a carrier. Equal rights to all. Fair exchange, service for service. No charge for wind, and no tax on the dead.

I solemnly swear that the matters in the above statement made by me of my own knowledge are true, and that all other matters contained therein I believe to be true.

FRANK PARSONS.

Subscribed to and sworn before me this 6th day of August, 1901.

[SEAL.]

MAUD M. CRANE,
Notary Public.

STATEMENT OF ROMYN HITCHCOCK,

Consulting Chemist and Technologist, New York City.

Arguments in favor of Government ownership of the telegraph have been ably presented before this commission and from time to time before other committees of Congress appointed to investigate the subject. The general and specific facts concerning the telegraph business in this country and abroad have been set forth in detail by different authorities before such investigating committees. There is no reason why any person of an inquiring disposition should be deceived by ambiguous or erroneous declarations concerning matters of fact in the telegraph business.

Objections to Government ownership and management of the telegraph, based upon considerations of political patronage and abuses, have been repeatedly put forward, but they are more theoretical than real. If the people want Government ownership they will also demand efficient and economical management. This can not be had if political influence controls the selection or discharge of employees. The operation of the telegraph is a technical service and employees should work their own advancement. Civil-service rules should be applied rigidly; promotions should depend upon efficiency and skill and the results of special examinations, with no discharges except for cause. Life positions and a pension system should be the reward of faithful service.

But it is unprofitable to spend time over matters already well thrashed out. What the people desire they should have. It is the duty of the Government, imposed by the Constitution, to utilize the best available means for the transmission of correspondence. It is unconstitutional for the telegraph, which should be a part of the postal system, to be operated as a private monopoly. Among the more important nations, the United States stands alone for its shameful neglect in the matter of telegraph communication. This condition is anomalous. The most active and progressive people on earth are unable to enjoy the telegraph as a public utility. Yet the popular demand for it, expressed in many ways, is indisputable. Doubtless on no other single question are the people so united. More than 75 bills have been before Congress advocating a postal telegraph. Sixteen investigating committees have reported in its favor. Of 75 countries the telegraph is owned and operated by the respective governments in all except Bolivia, Cuba, Cyprus, Hawaii, Honduras, and the United States.

The following organizations and many others have expressly favored a postal telegraph system:

The Farmers' Alliance, the National Grange, the Knights of Labor, the Railway Union, the American Federation of Labor, the International Typographical Union, the People's Party, the Prohibitionists, many boards of trade and commercial bodies. More than 2,000,000 votes have been cast for it.

Mr. Wanamaker declared in 1890 that the only visible opponent was the Western Union Telegraph Company.

Testimony has been given before this commission relative to discriminating freight rates on railroads and the demoralizing effects resulting therefrom. These things are only too familiar to students of economic conditions, but few people know that similar conditions have prevailed in the telegraph in regard to the distribution of news. Mr. S. H. Bell, representing the Typographical Union, used these words before the Senate Committee on Post-Offices and Post-Roads:

"Mr. Chairman, the news of this country is controlled by two great press associations, and in any place in which either has a footing no new journal can be established and secure a telegraphic news service except on such terms as may be prescribed by the paper or papers which already occupy the field. In England, on the contrary, all papers are on an equal footing; that is to say, all may receive the dispatches on payment of the charges of the news-gathering agencies and those of the Government for the transmission of the same. We believe that under governmental operation a similar condition would soon prevail here, which would be of untold benefit to all connected with the newspaper industry."

A great part of the testimony given at various times deals with comparisons. The experience of Great Britain and the continental countries, the reductions of rates invariably accompanying changes from private to public ownership, evidence that cheap rates enormously increase the use of the telegraph—all these facts have been admirably brought out. But the testimony has dealt almost exclusively with the telegraph as it has been and is. The time has come when we should seriously inquire whether the methods of the past, although they still prevail, are the best; whether there have not been improvements in telegraphy as in other arts, or if in this alone there has been stagnation for a generation.

Improvements have been made in the telegraph, but the great monopoly which controls it has opposed changes. The logical result has been realized—that we have in the United States the poorest, most inefficient, slowest, most antiquated and expensive telegraph service in the world. It is conducted on the basis of small business at high prices, regardless of the obvious teachings of experience that the opposite policy is the wiser and also, when largely developed, the most profitable.

To offset this humiliation, due to ignoble and shortsighted financiering, I propose to advocate before this commission the introduction of an American invention which represents the highest achievement in telegraphy as a foundation upon which to establish a Government postal telegraph service which shall be superior to any the world has known. This invention far outranks its nearest rival, the great Wheatstone apparatus. It is an invention not to be superseded, because it attains the limit of the working speed of a telegraph wire.

The question has always been, How shall the Government obtain control of the telegraph? How can it best do so with just regard to the vested interests which must be more or less affected? Important as these considerations are, they are subordinate to the larger interests of the people. If, as I believe, the time has come for a postal telegraph in this country, the people have a right to demand the best in the world. If it can be shown that the best is also the cheapest in first cost and maintenance, and that its adoption will improve, cheapen, and quicken the service far beyond what would be possible by any other method, there can be no question that this is what they should have.

It is my purpose to advocate such a system. Under private management for profit it is thereby practicable to reduce the present telegraph rates to one-tenth what they are at present, with vastly improved service. Under Government management the rates could be still further reduced.

The system of which I shall speak is the high-speed automatic of Mr. Patrick B. Delany. The main features and possibilities of the Delany system were discussed before the Senate Committee on Post-Offices and Post-Roads in 1896. (Doc. No. 291.) Although at that time the Elliott Cresson medal was awarded to the inventor, the system is much improved and is even better adapted to the needs of a postal telegraph than it was then. The tapes are now punched by the ordinary operating of a Morse key, and the signals are recorded in Morse characters. The electro-static conditions of a telegraph line have hitherto imposed limitations upon rapid signaling by the ordinary methods. By a recent improvement Mr. Delany has succeeded in utilizing the static charge in the production of signals on the receiving tape.

There are two leading questions which must receive brief consideration here. First, what are the points of practical superiority in the Delany system? Second, if it is so extremely valuable, why has it not been adopted by the telegraph companies?

Replying to the first question, technical features are involved, which, however, it is perhaps advisable to pass over for the present. The practical aspects of the subject are just now of most importance. The one great feature of the system is the extreme speed of operating with reliability and accuracy. The second is the relative cheapness of line construction, maintenance, and operation.

The points of superiority of the Delany system over its nearest competitor, the Wheatstone, are these: More certain legibility of signals. Simpler mechanism, not liable to derangement, well adapted to army work in the field. Improved methods for handling a large volume of business. It will work without repeaters from New York to San Francisco. The receiving instrument is controlled by the operator at the sending instrument. The transmitter increases the efficiency of ocean cables.

The invention is a result of gradual development of a fundamental principle. The inventor is not only an expert practical telegrapher, but he is a member and ex-vice-president of the American Institute of Electrical Engineers, member of the Franklin Institute, and the inventor of numerous telegraph devices. His synchronous-multiplex system, whereby 1 wire is made to carry 6 messages simultaneously, one way or in opposite directions, has been in use by the British post-office for 15 years, and his system for cable transmission holds the record for high speed over Atlantic cables.

When it is considered that a great item of cost in ordinary telegraphy is the construction and maintenance of a large number of wires, it will be understood that if the practical speed of working is greatly increased, the number of wires or the amount of copper could be correspondingly reduced, with great resulting economy. Let me give one illustration of this from high authority. Mr. Norvin Green, formerly president of the Western Union, stated that the introduction of the "artificial" or "phantom" circuits of the quadruplex represented in value to that corporation \$10,000,000. The quadruplex is used only on a comparatively few circuits, and it does not quite double their practical duplex efficiency. These are large figures, but a simplex Morse operator, sending at the rate of 15 words a minute, may monopolize a line which cost \$20,000.

When we come to the Delany system, however, the economy is enormously greater. For while the quadruplex sends an average of 60 words a minute with eight operators, four sending and four receiving, and the Wheatstone automatic 125 words, or, if duplexed, about 200 words, the Delany sends over a single wire 1,000 words a minute for a distance of 1,000 miles. In other words, one Delany wire is equal to 60 wires worked simplex or to about 20 wires quadruplexed, and it operates 8 times as fast as the Wheatstone.

The money-earning capacity of a line which is able to carry messages at a speed of 1,000 words a minute demonstrates the desirability of speed for economical working. If we take 10 hours of constant operation for business and social messages and allow 20 per cent of the time for manipulating the apparatus, the practical working result will be 800 words a minute.

Assuming messages to comprise 50 words each, 16 messages could be sent each minute. For convenience, we will say 15 messages a minute. In 10 hours this would amount to 9,000 messages, which at 15 cents each would yield a gross income of \$1,350.

An estimate of the profits of a line between New York and Chicago, fully equipped, at an assumed cost of \$1,000,000, will indicate the immediate possibilities. This line is supposed to have two wires, with a speed capacity of 1,000 words a minute each, one for sending and one for receiving.

We will suppose these wires are operated at a speed of 500 words a minute each way, and that 15,000 messages of 50 words each are transmitted every day of 12 hours. The present telegraph business between the two cities at 40 cents for 10 words is 12,000 messages a day. Therefore, the estimate of 15,000 50-word messages at 15 cents each is conservative.

15,000 messages, at 15 cents, \$2,250 a day, for 300 days	\$675, 000
Line maintenance, at \$4 a mile, 2,000 miles	\$8, 000
Handling messages, at 2.6 cents each	117, 000
Interest, 4 per cent	40, 000
	<hr/>
	165, 000
Income	540, 000

There is reserve capacity on the line. Only one-fourth of its working capacity is utilized. Press dispatches will occupy some of this. But no account is here taken of business from intermediate cities.

The figures do not include expenses of administration.

The question has been asked, How much cheaper can the Government conduct the telegraph service than the present corporations? I have not attempted to estimate that in a specific manner, but the select committee on the telegraph in 1870 estimated that the annual saving would be at least a million and a half a year. The receipts of the telegraph companies are now four times what they were in 1870, so that the saving under Government would be very much greater, without any improvement whatever in technical operation. It is probable that, taking account of dividends upon watered stocks alone, after deducting the probable value of the line equipments

of the corporations, the saving by Government management would be not less than \$4,000,000, and other economies would considerably increase that sum, without change in the methods.

Prof. Frank Parsons said, in 1896, concerning this subject: "If improved methods, well known to the electrical world, were adopted in the postal telegraph, the saving would be far greater—so great, indeed, that there seems every reason to believe a uniform rate of 5 cents a message would yield a substantial profit."

As to the second question, pertaining to the attitude of the existing monopoly toward this system, or toward any new system, I wish to quote a few pertinent words from Mr. Delany himself, which are to be found in Senate Document No. 291, Fifty-fourth Congress, first session: "So anxious have the telegraph owners been to perpetuate the condition of the early days—the golden span from 1858 to 1870—when a \$500,000 plant grew to one of \$20,000,000, every innovation calculated to upset or interfere with this comfortable situation has been unwelcome. Every step in advance has been viewed as an encroachment on an exclusive domain, and such great improvement has been obliged to knock loud and long for recognition. It is significant that none of the improved methods of telegraphy now in use originated within the controlling telegraph organization, all having come to it by purchase of competing lines or from individuals outside. The well-known Page patent was the work of an examiner in the Patent Office. Stearns was connected with the municipal telegraph of Boston when he brought out his duplex system, and it required 2 or 3 years' effective work by a competing line to gain a foothold for it. Edison's quad-ruplex system was an outside creation. The telephone was a founding left on the doorstep of the leading telegraph company, but was not adopted and was recognized only after it had grown into great promise."

With proper regard to the future and a disposition to maintain an up-to-date installation, a part of the large earnings would have been invested in improvements, and rates should have been reduced. But what has been the policy throughout? The fatal, ruinous policy not to meet competition, but to buy it up. A dependence upon the purchasing power of wealth to prevent changes or the use of new methods, to antagonize improvements, and to suppress inventions. It has been a battle of money against the pervading spirit and the irresistible tendencies of the age, and it will meet its Waterloo whenever improvements in either methods or means come into the field. It needs not even the Delany system to ruin the telegraph monopoly; it needs no new devices; nothing but the same old system that the companies are using still, supplemented with one-fifth of the money represented by their outstanding securities, and a liberal and wise business policy. But it is not competition that we are striving for; it is the best and cheapest system for the people.

One of the worst features of the present monopoly is the utter disregard of the welfare of faithful employees. Their condition is as bad as it can be, for the wages are insufficient for comfortable living. If the truth were all told, there would be popular indignation. Yet the employees are powerless to better their condition. Probably the average operator should receive about double the wages paid by the Western Union Company.

Leaving out of consideration the possible economies which might be effected by Government administration with the older methods, let us suppose the telegraph to be brought into universal use through the greatest possible cheapening of rates. Whether this result is attained through Government ownership and the operation of the telegraph in conjunction with the post-office or by its adoption by a private corporation working for profits, does not materially affect the point at issue. In either case there will be at least 90 per cent reduction in charges.

While personally favoring Government ownership and disposed to actively further it so long as there is any prospect of success, I am also convinced that it is possible to make the telegraph a public utility in private hands. The proposed reduction in rates of 90 per cent are based upon the Delany system under private management. By no other system would such a large reduction be profitable to the owners. It is proposed to establish a rate of 15 cents for 50 words and 30 cents for 100 words between New York and Chicago. It is proposed to do away with the 10-word messages and substitute letter-telegrams—letters carried by wire instead of by train.

Comparatively few men are able to immediately grasp the idea and follow it confidently to the inevitable conclusion. It requires time and thought and familiarity before the transmission of letters of 50 or 100 words from New York to Chicago or San Francisco presents itself to the mind as commercially possible or even to be desired. Any radical departure from old methods requires time to permeate the average brain cells and ganglia and bring forth definite or logical conclusions. The man of wealth does not at first recognize its possibilities for gain; the people will not conceive the reality of it until they have experienced it, learned its advantages, the saving in time, the completeness of knowledge as contrasted with the suspense, uncertainties, even anxieties of the ambiguous short telegrams, short because every additional word costs. Such letter-telegrams will be something new under the

sun. No man can estimate what they will lead to in number; in bringing people nearer together in time and social intercourse, and in the distribution of news for the press.

Likewise our forefathers could not foresee the wonderful growth of correspondence which we now enjoy because of cheap and rapid mails. The postboy, pony post with relays, packet boat, train, telegraph, pneumatic tube, telephone, represent successive stages with a premium subsidy for speed, reaching an anticlimax in the 10 cent stamp to hasten the delivery of a letter by a few minutes which may have been many hours on the way. But even now the telegraph is too slow, because it can be speeded up.

The conviction that the telegraph should belong to the people, that cheap communication is one of the greatest blessings to a nation, should be strong enough with all to eliminate selfish considerations. But as I look forward I see the signs of a new private monopoly in the air, the basis of which is the Delany system. At present I believe it is possible to direct the system into Government control; but if this is to be done, there must be no delay in Congress. If the system gets into the control of those who are more interested in the profits of an investment in stocks than in the needs of the people, the Government will not be able to secure it without a much larger expenditure and probably a delay of several years.

This is not a matter which admits of any lobbying. Fair, open, and direct dealing, I am assured, will characterize all negotiations on behalf of the owners of this system. If it is true, as has been intimated to me, that a fund of \$1,000,000 was at one time provided to defeat legislation in favor of Government ownership of the telegraph, the same conditions may have to be met again, and they can best be met by giving the utmost possible publicity to every detail of the negotiations.

I wish now to make one further suggestion in the direction of radical departures from old methods. If we have something which promises to effect material changes in social or business methods, it is well to prepare for them in advance. Now, these cheap letter-telegrams are sure to enormously increase the bulk of the telegraph business. While messages will be much longer, they will also be in vastly greater number. And if the system is introduced by a private corporation, its operations will profoundly affect the post-office business. This is a matter which deserves very critical examination.

The primary function of a telegraph company is the transmission of communications over its wires. The practical development of the business, however, has involved the immediate delivery of messages by special messengers. Obviously, if the company could be relieved of the special-delivery obligation, it would be greatly to its advantage, and the public service could be made much cheaper.

With the larger development of the telegraph business—larger, it should be understood, than anything the world has seen—which will result from the new system, the special delivery of such a great volume of correspondence in large cities would require an organization rivaling in extent the post-office carrier service and practically duplicating it. Letter carriers make regular rounds, but if messages required to be sent out singly, as they arrive, it would add very much to the complications and expenses of the telegraph administration.

The argument that the telegraph companies do now deliver all messages does not affect the point of this discussion. Service can always be rendered if people are willing to pay for it. All telegrams handled by the companies now are urgent, although not so regarded by the companies, and delivery by messenger is obligatory.

By far the greater number of letter-telegrams will be of a nature that will not require immediate delivery. It is therefore proposed to have them delivered by the post-office. If ordinary letter-telegrams are handed in at New York and posted in the Chicago post-office 20 minutes later, for delivery in that city, they will reach their destinations soon enough. Patrons who wish to do so, can have lock boxes at the telegraph office, in which their dispatches will be placed as they arrive.

This post-office delivery does not conform to the conventional idea of telegraphic correspondence. We are accustomed to have telegrams sent to our offices and homes, and the idea of receiving them by mail seems at first glance a backward step. But in truth it is not, for what time is lost in delivery is largely made up in getting the messages quickly through to the cities of their destination. The new system will lead to the delivery of messages through the post-office almost if not quite as promptly as they are now delivered by the Western Union Company. I do not wish to exaggerate in this regard. The local post deliveries are often slow and far apart, but as the demand for this service increases there will be material improvements all around.

Nevertheless, a certain proportion of letter-telegrams will require immediate delivery, and for this purpose responsible, uniformed men, not boys, should be the carriers. For this service a special charge should be made.

My contention is that the less urgent business should not be taxed to pay for this special service rendered to a comparatively few correspondents. Good business policy requires special pay for special service and minimum charges for ordinary service.

The routine of business will be, in a general way, as follows:

In every city there will be a central transmitting and receiving office, and there may be a number of branches similarly equipped, but we will consider only the central office. Connected therewith by ordinary wires will be small local offices where letter-telegrams can be handed in, but from which deliveries will not, until after later developments, be made. At each of these local offices a telegraph operator will have a Morse key which operates a tape-punching apparatus at the central office. If the Government owned the system, all this would be arranged in connection with the postal stations.

At the central office the punched tapes are immediately run through the line transmitters, at a speed of 500 to 1,000 words a minute, or faster for short distances. With such rapid transmission, there must be an immense amount of business before there can be a moment's delay in sending off a message. For example, a single instrument, on one wire, will do all the business that can be provided by 50 men constantly working Morse keys. It will require a very large development from the present business before 50 Morse operators will be kept continuously at work sending messages to any one city. If such a result should be realized, between such important cities as New York and Chicago, the immediate running of another wire would be advisable. That may happen after a while. When a wire is worked to anything like its carrying capacity by this system, it will be earning so much money that, under Government control, there will be either a large profit or a reduction of the 15-cent rate to 10 or even 5 cents for 50 words.

Now we will follow the message to its destination. At the distant city it is recorded in Morse characters on a tape. In the ordinary course it will be written out on a typewriter, inclosed in an envelope, stamped and addressed, and deposited in the post-office.

The system involves important details in the convenient and systematic manipulation of the tapes, and the method of distribution of messages to distant parts of the city, which need not be dealt with here.

An important feature of the system is that it affords absolute secrecy for all correspondence, whenever this is desired. For Government business, as well as for some private correspondence, this is worthy of consideration. The only way to insure secrecy is to prevent any employee of the telegraph company from knowing the words of the communication. The tapes may be punched by confidential clerks in private offices. Whenever such confidential business has to be transacted, suitable apparatus for this purpose can be leased from the telegraph company. There are several ways of punching the tapes, and employees can quickly learn to do the work. Such tapes will be rolled in compact coils, in the usual way, and carried to the transmitting office, where, in the presence of the messenger, they are run through the machine, automatically coiled up as before, and handed back. Not a word of the message can be read.

At the receiving station the tapes are also automatically coiled as they come from the machine. When a message of this secret character is received, the tape must be sent to the address without uncoiling. Any person can soon learn to translate the Morse characters on the tape.

Now, in regard to the policy to be pursued by the Government in securing a postal telegraph, it seems to me, in the light of facts herein presented, that the purchase of the properties or securities of the existing telegraph corporations would be highly inexpedient. If the entire plant of the Western Union Company could be reproduced for \$25,000,000, or less, as is confidently declared by persons who know about such things, the people of the country should not be called upon to pay a hundred millions for it merely to protect investments. It is easy to predict ruin to the business of that great monopoly when confronted with a competitor too strong to be bought up. And if the purpose of such competition should be the ruin of the existing companies, it could succeed in its aim. But industrial disturbances and revolutions, predicted by enthusiastic advocates of new systems, seldom bring sudden disaster to established business. Usually there is time for a natural readjustment to meet the changed conditions. The canal boat still competes with railway traffic. Doubtless the present telegraph companies will continue in fairly profitable business, parallel with the Delany system, although to do so they must adopt a more liberal and enlightened policy than in the past. They will lose all the general telegraph business, but this, which should have been their main source of revenue, they have made no effort to develop. Indeed, they have systematically restricted it to the public necessities by excessive charges. They will also lose the press business. But there is enough of other business remaining which would seem to be undesirable for the Government to undertake.

Doubtless the simplest course for the Government to pursue in the introduction of this system would be to enter into an agreement with the owners whereby the latter shall construct the first line—between Washington and New York, for example—with complete equipment, and operate it for 6 months or a year, for their own

profit, at 10 and 15 cent rates for 50 and 100 word messages. If, at the end of the time, it has been shown that the working is satisfactory, as provided in the specifications, the Government is then obligated to take over the line, paying an advance of 10 per cent on the construction cost. It would be well to have a Government engineer in some way associated with the construction.

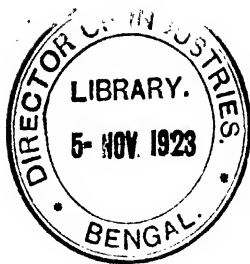
It may be asked, What evidence can be adduced that the Delany system can practically accomplish the results claimed for it? If the evidence were not beyond question there would be a weak point in my whole argument. But there is no such weakness. Nothing has been asserted that does not rest upon indisputable facts of experience, which are capable of demonstration at any moment. At a meeting of the Franklin Institute, at Philadelphia, November 20, 1895, the Delany system in its first practicable form was shown and later received the Elliott Creason medal. The following quotation is from the journal of that date: "At this point Mr. Delany made several experimental transmissions through an artificial line. * * * Perfectly legible records were obtained at a speed of 1,200, 1,800, and finally to 2,400 words per minute, as timed by Mr. Thomas Shaw, M. E., and others.—The Secretary."

The apparatus has been operated at a speed of 8,000 words per minute, but this has no commercial significance.

Finally, gentlemen, if there is any solid basis for industrial innovations, if there is any sound, safe, and sure foundation upon which we can rely in these days, either for the encouragement of an industrial enterprise or the investment of our precious money in it, that must be in the profound and accurate knowledge of men thoroughly grounded in the knowledge and methods of physical science.

It is upon such high authority that I have ventured to thus boldly and confidently advocate the Delany system before you, and I think the Government of this progressive people should be quick to recognize its merits and utilize them for the public good.

ROMYN HITCHCOCK.



RAILWAY REGULATION UNDER FOREIGN AND DOMESTIC LAWS.

PREPARED UNDER THE DIRECTION OF THE INDUSTRIAL COMMISSION

BY

B. H. MEYER, Ph. D.

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INTRODUCTION.

For the purpose of this report special charters, granted by every State and Territory in the United States, were examined. The session laws of the various legislatures, as published, contain the charters granted by them; and while not all the charters that have been granted were examined, the number which was examined is so large that generalizations may safely be based upon them. As a rule, the charters granted during the first 10 years or so in any one State were compared with one another. The charters granted during the later decades were likewise examined, with a view of noticing in what ways, if any, these differed from the earlier ones. Parallel with these, an analysis of general laws was undertaken, including only the earlier enactments on the subject of railways. The discussion of contemporary railway legislation was based upon the latest edition of the revised statutes of the different States, supplemented by the general laws of the States which had been enacted since the publication of the statutes. In this manner, it is believed, no essential provision of the railway laws of any State, whether included in the revised statutes or not, have been overlooked. The material upon which the treatment of constitutional provisions is based is found in the appendix to this report. The treatment of foreign railway charters and legislation rests almost exclusively upon material submitted by the various departments of public works in the different foreign countries. The respective officers were requested to submit typical charters and important general laws; and there is every reason to believe that the material thus submitted is thoroughly representative of the railway legislation of the countries concerned.

Without attempting to formulate definite conclusions or to express whatever opinions may be justified on the basis of the facts presented in this report, a number of the leading characteristics brought out may be enumerated here. In the first place, the essential similarity of charters the world over has been confirmed. The lineal descent of present railway charters from the earlier canal and turnpike acts in England can likewise not be questioned. While in different countries certain forms of expression found their way into the charter, in many respects more than similarity can be discovered. Identity of contents, even, can in many instances be established. A characteristic of railway legislation in the United States is the great extent to which special legislation was persisted in after general laws had been enacted by the respective State legislatures. In all sections of the country the statute books afford numerous instances of the granting of special railway charters, completely ignoring the existence of general laws for the incorporation of railway companies. In addition, illustrations can be found of the organization of railway companies on the basis of special charters granted many years before, when at the time of such organization general laws and constitutional provisions prohibiting special franchises were found upon the statute books. As a whole, the railway legislation of the United States is incomplete, especially with respect to such subjects as the issuance of stock, making joint arrangements, providing for emergencies, and similar topics. A tabular analysis of railway laws shows at a glance the absence of essential provisions in the laws of many States. Together with this incompleteness there goes a certain lack of uniformity, which must be extremely exasperating to railway companies that attempt to act in obedience to the law. Our great railway systems lie in territory under the jurisdiction of a number of different States, and when two or more of these States legislate in diverse ways on the same subject, it is difficult to see how a railway manager can act in accordance with the laws of all the States to which his road is subject, and at the same time adhere to that unity in management which good business principles demand. The railways are essentially alike all over the United States, and no good reasons can be advanced for the extraordinary differences which exist among the laws of some of the States.

The lack of elasticity in railway legislation is best illustrated by the many constitutional provisions which have been incorporated by various States. It is a well-known fact that amendments can not be readily secured, and, that legislation

which is rigidly limited in its scope by constitutional amendments can not embody that freedom of action which the nature of the railway business demands. Our railways are an important part of our industrial mechanism, and, in common with all other domains of social and economic life, they undergo changes and adjust themselves to modifications and variations in this social and economic life. Rigidity in railway legislation prevents that prompt readjustment which progress demands. The tendency, noticeable in the laws and constitutional provisions of a number of States, to permit suspension of the long and short haul provisions, for example, is an excellent illustration of a most commendable tendency in our railway legislation, because it gives to administrative authorities discretionary powers, which will enable them better to adjust the railway service to concrete conditions as the same may arise.

In general, it is true that our laws do not recognize differences in the degrees of importance represented by different railways. A subordinate branch of a small independent road in a remote section of the undeveloped part of a State is subject to the same laws that govern the most important systems, except, perhaps, in regard to taxation, for which purpose various schemes of classification have been adopted. Again, it may be said that our laws do not provide for adequate administrative machinery, and that many of them appear to have been enacted on the assumption that statutes execute themselves. An examination of the commission laws shows clearly the great lack of uniformity in the qualifications of commissioners, their terms of office, and in the powers exercised by them. The question naturally arises whether any system of administrative control could not be greatly strengthened by legal provisions, outlining certain qualifications for every agent who may be a part of the administrative machine. At present there is nothing in our State laws to prevent persons totally unfamiliar with railways from occupying positions which call for high ability and thorough knowledge of railway affairs. Furthermore, there is very little in our laws which enables the commissions or other officers to compel prompt compliance with the laws on part of individual railways which do not see fit to obey them. A single obstinate manager may prevent other managers from voluntarily doing what justice to shippers and railways alike demands, and what every citizen should have a right to demand; and, in case the demand goes unheeded, to have the same enforced through an efficient and prompt administrative agent. A study of the laws of Prussia, Switzerland, and Japan impresses one with the lack of representation of social and economic interests in the management of our railways. The full significance of this becomes apparent when the composition of advisory bodies in these and other countries is taken into view, and the wholesomeness of the influence and power which they exercise over the railway systems of their respective countries is realized. They are, in a sense, clearing houses of information through which the railways and the people learn to know each other.

PART I.—EARLY RAILWAY CHARTERS.

General characteristics.—A railway charter may be defined as a special act of a legislative body authorizing a person or persons duly organized to construct and operate a railway or railways in a certain territory under certain conditions. Such a legislative act is a private law. With the exception of a few of the Western States—Arizona (Territory), California, Colorado, Idaho, and Montana—which began with general laws, special charters have been granted by every State and Territory in the United States. The charters have numerous resemblances and differences which will be noted more in detail later on, but at the outset it is well to notice certain features which charters in all parts of the United States have in common. In spite of numerous striking differences which exist, we may speak of a typical railway charter.

The leading features which are common to railway charters of the different States may be associated with the following points, every charter having one or more provisions relating to some or all of these points: Name of company; number of commissioners; number of board of directors; the amount of capital stock; size and number of shares; the amount of the payment per share at the time of subscription, and the maximum assessment per share, together with the number of days' notice required; systems of voting; the time limit as to beginning and completing construction; junctions, branches, and extensions; route; expropriation and methods of valuation, together with the manner in which disputes are settled; the amount of land which may be held; the number of miles to be constructed before traffic may be opened; the power to borrow money and the rate of interest; the distribution of dividends, liability of stockholders, annual reports, passenger and freight rates. In every State charters may be found which contain provisions on only a few of these points, while in most States charters were granted containing provisions on all of them, and perhaps others not here indicated.

Following an old English custom, a few charters in a number of States contain a preamble. Where a preamble is found, it usually sets forth the reasons why the proposed railway should be constructed, the public service which it can be made to perform, and the manner in which the project is to be carried out. Preambles of this kind can be found in charters of States so far apart as Wisconsin, Pennsylvania, and Georgia. Similarly, charters in some North Atlantic States declare the public use of the projected railways. Both the preamble and the declaration of public utility serve the same purpose, namely, to bring before the legislative body before the franchise is granted the social and economic conditions which make the project desirable, if not necessary.

While there is no general order in which the different provisions of a typical railway charter are incorporated, in the individual charters of the different States, it is very common for a charter to enumerate first of all a number of persons, designated commissioners, under whose direction the proposed railway is to be organized. These commissioners are authorized to open subscription books in specified localities on a certain date, and to continue to receive subscriptions during a certain period of time. The charter further specifies that after a certain minimum sum has been subscribed, and a certain payment on each subscription, varying greatly in its amount, has been made, the subscribers shall hold a meeting and elect a board of directors. The size of the board to be elected, like the number of commissioners, varies very greatly in the different charters, although 9 and 13 are perhaps the most common numbers. In a few States, like Connecticut, Maryland, and Kentucky, charters were granted making it obligatory on the part of the elective officers to bind themselves to the performance of their respective duties by an oath.

The board of directors having been elected, the company has obtained legal status and is prepared to carry out the provisions of the charter in its possession.

The powers granted to the company, acting through the board of directors, include powers common to corporate bodies, such as purchasing, holding, selling, and leasing property; to have perpetual succession: to sue and be sued; to use a common seal, and in general to exercise those powers, rights, and privileges which other corporate bodies exercise, in order to carry out the provisions of the charter.

One power which is invariably given to the board of directors, with or without restrictions, relates to rates; and, considering the great importance which has always been attached to the question of rates, it may be well to bring together typical features of charters of different States on this important question.

Charter provisions as to rates.—A charter granted by Connecticut in 1832 provides that the company may charge "such rates per mile as may be agreed upon and established from time to time by the directors of said corporation." This, in substance, is the provision on rates which is more frequently found in railway charters in the United States than any other. The Connecticut charter just referred to names 3 "commissioners," who shall be sworn to a faithful discharge of the trust imposed upon them by virtue of the act, and who shall not be interested in any way whatsoever in the company.

A Colorado charter of 1865 provides as follows: "They (the board of directors) shall have power to establish such rates for the transportation of persons and property in all matters and things respecting the use of said road and the transportation of property as may be necessary: *Provided*, That the legislative assembly of this Territory, or any legislative body, having legislative authority over the county in which said road is located, may, after the expiration of 25 years from the passage of this act, and at the expiration of each period of 20 years thereafter, prescribe rates to be charged and collected by said corporation for transporting passengers and freight over said road and the branches thereof."

One of the earliest Florida charters grants the company "the right to demand and receive such prices and sums for transportation as may be from time to time authorized and fixed by the by-laws of said company or companies: *Provided*, That such prices and sums shall not be increased without at least 60 days' previous notice thereof being given." This charter further provided that the "tolls" should not yield more to the company than 20 per cent per annum on its stock, and any excess over 20 per cent should be paid into the internal improvement fund.

Maximum rates are prescribed in a charter granted by Georgia in 1837, as follows: "*Provided*, That the charge of transportation or conveyance shall not exceed 25 cents per 100 pounds on heavy articles, and 10 cents per cubic foot on articles of measurement for every hundred miles, and 5 cents a mile for every passenger." Similar provisions were incorporated in Georgia charters during succeeding years.

An Indiana charter of 1832 empowers the company to "change, lower, or raise rates at pleasure: *Provided*, That the rates established from time to time shall be posted in some conspicuous place or places."

A provision similar to that found in the Florida charter above quoted is found in a Connecticut charter of 1829. "It shall be lawful for them (board of directors) to charge for every hundred pounds transported 60 miles or upwards, 2½ mills per hundred pounds weight for each mile; for ever hundred pounds weight transported over 60 miles and under 60 miles, 3 mills for each mile; for every hundred pounds below 60 miles, 3½ mills per mile." Passengers were to pay 4 cents per mile.

A charter granted by Maryland in 1827 prescribed different rates for different directions. From north to south the freight charges were not to exceed 1 cent per ton-mile for toll and 3 cents per ton-mile for transportation; south to north the charges were not to exceed 3 cents per ton-mile for tolls and 3 cents per ton-mile for transportation. The maximum rate for the transportation of passengers was fixed at 3 cents per mile. The same State granted a charter in 1831 which fixed the maximum rate for freight at 3 cents per ton-mile for both toll and transportation, and for passengers not exceeding 3 cents per mile, provided the passenger does not carry baggage exceeding 50 pounds in weight and occupying space not exceeding 2 cubic feet.

The early Massachusetts charters, like the charters of other New England States, are the most complete of any that can be found in the legislation of other States. One of the earliest charters, granted in 1820, refers to a general law enacted by Massachusetts in 1808, thus subjecting the corporation created by the charter to the provisions of a general law. That is perhaps the earliest instance of its kind. While this charter fixes a maximum freight rate it does not mention passenger rates at all; but another charter granted by the same State during the same year provides that the company may impose charges "not exceeding 3 cents, and for every passenger passing and repassing not exceeding 2 cents per mile,

which shall be conveyed upon said railroad, exclusive of the expense of transportation, payable at such time and in such manner as may be described in the by-laws." It will be noticed that this charter, like the Maryland charter already referred to, makes at least a theoretical division of the aggregate charge into "toll" and "transportation."

The early charters granted by Michigan are essentially like those granted by Ohio, Illinois, and Wisconsin. Many of them are quite complete and contain leading features of typical charters. Those which are more carefully drawn contain provisions relating to maximum rates for both freight and passengers. The amount which the company may charge varies, however, very materially, not only in charters granted during succeeding years, but also in those enacted during the same year. For all of the Western States the statement holds true that among earlier charters we find more numerous examples of maximum rates, even though the same charters give the board of directors wide discretionary powers over rates. Following the period during which charters of this kind were granted, it was more common to omit the maximum-rate feature and to incorporate the power over rates in the board of directors, giving this body the right to charge such rates as it may from time to time think expedient. It may be noticed that an early Ohio charter (1838) makes a distinction in charges upon ordinary and "pleasure carriages."

There is no essential difference among the early charters of Pennsylvania and Maryland, except perhaps that in Pennsylvania a distinction was sometimes made between "through" and "way" passengers. Nor is the difference between the charters in these States and those granted by North and South Carolina a striking one, except that the systems of voting rather common in the Carolinas do not appear in the Atlantic States farther north. In 1837 North Carolina granted a charter which provided for maximum rates as follows: "On persons, not exceeding 6 cents per mile for each, unless the distances to which any person be transported be less than 10 miles, in which case the president and board of directors may be entitled to make an extra charge of 50 cents for taking up and putting down each person so transported; for transportation of goods, * * * not exceeding an average of 10 cents per ton mile; and for the transportation of mails, such sums as they may agree upon." In a similar manner later charters in both North and South Carolina prescribe maximum rates. These rates frequently bear a direct relation to distance and space occupied.

These quotations suffice to indicate the manner in which early charters in different parts of the United States attempted to control rates. The variety existing among provisions of this kind is no greater than among provisions on other subjects, and in nearly all instances the maximum rates prescribed appear to have been much above what railway companies would in ordinary circumstances be inclined to charge.

As a matter of interest, rather than of importance, it may be noted that in a few States several charters prescribe rates by reference to another charter previously granted by the same legislature. Thus a Michigan charter of 1848 refers to rates charged by the Michigan Central Railway; a Georgia charter of 1838 specifies that the company may charge as much as the Georgia Railroad and Banking Company; in 1831 Mississippi adopted a charter granted by Louisiana; and a Tennessee charter of 1851 grants the same provisions which have previously been granted to the Nashville and Chattanooga road.

Publicity of rates.—Publicity of rates is not generally provided for, although provisions on this subject are found in some of the charters granted by Indiana, Louisiana, Maine, New Hampshire, Vermont, New Jersey, South Carolina, Georgia, Missouri, and in occasional charters granted in the Northwestern States, all of which are fairly well illustrated by the clause of an Indiana charter quoted above. A Louisiana charter of 1831, after providing that such rates may be charged as shall have been previously fixed by the resolution of the board of directors, stipulates that "rates shall be published in some newspaper, * * * and it shall be unlawful to increase such rates, after the same shall have been established, during the period for which they have been established." The same charter further provides that every new board of directors shall publish a schedule of rates within 10 days after its election. Another charter granted 2 years later specifies the number of newspapers in which the schedule of rates shall be published, and that such rates "shall not be changed during the year in which they are established." Publicity of a different kind, and quite unique in railway legislation, is provided for by joint resolution of the South Carolina legislature of 1836: "That no charter for the incorporation of railroad companies, or in extension thereof, shall be granted by the legislature unless 3 months' public notice of the application for same be previously given by advertising in one of the papers of

the city of Charleston, and also in the paper of one of the counties in which said road may be situated, or, if there be no newspaper in such county, then by publication of such notice at the court-house or some conspicuous place in the county." The South Carolina resolution evidently aimed to accomplish the same thing as the declaration of utility in some of the other States, namely, to give interested parties an opportunity to be heard and to demonstrate to the public the necessity of incorporating the projected company.

Another, but a much more restricted, kind of publicity is that provided for in some charters granted in all parts of the country, by giving stockholders the right to inspect the books of the company at any time. This, however, is not publicity as we now understand it, for it simply gives the persons directly interested in the financial success of the enterprise access to the books, while the real and essential publicity suggested to-day is of a very different kind. It is therefore more a matter of curiosity than of vital importance that notice is taken of a New Hampshire charter of 1836, which provides that the books of the company shall be open for inspection by a committee of the legislature. Analogous provisions are occasionally met with in charters of Rhode Island and the Northwestern States, but to what extent legislative committees ever exercised this privilege does not appear.

Discriminations.—Relatively few early charters contain any reference to the matter of discrimination, which figures so largely in later railway legislation. Among the States which granted charters containing clauses on discrimination are North Carolina, Rhode Island, Vermont, and Wisconsin. A North Carolina charter of 1837 says: "They shall give no undue preference to the property of one person over that of another, but as far as practicable shall carry each in the order of time in which it shall be delivered or offered for transportation with the tolls paid or tendered." An early Wisconsin charter contains a much more elaborate provision on discriminations.

Administrative agents.—So far as internal evidence is concerned, early charters were granted upon the assumption that the companies organized under them would voluntarily fulfill the obligations imposed by the franchise. The assumption which underlies early as well as later railway charters is that they execute themselves. It is consequently doubly interesting to observe that the small State of Rhode Island apparently took the initiative in establishing commissions, for in 1836 the legislature of that State passed "An act to establish railroad commissioners." After providing for the appointment of three commissioners by the general assembly, the act specifies that "it shall be the duty of said board of commissioners, upon complaint or otherwise, whenever a majority of them shall deem it expedient, personally to examine into any or all of the transactions or proceedings of any railroad corporation that now is, or hereafter may be, authorized and established in this State, in order to secure to all the citizens and inhabitants of the same the full and equal privileges of the transportation of passengers and property at all times that may be granted, either directly or indirectly, by any such corporation to the citizens of any other State or States, and ratably in proportion to the distance any such persons or property may be transported on any railroad as aforesaid; and to inquire into any contract, understanding, or agreement by which any railroad company shall attempt to transfer or give to any steamboat company any favor or preference over any other such company or boat, either as to freight or passage, contrary to the true intent and meaning of this act and the several acts hereafter passed in relation to railroads."

The commissioners in the Connecticut charter quoted before may here be recalled, together with the boards of internal improvement of Tennessee and Florida, which had some, although much more restricted, administrative powers over certain railways. Analogous functions were performed under a Vermont charter of 1843, by which "the supreme court at any stated session thereof, * * * upon application of ten freeholders in any town or towns through which said road may pass, may alter or establish the rates of toll upon said road for any term not exceeding ten years at any one time." It is evident that the Rhode Island commission is the only one of these bodies that could exercise, under the law, fairly comprehensive administrative functions. The Vermont court is here alluded to simply because it is another illustration of the introduction into the management of railway affairs of persons other than those directly interested in the corporation.

Powers reserved to the legislature.—Considered numerically, a majority of the charters granted in the different States do not reserve to the legislature either specified or general powers. It is very common, however, for charters to contain provisions reserving to the legislature the right to regulate, with more or less latitude, the charges of transportation. In the New England States this power could generally be exercised under charter rights as long as the net income of the

railway in question exceeded a certain per cent, usually 10. Thus a Massachusetts charter of 1829 reserves to the legislature the right to revise the schedule of rates every 4 years if the net income exceeds 10 per cent. A contemporary New Hampshire charter gives the board of directors full power over rates, and permits the legislature to reduce them after 10 per cent net on the investment has been realized. A clause typical of provisions of this kind is found in an early Maryland charter: "That nothing in this act shall be construed so as to prevent the legislature of this State from legislating upon the subject of the tolls reserved in this act at any time after the expiration of 20 years after the passage of the act: *Provided*, That at no time shall the toll be so regulated or reduced as to yield less than 6 per cent per annum." Other Maryland as well as Pennsylvania charters embody analogous provisions. Ten per cent net income is by far the most common limit placed upon the discretionary powers of legislatures over railway rates in all the States in which such chartered provisions are found. In a few instances the rate of net profits permitted under the law is very much larger. For instance, in Indiana charters were granted permitting the legislature to regulate rates whenever the profits exceeded 15 per cent, and any excess above 15 per cent was to be paid into the common-school fund.

Another right reserved to the State in a considerable number of charters is the power to purchase the railway after a certain number of years. This power was frequently reserved in the charters of the New England States, the significance of which was perhaps illustrated in the agitation accompanying the recent leasing of the Boston and Albany Railway. Early Massachusetts charters reserved to the State the power to purchase after a period of 20 years. In Vermont this period of discretionary power of the State varied from 20 to 50 years. New Hampshire followed Massachusetts, fixing it at 20. An Illinois charter of 1850 gives the State the right to purchase, after 25 years, by refunding to the company the cost of the entire plant, with interest at the rate of 6 per cent per annum. In New Jersey similar right was reserved after 30 years. An early Michigan charter contains a provision which is typical of isolated charters in all of the Northwestern States: "The State shall have the right, at any time after the expiration of 15 years from the completion of said road, to purchase and hold the same for the use of the State at a price not exceeding the original cost of said road, exclusive of repairs thereof, and 14 per cent thereon, of which cost an accurate account shall be kept and submitted annually, on the first Monday in January, to the legislature, duly attested by the oath of the officers of said company, and at such other times as the legislature shall require the same." In Missouri a charter granted in 1837 reserved to the general assembly the right to purchase the railway after 4 years by giving notice in writing. This charter also provided for the appointment of valuers, whose function it was to fix the price of the transfer.

Limitations on the life of charters.—The preceding paragraph illustrates one class of limitations placed upon some charters in all parts of the United States. While a majority of the charters are silent upon this point, now and then charters were granted which were limited in their existence to a certain period of years, varying all the way from 10 and 20 to 90 or more years. One of the powers granted in the charters which do not contain provisions directly limiting their life was that which gave to the board of directors "perpetual succession," which means, of course, a franchise unlimited in the period of its existence. In the Northwestern States a few charters were granted limiting the life of the corporation to 50 and 60 years. Florida granted a few which were to lapse after a period of 20 years; Louisiana, after 40 and 50, and, in one instance, 25. In one charter, a provision is found that after a certain number of years the same shall expire, and the assets of the corporation shall be distributed among the stockholders. The session laws of the different States contain numerous acts extending the charter period in those cases where the original act contained time limits; and it is obvious that in all those instances in which the charter reserved to the legislature the right to purchase, no time limit whatever was necessary.

Limitations on the power of taxation.—After the country at large had begun to realize the necessity and importance of railway transportation, various means were resorted to to encourage the construction of railways. American manufacturers were unable to provide the necessary material. This had to be imported from abroad, hence it was but natural that legislators should have resorted to the expediency of exempting from import duties materials to be used in the construction of railways. But the railways, after they had been constructed, represented valuable property, and to that extent increased the taxable resources of the territory in which they lay. To provide against the imposition of taxes, which might become burdensome or even discourage the construction of railways, legislatures of States in all parts of the Union incorporated, in some charters, a provision

limiting the power of the respective States to tax railway property; and, in a considerable number of instances, exempting such property altogether from taxation, usually for a limited period of years. "That the capital stock of said corporation shall be and remain free from taxation until the profits collected by said railroad corporation shall be sufficient to afford a dividend of 5 per cent per annum on the capital stock." This is from a Connecticut charter of 1833, and represents analogous provisions found in New England charters of that period. In Massachusetts some charters exempted railway property from taxation for one or more years, after which the legislature had the right to levy a tax not exceeding a certain sum, frequently 25 cents per annum, on each share of the stock. In the Northwestern States isolated charters limit the power of taxation to a certain per cent on the capital stock; others to a certain per cent on the net income. Then, again, other charters make railway property liable to taxation like all other property; and late laws in a few of the Western States specifically state that no railway property shall be exempted from taxation.

State participation.—To a limited extent the individual States participated in the construction of railways, either by becoming stockholders and lending the credit of the State or by giving direct financial aid. The well-known illustrations of the railways owned by the States of Georgia and South Carolina and the city of Cincinnati, stand quite alone in the contemporary railway history of the United States. The history of internal improvements had been such as to discourage the active participation of our commonwealths in the construction of railways. Works of internal improvement, greatly exceeding both the capacity to construct and to utilize them, had been projected by many States. The inevitable failure of these gigantic projects brought these States into disrepute as active economic agents; hence we find in constitutions and charters granted after this period of disaster in State works of internal improvement direct prohibitions of State participation. As a matter of historical interest, however, it may be well to notice a few typical instances of direct or indirect participation of the State in building up our railway system. It should be noted that the term "state" is here used in the specific rather than the generic sense, for even after constitutional prohibitions and statutory restrictions had become common, the smaller political units—county, town, village, and city—freely participated in railway enterprises. Large numbers of illustrations can be found in nearly every State. An act of the legislature of Maryland, in 1827, authorized subscription on the part of the State to the stock of the Baltimore and Ohio Railway. A contemporary Michigan charter empowers the State to take stock in the company chartered; likewise in case of New Jersey; also in Arkansas and other States in the Mississippi Valley. An early Indiana charter limits the State in its subscriptions to 500 shares, and in Louisiana the governor is authorized to subscribe a certain amount in behalf of the State after a certain number of shares have actually been paid for by individuals. In turn, the governor may appoint one director to represent the interests of the State. It is important to notice that in this representation of the State in the management of railways to protect the financial interests of the Commonwealth may be found the beginning of attempts at administrative control of our railways. In like manner the board of internal improvements, and later the commissioner of railroads appointed by the governor, were intrusted with the interests of the State in the control of railways to which Tennessee had given aid. Isolated charters in Wisconsin, Michigan, and other Northwestern States, as well as in various other States, authorized the company to borrow money and to pledge the credit of the State in its payment. In a few States, like Wisconsin and Texas, attempts were made to utilize the school fund in the construction of railways, on the plea that such an investment of these funds would be carrying out the provision of the law directing that school moneys shall be invested in the most profitable manner. In the estimation of the promoters of such plans, nothing could be more profitable than the railways which they had projected.

Miscellaneous provisions.—Under this head mention will be made of provisions found in isolated charters in States in all parts of the country, being essentially alike in substance, although varying in the form of expression or exact scope of their contents. During the early part of the nineteenth century it was common to organize corporations for a variety of purposes. Experience soon demonstrated that corporations which divided their interests and their energy among two or more enterprises became involved sooner or later in difficulties, if not in absolute failure. As a result of this experience it was not long before State legislatures enacted general laws or inserted provisions in special charters to the effect that corporations shall be organized only for one specified purpose. A few charters, for instance, were granted, which authorized the construction of a railway, as well as participation in other kinds of business. An excellent illustration of this is

found in the title of the Georgia Railroad and Banking Company, which has lasted into our own times. There appears to have existed a very close affiliation between railroading and banking, the same corporation frequently engaging in both kinds of business. A reaction against this is clearly shown in statutes and charter provisions prohibiting railway companies from engaging in the banking business. Such prohibitions are found in the charters of Alabama, Illinois, Kansas, Michigan, Nebraska, Pennsylvania, South Carolina, Florida, Georgia, Wisconsin, and other States.

The route of the railways chartered by the various acts is described with varying degrees of completeness and accuracy. In perhaps the great majority of charters the termini and a few leading intermediate points are named; in others, only the termini; and in still others, nothing more definite than the expression that the railway in question shall be constructed between some eligible point on a certain river to another eligible point on a certain lake or in a certain township. Instances are recorded in which projectors solicited aid in the construction of a railway along one route and then chose another, and repeated their solicitations for aid along the second, and perhaps secured support from both.

The amount of land which the railway company might legally hold was quite generally restricted to that which was necessary for construction and operation—a strip of 100 feet in width, and, in addition, whatever may be necessary in order to secure material and for the construction of depots, warehouses, and other necessary buildings. In many of the States the right of way was donated to the company; and, of course, in numerous instances, State and Federal grants were given in aid of railways. But to provide for the purchase of the necessary land, charters usually contain provisions relating to eminent domain or expropriation. Most charters name some officer or tribunal before whom cases relating to condemned property may be heard and the manner in which decisions and awards may be made.

The capital stock of the company was usually named in the charter, although, with very few exceptions, the amount of the capital stock apparently bears no relation to the magnitude of the railway in question. In only a few instances does the charter fix a definite ratio between the number of miles of road and the amount of the capital stock. While now and then a charter does not provide for the payment of anything whatsoever at the time subscriptions are made, or calls for only a dollar or two, in a large number of charters a payment of \$5 is called for at the time subscribers enter their names on the books of the company. Usually the manner in which the balance shall be paid is indicated, and the number of days' notice which must be given is stated. The voting power of stockholders is quite generally limited to one vote per share, although in the North and South Atlantic States the graded system of voting, by which the number of votes of the individual stockholder decreases as his holdings increase, is common.

It is a familiar fact that our early railways were built for short distances and without reference to one another, and that our present magnificent systems are but consolidations of large numbers of smaller roads. We are not surprised, therefore, to find the subject of consolidations rarely touched upon in early charters. To be sure the term is used; and now and then a clause, either directly authorizing or prohibiting consolidations, was put into a charter. The right to cross other railways, as well as to form junctions, is frequently granted; and in reality such a right can easily be construed as the right to consolidate. Similarly, the power to operate and lease other railways was frequently given, although in the Southern States the term "farming" is sometimes used.

Later charters quite generally expressly prohibit the leasing or joint operation of parallel or competing lines; and in numerous early charters companies are protected against the construction of parallel lines either within a certain number of years or a certain distance from their own roads.

A great majority of charters provide for an annual report in one form or another. This report is most frequently made by the board of directors to the stockholders; in fewer instances to the legislature; and, in still others, to both the stockholders and the legislature. The number of items specified in this report varies all the way from less than 10 to more than 100.

Forerunners of laws relating to safety appliances and the protection of persons and property can also be detected in early charters. Provisions may be found relating to the order in which cars shall be put into a train, the manner in which crossings shall be protected, bells upon locomotives, fences along tracks. (It is a matter of curiosity that in some of our earliest charters, provision is made for the construction of gates across the railway tracks, which the train operators are to open and close whenever they cross the public highways.)

The transportation of troops and munitions of war is occasionally provided for; and in various Southern States railway officers are expressly exempted from the performance of military duty. In a few charters the power of the company to own slaves is treated. A sinking fund is also mentioned in a very few of them.

An archaic feature of our charters is found in the provisions relating to the use of the same railway track by different shippers, and the rules governing the construction of rolling stock. For example, in Massachusetts a corporation was authorized to specify in its by-laws the form and construction of the wheels, and the weight of the loads which should pass over its road. This clause had directly in view the use of vehicles other than those owned by the corporation. In several charters granted in the Northwestern States the form of the vehicles, as well as the price to be charged for the transportation of goods and owners' vehicles, is specified in the charters. In New Jersey, it is provided "that no farmer belonging to this State shall be required to pay any toll for the transportation of the produce of his farm to market over the said road or roads, in his own carriage, weighing not more than one ton, when the weight of such produce shall not exceed 1,000 pounds, but the same farmer may be charged toll as for empty carriage." It will be noticed that the term "toll" is here used to designate remuneration for the act of transportation, while the term "expense," or "cost of transportation," as was noted in an earlier paragraph, relates more particularly to remuneration for the use of the track and represents a contribution to the fixed charges of the road.

PART II.—LATER CHARTERS AND EARLY GENERAL LAWS.

General characteristics.—The terms "early" and "late," used with reference to railway charters, are relative in their significance; for the same year which is early in the history of one State may be late in that of another. For instance, charters granted in the New England and Middle States between 1835 and 1840 may be characterized as later, while those granted in States like Wisconsin and Minnesota during those years would decidedly belong to the earlier charters of that section. The legislative history of railways in the various States of the Union is essentially similar, and as we observe the movements of this legislation from east to west we may notice that in turn each State goes through, in the main, all the experiences and stages of advancement of other States which preceded it in railway development. An examination of the contents of these charters, as one observes their march westward, clearly indicates the fact that the restrictions of the earlier types granted in the East are gradually made milder, if they are not altogether lost. Occasionally there is a reversion to type—a Western charter embodying all the salient restrictions and regulating features of the severest Eastern charters. The additional observation may be made that the maximum-rate provisions, which are rather common in the charters of the earlier East and Middle West, are frequently embodied in later charters. Then, as time advances and the more modern phases of railroading make their appearances, clauses referring to consolidations, discriminations, and even long and short haul are occasionally inserted. Aside from the enumeration of names comprising the board of commissioners, which usually appears in the first or second section of the charter, no regular order is maintained.

It is clear that States copied largely from one another, and in the process of copying different charter sections appear to have become badly mixed; and in numerous instances a considerable number, even a majority, of clauses incorporated in the more complete charter which served as the model are left out altogether.

While large numbers of special charters were granted up to 1870, general laws relating to railways appeared early in the thirties, and in a few isolated cases even before that time. A custom which aided in bringing about the transition from special to general laws was the abbreviation of railway charters by reference to previously granted charters in the same or, in isolated cases, in other States. Under this custom the charter only contained a few purely individual and local specifications, with the additional blanket provision that the company thereby incorporated shall enjoy all the rights and privileges previously granted to another specified corporation. Thus, in New York numerous charters are abridged by reference to the Attica and Buffalo charter granted in 1836. The same method was largely employed in the construction of charters in Maine, Virginia, Missouri, Indiana, Minnesota, Tennessee, and other States. When, as was often the case, a considerable number of charters were abridged in the same State by reference to some one charter, an element of uniformity was introduced with almost as much efficiency as if general laws had been enacted.

One of the peculiarities of railway legislation in all sections of the country is the granting of special laws after general laws had been enacted in the respective States. Indeed, it is not uncommon to find upon the statute books a comprehensive general law enacted on a certain day and perhaps a special charter granted, if not on the same, then on immediately succeeding days. Large numbers of special charters were granted completely ignoring in their provisions existing general laws.

The Northern Pacific franchise.—A late illustration of the organization of a railway company under special charter is afforded by the history of the Northern Pacific Railroad, the leading facts of which are set forth by the general counsel of that company in the preface to his compilation of the Northern Pacific charters.

"Soon after the institution of the foreclosure proceedings it was determined that it would be necessary to reorganize the Northern Pacific Railroad Company under a new charter, to be obtained either from Congress or from some one of the States. Congressional legislation was considered doubtful, and the reorganization committee early took steps to secure a charter for reorganization under a State law.

"In all of the States in which any portion of the property is situated the granting of charters by special act is prohibited, and corporate organization can only be effected under general laws. Such a constitutional amendment had been adopted in Wisconsin in November, 1871, but the supreme court of Wisconsin had several times decided that the amendment was prospective in its operation, and left the legislature at liberty to amend special charters granted prior to the adoption of the constitutional amendment.

"It was considered preferable to secure a special charter, which should be open from time to time to special amendment, and it was determined that the charter of the Superior and St. Croix Railroad Company (a Wisconsin corporation) would be the best adapted for the purpose. This charter was acquired by the purchase of all the stock of the company and was amended by special act (chapter 244, Laws of 1895) of the legislature of Wisconsin, as hereinafter set forth.

"As the reorganized company was to acquire the vast properties of the Northern Pacific Railroad Company and to issue thereon a great amount of stock and bonds in order to carry out the plan of reorganization, it was thought prudent to leave unsettled no possible question, however technical, based upon nonuser or upon any other ground, concerning the validity of the charter. To test the question the attorney-general of Wisconsin applied to the supreme court of that State for leave to file in the court, according to the practice thereof, a bill in the nature of a quo warranto to forfeit the franchise on the ground of nonuser. The case was fully argued, and on the 19th day of June, 1896, the supreme court unanimously decided that the corporation was not dissolved by nonuser, and that if any ground for forfeiting the charter had existed it was waived by chapter 244 of the Laws of 1895 amending the charter above referred to. So that before the purchase of the properties of the Northern Pacific Railroad Company and the increase of its capital stock and the provision for the issue of securities, the validity of the charter of the present Northern Pacific Railway Company (formerly Superior and St. Croix Railroad Company), by the unanimous decision of the highest court of the State, had become *res adjudicata*."

The charter of the Superior and St. Croix Railroad Company, upon the basis of which the Northern Pacific now does business, was granted in 1870 and provided for the construction of a rather short and not very important railway in the north-western part of the State of Wisconsin. The road, however, was not built, and the charter provisions were not made use of. A few unimportant amendments were adopted in 1871, and in 1895 the legislature of Wisconsin adopted another and very comprehensive amendment which, together with the original charter, constitutes the present franchise of this great transcontinental line. The amendment of 1895 describes the route of the present Northern Pacific; it gives the company power, among other things, "to receive and store any property in any of its depots or other buildings, including elevators * * * ; to demand, collect, and receive such sum or sums of money for the transportation of persons and property and for the storage of property as shall be reasonable." The extension of the road and its connection with other lines was not directly provided for in the charter itself, but the general laws of the State, as amended in 1897, grant ample powers for this purpose:

"Any railroad corporation organized and existing under the laws of the Territory or State of Wisconsin, or existing by consolidation of different railway companies under the laws of the Territory or State of Wisconsin, and of any other Territory or Territories, State or States, may consolidate its stock, franchises, and property with any other railroad corporation, whether within or without the State, when their respective railroads can be lawfully connected and operated together, to constitute one continual main line, with or without branches, upon such terms as may be agreed upon, and become one corporation by any name selected, which within this State shall possess all the powers, franchises, and immunities, including the right of further consolidation with other corporations under this section, and be subject to all the liabilities and restrictions of this chapter, and such in addition, including land grants and exemptions of land from taxation, as such corporations peculiarly possessed or were subject to at the time of consolidation or amalgamation by the laws then in force applicable to them or either of them."

The Wisconsin statutes, like those of most other States, as will be noted more in detail later, prohibit the consolidation, lease, purchase, or control by one railway corporation of another parallel or competing line, to be determined by jury. To complete its franchise the Northern Pacific filed this charter in all the other States through which it runs, and appointed certain persons as its legal representatives in those Commonwealths. In Idaho a special promise is exacted to the effect that the corporation accepts in full the provisions of the State constitution. It should be noticed that the reorganization of the Northern Pacific under a special charter took place at a time when every State through which its lines pass had on its statute books general laws governing the organization of railway companies.

The physical location of the railway is by no means an indication of the source of its legal power, for, as in the case of the Northern Pacific, a great system may be operated on the basis of a charter granted to an insignificant road in a distant State. The Southern Pacific, for instance, is organized under the laws of Kentucky. What constitutes the essence of the legal privilege of a modern railway corporation is an extremely complex problem, the difficulty of which is strongly impressed upon us when we realize that scores, if not hundreds, of separate charters granted by different States are comprised in the existing franchises of our great companies. The Pennsylvania company, for instance, represents more than 150 original lines, each having its special charter or certificate of incorporation. Many of these charters represent conflicting, if not mutually exclusive privileges, and what the charter rights of such a corporation are is a question difficult of solution. Not only is there a possibility of conflict between the diverse provisions of different charters, but also between the charters and the general laws, although in many States the supremacy of general over special laws has been at least acquiesced in, if not publicly recognized. The chairman of the Massachusetts railway commission writes that in that State it has been recognized that general laws have superseded the earlier special enactments. This appears especially significant when we remember that, with a few minor exceptions, all the railways of Massachusetts were incorporated under special charters—a compilation of which makes a good-sized volume—before comprehensive general laws had been passed. This possibility of a conflict between special and general laws is illustrated in the railway history of Michigan. The legislature of that State in 1898 created a commission, composed of the railway commissioner and two State officers, to negotiate with certain railway companies of the State operating under special charters, for the purpose of ascertaining upon what terms the companies would be willing to surrender their charters. While the question of the amount of taxes these companies were to pay was the immediate cause of this action on the part of the legislature, a similar situation with respect to the other question is by no means an impossibility. No further reference is here made to this difference between the railways and the State, because it involves the question of taxation, which the Industrial Commission has fully treated in another part of its report. (The well-known instance of the Illinois Central and the reserved rights of the State with respect to taxation in the charter of that company is also suggested in this connection.)

Early general laws.—In the first part of this report on early charters reference is made to an early law of Massachusetts of 1808. In 1833 the legislature of that State enacted a law "defining the rights and duties of railway corporations in certain cases." This law was included in a larger act on canals, turnpikes, and railroads. The law of 1833 also embodied the idea of a preamble by specifying that petitions for the construction of a railway shall be accompanied by the report of a competent engineer. Connecticut, in 1849, adopted a fairly comprehensive amendment to the earlier act relating to railway companies. In the first section this law provides that all railway companies shall be subject to general laws, except when otherwise specially provided for. A provision similar to that found in Massachusetts was embodied in the law providing for the report of a competent engineer in connection with the petition for a charter. The usual provisions with respect to organization, shares of stock, location, annual reports, and other financial affairs of railway companies were provided for. In Maine a general law adopted in 1841 contained the following section: "No petition for the establishment of any railroad corporation shall be acted upon unless the same is accompanied and supported by the report of a skillful engineer, founded on actual examination of the road and by other evidence, showing the character of the soil, the manner in which it is proposed to construct said railroad, the general profile of the country through which it is proposed to be made, the feasibility of the route, and an estimate of the probable expense of constructing the same. The

petition shall set forth the places of beginning and ends of the proposed railroad, the distance between the same, the general course of said railroad, together with the names of 5 towns through which the same, on actual survey, may be found to pass." This provision is typical of analogous clauses in the laws of other North Atlantic States. By 1848 Maine granted charters containing only a few sections, together with the additional statement that "all the privileges and immunities usually granted to such corporations" shall be delegated to the company thereby formed. New Hampshire adopted a general law in 1843 dealing with expropriation, crossings, fences, contracts among railway companies, and so on. The year following "An act to render railroad corporations public in certain cases, and constituting a board of railroad commissioners" was adopted. The commission established by this law was empowered to lay out routes on petition only, to inspect roads and railway accounts. Vermont enacted similar laws in 1846-47 and 1849, the latter being quite a comprehensive general law.

New York, which is representative of the Middle States, had passed 90 general laws before 1834, beginning with an act to prevent injury to railroad property and to insure the safety of passengers. These laws embraced subjects like the relation of railroads to canals, highways, Indian lands, to taxation, maps and profiles, contracts, loaning the credit of the State, carrying mails, junctions, baggage checks, altering lines, transportation of freight, suits against companies, destruction of noxious weeds, and such like. A law of 1843 compelled railway companies to report annually to the secretary of state. Like the New England States, New York declared the "public use" of a railway, and demanded proof that the proposed railway was of "sufficient utility to justify the taking of private property" in accordance with the provisions of the general law authorizing the organization of railway companies. By 1848 New York had worked out a fairly comprehensive general law, but it was not until 1850 that what may be called the fundamental law of the State was adopted. (The New York law of 1850 was transcribed, with the exception of a few sections relating to the Erie Canal, by the legislature of Wisconsin in 1853, which, however, failed to pass the bill.) The law of 1850 forbids the organization of corporations by special acts, except for municipal purposes and in cases where, in the judgment of the legislature, the objects of the corporation can not be obtained under general laws. In addition, it contains, among others, provisions relating only to the organization of railway companies, subscription and forfeiture of stock, transfer and increase of stock, expropriation, change of route, filing maps and profiles, paying labor employed in construction, formation of trains, baggage, intoxication of employees, annual report of over 100 items, and other phases of legislative control.

Notwithstanding numerous general laws, the New York and Erie Railway secured 17 amendments before 1850. The Portsmouth and Concord Railway secured 1 amendment during each of the first 10 years of its existence. The Western Branch, Massachusetts, secured 22 amendments before 1853, and the Eastern Branch secured 18. Thirteen were granted to the Housatonic between 1838 and 1850; the Camden and Amboy, 15; the Delaware and Raritan, 14. The Pennsylvania adopted 22 up to 1854, and the Baltimore and Ohio 21 between 1838 and 1852. Since these amendments dealt with such topics as the increase of stock, the issuance of bonds, holding lands, building telegraphs, extending lines and forming connections, the construction of bridges, and so on, it is obvious that a single comprehensive law, properly observed would have answered all the purposes, and in a uniform way, of all the special charters with which the various legislatures had to concern themselves. Numerous contemporary newspaper paragraphs can be found deploring the fact that legislatures are obliged to use so much of their time for the construction of special laws which could be so much more efficiently dealt with under general statutes.

Among the States of the Middle West, Illinois began early. In 1849 the legislature of that State passed "an act to provide for a general system of railroad incorporations." This law prescribes the formation of railway corporations and the powers, duties, and liabilities of officers. The board of directors is given full power over rates, but these are limited to 3 cents per mile for passengers, unless otherwise provided for by special act of the legislature. The legislature is empowered to reduce rates without the consent of the company, but no such reduction shall cause the net profits to fall below 15 per cent per annum. The probable use of the proposed railway must first be ascertained, and the interested parties must be given an opportunity to be heard. Annual reports are demanded, and the act is to apply to all existing corporations, so far as the same is not in conflict with special charters granted. The legislature of Massachusetts, in 1855, adopted a comprehensive general law including provisions on legislative control of rates, junctions, taxing capital stock 1 per cent per annum, providing for reasonably good service, consolidation, and so on. However, in this, as in so many

other States, during succeeding years charters were granted by the legislature which are as long and involved as if no general laws had been in existence. Iowa (consult Dixon, *State Railroad Control in Iowa*) passed an incorporation law, providing for the incorporation of railroads, at the first session of its general assembly, and in most of the earlier legislation of that State interference with railway management is foreshadowed. A law of 1856 contains the significant provision that "railroad companies accepting the provisions of this act shall at all times be subject to such rules and regulations as may from time to time be enacted." In 1860, maximum rates were prescribed, and 2 years later railways were required to maintain offices within the State and to submit annual reports. Another law provided for the periodical publication of rates and certain provisions relating to safety.

The active regulation of rates was attempted in 1866, but most of the restrictive laws enacted up to this time were rarely enforced. Kansas, after most prolific crops of private charters, passed an elaborate general law in 1857, but within 3 days after this law had been passed a special charter was granted without reference to the act in question, although covering in its provisions matters which the general law treated very elaborately. The contents of this rather elaborate law are essentially like those of the Illinois law.

Taking North Carolina and Alabama as representatives of another section of the country, it may be said that their general laws, while fairly comprehensive, are not as complete as the best laws of States farther north. The North Carolina law of 1871 embraces 70 sections, in one of which a maximum rate of 5 cents for passengers is prescribed; another calls for an annual report of 105 items, and another prohibits consolidation with parallel or competing lines. The Alabama law of 1850 reserves to the legislature the right to alter or repeal any certificate of incorporation; it places a limit upon the indebtedness which the company may assume; and contains furthermore the very novel provision that no railroad shall be constructed through an orchard without the owner's consent. In 1858 all railway companies were made subordinate to general laws.

California was one of the few States which began to legislate on railway matters in general rather than special acts, beginning with 1850. In 1853 a law was passed which enabled any 25 persons to form a railway company. The life of the franchise was limited to 50 years. While section 2 of the law specified that the capital stock of the company shall exactly equal the actual cost of the road, section 16 empowered the company to increase its capital stock "to any amount which may be deemed sufficient and proper for the purpose of the corporation." This law was amended in 1853, 1856, and 1857, but in 1861 the whole of it was repealed and another law, supplementary to the original general act of 1850, was adopted. An important provision of this last law is found in section 1, which specifies that at least \$1,000 per mile shall be subscribed, and 10 per cent actually paid in before the articles of incorporation can be filed. The form of the articles of the association is prescribed, and the period of its existence limited to 50 years. A sinking fund for the redemption of bonds is provided for and the unusual liberty of laying out its road, "not exceeding 9 rods wide," is given to the company. There are elaborate sections on eminent domain, arbitration, tolls, and so on. By a vote of three-fourths of the constituents of the companies, consolidated railway corporations may be organized. Maximum rates of 10 cents per passenger-mile and 15 cents per ton-mile are prescribed, although the company can not be compelled to undertake the transportation of a small quantity of freight for less than 25 cents. The maximum rates of the California law are in part exceeded by those prescribed in a Washington charter granted in 1862, which are 10 cents per passenger-mile and 40 cents per ton-mile. It is also a significant fact that the first general law enacted by the legislature of Washington, in 1873, relates to "extortion and unjust discrimination in the rates charged for the transportation of passengers and freight on railroads in this Territory." Montana, Colorado, Arizona (Territory), and Idaho are other States which, like California, began with general laws.

PART III.—CONSTITUTIONAL PROVISIONS.

General considerations.—Constitutional provisions probably represent the more fundamental and permanent features of railway legislation. It may be assumed that the provisions incorporated in the constitutions of the various States of the Union were thought to represent those matters respecting railways which the people of the different States, represented in their respective legislatures, considered most important and least likely to require changes in the future. The history of American constitutions does not reveal an undue readiness on the part of the people to change or modify their organic laws; and in view of this slowness in bringing about constitutional changes an element of fixity and rigidity is infused into the legislative control of railways.

The constitutions of the older States, as a class, contain fewer and less comprehensive provisions relating to railways; and two of them, Massachusetts and New Hampshire, embody no direct provisions of this kind, while Rhode Island is saved from being classified with these two States by a brief and rather unimportant constitutional provision. In addition, there is an absence of clauses relating to railways in the organic codes of the Territories of Arizona and New Mexico. With these exceptions, every State in the Union contains more or less elaborate provisions on this subject, varying from the less comprehensive and incomplete sections of many of the constitutions of the older States to those much wider in their scope and stringent in their nature, as in the recently adopted constitution of Montana.

By far the greater part of the contents of all the constitutional provisions may be grouped under three general heads: First, those relating to incorporation; second, those relating to public aid; and, third, to direct regulation and control, the latter having in view the correction of abuses and the establishment of equitable rates. While a few of these provisions are negative in their character, a good many of them are positive, empowering legislatures to establish rates and to do other things calculated to subordinate the agencies of transportation to the public good.

Acceptance of the constitution.—Fifteen State constitutions contain provisions to the effect that no railway, canal, or other transportation company in existence at the time of the ratification of the constitution shall have the benefit of any future legislation by general or special laws, other than in execution of a trust created by law or by a contract, except on the condition of complete acceptance of all the provisions of the section or article of the constitution in question. In a few instances the further provision is embodied that whenever existing charters are revised or amended, the same shall become subject to the constitution. (The constitutions incorporating such provisions are found in Alabama, Arkansas, Colorado, Delaware, Idaho, Kentucky, Louisiana, Mississippi, Montana, North Dakota, Pennsylvania, South Dakota, Texas, Utah, Wyoming.)

Corporations organized under general laws.—In the first section of this report it was noted that great crops of special charters were produced in all sections of the country, and it was perhaps a reaction against those excesses in special and local legislation which led to the adoption of constitutional provisions prohibiting the organization of railway and similar companies under special charters. One method of avoiding these constitutional and statutory provisions was observed in the case of the Northern Pacific Railway; but Section XXI of the original charter of the Superior and St. Croix Railroad Company declared "that in the judgment of the legislature of this State the objects of the corporation hereby created can not be attained under the general laws." The later constitutions of the Western States are very stringent in this respect, and the organization of a large class of corporations, of which railways are an important member, under special acts, is rigidly prohibited. (The following States have incorporated

such prohibitions in their constitutions: Arkansas, California, Colorado, Delaware, Florida, Illinois, Idaho, Indiana, Iowa, Louisiana, Maryland, Michigan, Minnesota, Missouri, New York, North Carolina, South Carolina, Utah, West Virginia, Wisconsin, Wyoming.)

Previously granted charters.—Closely allied to the last type of constitutional provisions is another, found in only 6 States, which invalidates all charters and special or exclusive privileges granted before the adoption of the constitution, unless organization had been actually effected. Organization thereafter could not be effected without a full acceptance of the new constitution. (This is found in the constitutions of Arkansas, California, Colorado, Kentucky, Idaho, Wyoming.)

Special charters.—In addition to the positive provision that railway companies shall be organized under general laws, 19 constitutions contain the negative clause that no special charters shall be granted, except for charitable, educational, and certain other purposes, when the same shall remain under State control. A few constitutions specify that special charters may be granted to corporations and organizations not having in view financial gain. (The following are the States whose constitutions contain such provisions: Arkansas, Colorado, Idaho, Kentucky, Kansas, Minnesota, Mississippi, Missouri, Nevada, New Jersey, North Dakota, Ohio, Oregon, South Dakota, Tennessee, Texas, Utah, Washington, Wyoming.)

Railways public carriers.—The analogy of railways to common roads and other public highways is expressed in constitutional provisions declaring all railway and canal companies to be common carriers. While provisions bearing on this topic are differently worded in the different constitutions, sometimes a separate section being devoted to it, and in other instances only a phrase or sentence embodied in another section, the meaning is usually the same; namely, the declaration that the railway is a public highway and that railway companies are common carriers. (The following constitutions contain such provisions: Alabama, Arkansas, Colorado, Idaho, Louisiana, Mississippi, Missouri, Montana, Nebraska, North Dakota, Ohio, Oregon, Pennsylvania, South Dakota, Texas, Utah, Washington, West Virginia, Wyoming.)

Eminent domain and public use.—Ever since the Supreme Court of the United States handed down the decision of *Munn v. Illinois*, declaring that whenever a person devotes his property to a use in which the public has an interest, he must grant, to the extent of that interest, the right of the State to control that property, no one could consistently question the public nature of railways. This fact has found common expression in the term "quasi public," which is now generally applied to railway corporations. A large number of State constitutions declare that the respective legislatures may take the franchise and property of railway companies and subject the same to public use, when the general welfare requires it, in the same manner in which the property of individuals is taken. In other words, these States reserve in their constitutions the power to exercise the right of eminent domain over all the corporate property of a railway company. (The following States have this provision: Arkansas, California, Colorado, Idaho, Illinois, Kentucky, Mississippi, Missouri, Montana, Nebraska, North Dakota, Pennsylvania, South Dakota, Washington, West Virginia, and Wyoming.)

Power to annul charters.—Sixteen States reserve constitutional power to alter, amend, revoke, or annul charters granted under special or general laws, whenever in the opinion of the legislature it may be injurious to the citizens of the State in question to continue the same. Usually the additional clause is incorporated that in case of such repeal or revocation no injustice shall be done to the members of the corporation. (Found in the constitutions of Arkansas, California, Colorado, Idaho, Iowa, Kansas, Mississippi, Montana, New York, North Carolina, Oregon, South Dakota, Utah, Washington, Wisconsin, and Wyoming.)

Public aid.—Even after the downfall of the national system of internal improvements, together with the failure of individual States to make such works a success, subordinate political units—counties, towns, cities, villages, etc.—extended aid to railway companies in a variety of ways, the most common among which were granting the right of way, making cash donations, purchasing bonds, or becoming stockholders, loaning the public credit, etc. Provisions relating to subscriptions to stock are found in 14, and to loaning of the public credit in 15 constitutions. (The former including the following States: Arkansas, Connecticut, Delaware, Florida, Idaho, Louisiana, Kentucky, Mississippi, Missouri, Oregon, Pennsylvania, Virginia, Washington, Wyoming; the latter, Connecticut, Florida, Maine, Mississippi, Nevada, New York, North Carolina—excepting a few specified cases—Oregon, Pennsylvania, Texas, Utah, Virginia, Washington, Wisconsin, Wyoming. Idaho breaks the monotony of this rule, in that it prohibits certain political units

from becoming stockholders in all joint stock companies, except "railroad corporations, companies, or associations.")

Intersections, junctions, and consolidations.—Varying somewhat in the number of subjects specified in the constitution, 11 States make provision for the connection, crossing, and intersection of railways and interchange of traffic. In one form or another, it is prescribed that every railway shall have the right to intersect, cross, or connect with any other railway, and that it shall receive and transport the freight and coaches, loaded or empty, of every other railway, without delay or discrimination. Closely allied to the subject of connections and the interchange of traffic is the question of consolidations, and constitutional provisions dealing with both subjects are found in several States. The most common form in which the traffic arrangements of the different roads is expressed is that which permits one railway to lease, control, purchase, or consolidate with any other railway, provided that the other is not a parallel or competing line. To what extent provisions relating to mere interchange of traffic would permit the consolidation of competing lines is not clear. Isolated provisions prohibiting the holding of stock of other railway companies may be found. (Among the States prohibiting the consolidation of competing lines are: Arkansas, Colorado, Illinois, Kentucky, Missouri, Montana, North Dakota, South Dakota, Texas, Utah, Washington, West Virginia. The following provide for junctions, connections, etc.: Alabama, Kentucky, Idaho, Louisiana, Mississippi, Missouri, Montana, Pennsylvania, South Dakota, Texas, Wyoming.)

Vote of shareholders.—Only 9 States provide for some system of suffrage on the part of shareholders, and for these the constitution of Illinois appears to have served as a model. "The general assembly shall provide, by law, * * * the right of every stockholder to vote, in person or by proxy, for the number of shares of stock owned by him, for as many persons as there are directors or managers to be elected, or to cumulate such shares, and give one candidate as many votes as the number of directors multiplied by the number of his shares of stock shall equal, or to distribute them on the same principle among as many candidates as he shall think fit." (Found in the following constitutions: Delaware, Illinois, Idaho, Kentucky, Mississippi, Missouri, Montana, Nebraska, West Virginia.)

Free transportation.—The granting of free passes to members of the legislature, State, municipal, and other officers, or the selling of tickets at a discount, is constitutionally prohibited in Alabama, Arkansas, California, Florida, Kentucky, Mississippi, Missouri, New York, Pennsylvania, Washington. The constitution of Wyoming also treats of the sale of unused tickets or parts of tickets.

Regulation.—The establishment of tariff schedules and the regulation of rates are treated in the constitutions of Georgia, Mississippi, Missouri, Utah, Washington, and West Virginia. The legislature expressly reserves full power of control, in addition to reservations expressed in other sections of the constitutions of Alabama, Florida, Idaho, Illinois, Louisiana, Nebraska, South Dakota, Wyoming. Discriminations against persons and places or industrial sections are occasionally directly prohibited in the constitution. The form in which the prohibitions are expressed varies, but they all have in view the equal treatment of all the interests affected by the railway service. (The following constitutions contain more or less complete provisions on the subject of discrimination: Arkansas, Colorado, Florida, Georgia, Idaho, Illinois, Kentucky, Missouri, Montana, Nebraska, Pennsylvania, Texas, Utah, Washington, Wyoming.)

Pooling.—The formation of trusts or combinations and the making of contracts restricting competition or having in view the control of prices is prohibited in ten constitutions (California, Kentucky, Idaho, Mississippi, Montana, North Dakota, South Dakota, Utah, Washington, and Wyoming).

Miscellaneous.—Only a few States provide in their constitutions for the organization of administrative bodies, such as railway commissions, and the powers and duties of the same. The California constitution not only prescribes the organization of the commission, but enumerates the more important powers of this commission, specifies the manner in which the commission shall be elected by the districts into which the State is constitutionally divided, and fixes fines for violations of the law on the part of railway agents or employees. Analogous provisions are found in the constitutions of Kentucky and Louisiana. The constitutions of Arkansas, Missouri, and Pennsylvania make it unlawful for railway officials to be interested in the purchase of materials and supplies for the construction of a railway. The constitutions of Arkansas, Kentucky, and Indiana prohibit the charging of a greater sum for a shorter distance over the same line in the same direction under similar conditions. Four constitutions—Colorado, Kentucky, Mississippi, and Montana—make it unlawful for a corporation to require its

servants or employees, as a condition of their employment, to sign a contract limiting the liability of the company in case of suits for damage, or precluding the possibility of bringing such suits altogether, by contract. About ten constitutions expressly limit the activities of a chartered corporation to the business which is expressly provided for in the charter. In a few cases the constitutions specify that no railway company can become a foreign corporation by consolidation; and, in a small number, a provision common in many of the earlier laws is enacted, compelling railway companies to establish stations or depots whenever they pass within a certain distance of towns and villages, frequently the county seat. The constitution of Washington stands alone, in that it expressly prohibits discriminations against express companies. Idaho and Wyoming demand the appointment of legal representatives of railway companies in those States. (This provision is common in general laws but not in constitutions.) The Missouri constitution provides for the payment into the State treasury of specified sums of money proportionate to the amount of capital stock, before a charter can be issued.

This analysis presents the leading features of the constitutional provisions of the several States. None of importance have here been omitted and only a few of the less important ones have not received mention. An examination of the appendix containing these constitutional provisions will show the great similarity which exists among many of the constitutions with respect to certain clauses, and the manner in which constitutional provisions were copied in one State from the constitution of another.

PART IV.—PRESENT GENERAL RAILWAY LEGISLATION.

Terms applicable to later charters.—In a technical sense the term "charter" can scarcely be applied to the instruments issued to railway corporations under contemporary general laws. The word charter, through long usage, has come to signify a special grant of authority and power. In the constitutions of 21 States, as was noticed in the preceding section, the incorporation of railway companies under special or local acts is prohibited; in other States this prohibition is found in general laws; and in some States in both the constitution and in the general laws. The statutes of South Carolina mention the organization of railway companies "under charters," and in the Kansas statutes the term charter is also used. But these are exceptions. Terms like "articles of association," "certificate of incorporation," "articles of incorporation," "articles of agreement," and "letters patent" have come into use, and carry with them the significance of earlier special charters. Articles, certificates, etc., are charters only in a loose and general sense, because the contents of the franchise itself are expressed in the general law relating to railways and the constitutional limitations under which these have been exacted. The grant of a charter involves a distinct legislative act, authorizing the company receiving the same to exercise, in a measure, the rights of sovereignty, and to do the things for which the organization was accomplished. A certificate of incorporation, on the other hand, is issued in pursuance of law by administrative and not by direct legislative authority. Formerly a separate act of the legislature was necessary. Under general laws an administrative act for each such grant of power is all that is requisite for the organization of a railway company. To be sure, there is a very direct connection between the earlier charters and the later general laws, for many of the latter embody not only the essential features of the former, but frequently they are expressed in similar and even identical language. The change of name from article or certificate did not carry with it any radical change in the nature of the franchise. In this respect there exists continuity of development. The greatest change brought about by the transition from special charters to incorporation under general laws consisted in uniformity. Almost infinite variety in charter provisions was common during the earlier period of special legislation. Under general laws, even when compliance therewith was not enforced or enforceable, a certain degree of uniformity was brought about from the very first.

Conditions under which railway companies may be organized.—There are, however, features of railway legislation in the United States which reveal many elements of uniformity as to the conditions under which railway companies may be organized; and yet, after admitting this much, we are compelled to recognize the fact that railway laws are very far from being uniform, and that numerous variations and differences are noticeable.

The number of persons who may associate themselves for the purpose of incorporating railway companies varies from two or more in Washington to any number in Iowa. Between these extremes there exist 10 different numerical groups which may effect an organization: Three or more in Florida, Oregon, Montana, and Wyoming; 5 or more in Illinois, Indiana, Kansas, Nebraska, Wisconsin, Montana, etc.; 6 in Louisiana; 7 in Michigan, Kentucky, Alabama, New Jersey (for roads less than 10 miles in length); 10 in Maine, Georgia, Arkansas, Texas, etc.; 13 in New Jersey (for roads more than 10 miles in length); 15 in New York, Indiana, etc.; 20 in Vermont; 25 in Massachusetts, New Hampshire, etc. These numbers, or more, may in some States be composed of any persons whatsoever; in others, a certain proportion must be citizens; and, in a few, all of them must be citizens. Certain restrictions are occasionally made with respect to residence, both on the part of the stockholders and on the part of the board of directors and officers. The object of restrictive provisions relating to residence was evidently

to prevent the projected road from being controlled by "foreign influence." During the early history of railways in the United States the possibility of foreign control, on the assumption that such control would result in the neglect of local interests, was used as a weapon to encourage local subscriptions to the stock of railway companies.

Contents of the articles.—The nature of the contents of the articles of association, or certificates of incorporation, can best be indicated by presenting the salient features of such articles in a few of the leading States, which may be considered typical of analogous provisions from the laws of other States—understanding by the term "typical" not identity, but essential similarity, leaving room for modifications of one kind or another in particular cases.

The law of *Illinois* requires a statement of the name of the corporation to be organized, the States from and to which the railway is to be constructed, the location of the principal offices, the time of beginning and completing construction of the railway, the amount of capital stock and the number and size of the shares, the names and residences of the persons who contemplate effecting an organization, and the names of the first board of directors.

According to the statutes of *Maine*, the articles must contain the name of the corporation and the gauge of the projected railway, the names of the places from and to which the same is to be constructed, the amount of the capital stock, which shall be not less than \$3,000 per mile for narrow-gauge and \$6,000 for standard-gauge railways, the number of shares of stock, and the names and residences of 5 directors. Since, on this point, the laws of *Maine* (General Laws, 1899, p. 117, Sec. I) are in many respects much better than those of most of the States, a full quotation is here inserted:

"Said directors shall present to the board of railroad commissioners a petition for the privilege of said articles of association, accompanied with a map of the proposed road, on a proper scale. The board of railroad commissioners shall, on presentation of such petition, appoint a day for a hearing thereon, and the petitioners shall give such notice thereof as the said board deems reasonable and proper, in order that all persons interested may have an opportunity to appear and be heard therein. If the board of directors, after notice and hearing parties, finds that all the provisions (of law) have been complied with and that public convenience requires the construction of said railroad, said board shall indorse upon said articles a certificate of such facts and the approval of the board, in writing. The secretary of state shall, upon payment of \$20 to the State, cause the same, with the indorsement thereon, to be recorded, and shall issue a certificate in the following form."

Then follows the prescribed form of certificate, with the contents indicated above.

The laws of *Arkansas*, for 1899, created a State board of railroad incorporation, composed of the governor, who acts as chairman, the attorney-general, auditor, secretary of state, treasurer, and commissioner of State lands. This board hears all applications for certificates of incorporation, and on its recommendation such certificates may be filed with the secretary of state, and thus legally empower an organization to construct a railway under the terms of the general laws of the State. Ten or more persons may organize, elect a board of directors, and subscribe to the articles of association when \$2,000 per mile has been subscribed and 5 per cent of the subscriptions paid to the board of directors, a majority of which must be citizens of the State.

The laws of *California* require the articles of incorporation to state the name of the projected corporation; the purpose for which it is to be organized; the places from and to which the railway is to be constructed, as well as all intermediate branches; the estimated length of the road; the amount of the capital stock, \$1,000 per mile of which must be subscribed before the articles can be filed, and 10 per cent actually paid in. The number of directors varies from 5 to 11, but 5 of them must be residents of the State. The sale of railway franchises and municipalities must be advertised, and the franchise given to the highest bidder.

Massachusetts.—The articles must contain the name, route, gauge, capital stock, and other common items. In case of standard-gauge railways \$10,000 per mile must have been subscribed and for narrow gauge \$3,000. The amount of the capital stock depends upon the detailed estimate of costs. No increase in capital stock can be made without the authority of the railway commission, before whom a hearing must previously have been given, upon which such increase or refusal to permit such increase is determined. The articles and certificate must be filed with the secretary of state. All petitions (compare the laws of *Maine*) for such charters must be accompanied by a map upon a proper scale, showing in detail the entire route of the road. A "certificate of public exigency" is also required

before a charter can be granted. The railway commission, upon due notice, must give a hearing to all persons interested in the projected railway, and not until such persons have been given an opportunity to be heard and all the other provisions of the law complied with can a charter be granted. It will be noticed that the Massachusetts law still provides for the granting of special charters, although these special grants are surrounded by wholesome and what appear to be entirely adequate provisions and safeguards.

Michigan.—Although a law of 1891 of this State declared every railway company operating within the limits of the State "to be in all respects subject to the general laws of the State respecting railroads, as now existing or as hereafter amended," a conflict between such charter provisions and general law provisions is still possible, as has already been indicated in another connection. Consequently, in 1899, there was created in this State a commission—composed of the commissioner of railroads, the State treasurer, and the secretary of state—whose duty it is to negotiate with railway companies operating under special charter, to determine upon what terms such railway companies will surrender their charter rights. For this purpose the commission is given authority to inquire into the business of railways, to secure the necessary information by subpoenaing witnesses, etc.

Georgia.—In addition to the usual provisions of the articles of incorporation the laws of Georgia provide for a petition which must be presented at least 4 weeks before a charter can be secured. Companies may amend their charters by adopting the general railway laws of the State.

Significance of certificates and articles.—These articles and certificates empower railway companies to make examinations and surveys for the proposed railway, in order to select the most advantageous route; to purchase, receive, and hold an amount of real estate necessary for the construction, maintenance, and operation of the road; to own other kinds of property essential to railway business; to have perpetual succession, or succession for a certain period of time; to have the power to sue and to be sued; to establish connections with other railways; to charge or to receive such remuneration for their services as from time to time may seem reasonable; and, in general, to enjoy those rights, privileges, and immunities which the law guarantees to all similar corporations, and which are essential in carrying out the legitimate aims and purposes of the corporation. The completeness with which the powers and duties of railway corporations are prescribed in different laws vary somewhat, yet there exists, perhaps, greater similarity and more completeness in this respect than in any other subject of railway legislation. In some States corporate powers of railway companies are enumerated in separate laws; and, in others, all the leading features of legal provisions relating to railways are expressed in the commission laws. It is unnecessary to enumerate in the lengthy phraseology of the law books the detailed rights and privileges of railway companies, for they are the same as those enjoyed by corporations in general, and are not essential to a consideration of the degree of regulation and control which is possible under the existing railway laws of the different States of the Union.

The provisions of the few articles which have been presented above are sufficient to show that there exist differences among the States with respect to the time limits within which railways may be constructed; the amount of capital stock, and the subscriptions thereon per mile of railway; the degree of publicity given to the applications for charters, and other things. A fee for filing certificates is charged in a number of States. For instance, in North Carolina \$250 must be paid before a bill can be introduced to incorporate or amend. In Maine, a fee of \$20 is exacted; and similar fees are charged in Wisconsin, Washington, and other States. The laws are weak in the financial requirements which they exact of railway companies. It would seem that some definite proportion should exist between the amount of the capital stock and the length and characteristics of the projected road; but such is not generally the case. Idaho and Indiana require a subscription of \$1,000 per mile; Kentucky, \$250 per mile, of which 20 per cent must be paid in cash; Arkansas, \$2,000 per mile; Maryland, 10 per cent payment on shares; Virginia, a payment of \$2 per share when subscriptions are made; New Jersey, \$10,000 per mile, and a deposit of \$2,000 per mile when the articles of association are filed, which latter sum, however, is returned to the board of directors when the road is completed. This is sufficient to show existing variations.

Corporate life and reserved rights of the State.—While many of the early charters and general laws were unrestricted in their nature, it was not long before a reaction against this lack of restraint set in, and regulating features, more or less adequate in their nature, were introduced in charters and certificates. Many such charters contained in one of their concluding sections the proviso that the

charter in question should be considered a public act and, as such, to be construed favorably for the purposes for which the company was organized. Both in England and the United States, however, it has been held that the mere insertion of such a clause does not make a special or private law a public act, and that unless a charter is public by the nature of its contents it will be construed as a special act when passed with reference to a particular company organized to construct a certain road. The public importance of railways and the vital connection between them and the social and economic interests of the States, frequently led legislators into a good deal of indulgence, especially during the early period of railway development. The limitations of charter rights had not yet been established; and it was not uncommon for incorporators to maintain that the rights and privileges granted by their charter were absolute and unrestricted. Not until the advent of Granger legislation, culminating in the leading case of *Munn v. Illinois*, had the right of the State to interfere in the management of railways incorporated under special charters been established; and at the present time nearly two-thirds of the States have statutory provisions reserving to the respective States the right to alter, amend, or repeal the franchise of any corporation, whether organized under special or general law. Reference to Part III, on constitutional provisions, will show similar limitations placed upon franchises by State constitutions.

The nature of the reserved rights of the States and the limitations placed upon the corporate life of railway companies are illustrated by provisions in several States here inserted:

Maine.—The laws of Maine provide that "no corporation can assign its charter or any rights under it; lease or grant the lease or control of its right or any part of it, or divest itself thereof, without consent of the legislature." In addition, all corporations, whether organized under special or general laws, shall be subject to general laws. In Maine and Massachusetts the State may amend or repeal the charter, or the Commonwealth may purchase railways on 1 year's notice, after 20 years' corporate existence.

Michigan.—Legislation in Michigan on this point has already been indicated.

Illinois.—In Illinois charters are granted for 50 years, with the privilege of renewal for the same length of time; and a law of 1895 reserves to the legislature power to enact laws on all the leading topics relating to corporate existence.

Iowa.—In Iowa companies may likewise be chartered for 50 years, with the privilege of renewal for as many more, and they shall eventually be subject to legislative control. The legislature may alter, abridge, set aside the charter, or impose new conditions which it deems necessary for the public good.

Kansas.—Special charters which do not designate the period of corporate life continue 99 years. The legislature has power to extend the charter period as it may deem proper.

Wisconsin.—The legislature of Wisconsin expressly reserves the power to pass laws relating to reasonable maximum rates, the correction of abuses, unjust discrimination, and for the protection of the just rights of the public. Corporations, however, under the laws of this State "shall continue perpetually."

North Carolina.—Sixty years, unless otherwise provided for in the act creating the same, is the corporate life under the laws of North Carolina.

Louisiana.—This State limits the corporate existence to 99 years.

Texas.—In Texas a charter is forfeited if 10 miles of the proposed road are not put into running order within 2 years, and 20 miles during every year thereafter until the road is completed. Charters may be granted for a period of 50 years, with the privilege of renewal for an equal number of years.

Maryland and Rhode Island illustrate an entirely different type of statutory provision:

Rhode Island.—The laws of Rhode Island prescribe a course of procedure which appears to be entirely in harmony with the needs of our growing railway and industrial systems. In that State the general law alters special charters whenever the latter are found to be inconsistent with the former.

Maryland.—Exactly the opposite is true in Maryland, where the adoption of the "general code" is not to affect the rights and privileges granted by special charters.

Provisions found in the laws of all the other States dealing with this subject at all, do not contain anything not found in what has here been presented.¹

¹ States having statutory or constitutional provisions, or both, directly reserving to those States the power to alter, repeal, or amend charters, are the following: Arkansas, California, Colorado, Indiana, Iowa, Kansas, Massachusetts, Michigan, Mississippi, Montana, New Hampshire, New York, North Carolina, North Dakota, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Texas, Vermont, Virginia, Washington, West Virginia, Wisconsin.

Determination of route.—Under early railway methods the route was very indefinitely indicated, the best of all descriptions being frequently contained in that clause in the charter naming the termini of the road; and it will be remembered that not all of the termini were mentioned in some charters, but that merely certain zones thought to contain "eligible points" were loosely indicated. In other charters not only the termini but one or more important intermediate points were designated; in but very few, often insignificant, charters was the entire route described with sufficient definiteness to enable one to tell beforehand exactly where the railway would be constructed. The course of a railway is a matter in which the public has an interest. The manner in which the right of eminent domain has been exercised has depended very greatly upon the extent of the public interest in the railway in question. Before the charter was granted to the Liverpool and Manchester Railway—known to all the world as the first important modern railway—every piece of land to be crossed by the proposed railway had to be described and the exact location of the entire line definitely determined before the charter was granted. Such a mode of procedure had been practically unknown in the United States until more recent times. Even at the present time great competing systems quietly send out their surveyors to gain an advantage in entering new sections or in constructing lines which will shorten the route between important competitive points. It is not uncommon to have one railway build, section by section, year after year, until finally the design, which must from the first have directed the movements of the constructors, dawns upon the public mind and the real significance of what appeared to be perhaps the construction of a subordinate branch becomes apparent. This may or may not be desirable; that is immaterial. The fact, however, remains that important public interests are affected by just such movements, and every interest which is thus liable to be affected should have an opportunity to be heard before such important industrial operations are undertaken. No State in the Union has legislated in this respect with greater care and completeness than Massachusetts. The laws of that State provide that the termini, together with the names of the cities and towns through which the projected road or branch is to run, are to be given with as much certainty as the nature of the case will admit. The articles of association of the company fostering the project must be published in each county once a week for a period of three weeks; and the map of the proposed route, together with the report, must be submitted to the mayor, aldermen, and selectmen of the different municipalities affected. Public hearings, after due notice to all persons interested, are also provided for.

In Maine the railroad commissioners must approve the location of the railway before construction is begun. Extensions of existing lines may be built on application to and approval of the commission. Frequently the more remote States are less restrictive in such matters; but the laws of Arkansas make it obligatory for the company to file the map with the county clerk of every county through which the proposed railway is to be run, for the inspection of all persons interested. The location having once been established, no modifications in the line, exceeding a certain distance, are permitted, and a map of the road, together with such modifications, must be filed with the secretary of state. One of the most important provisions bearing upon this question is found in a recent law (1899) of Tennessee, which prohibits one railway company from holding exclusive possession of a narrow pass, thus preventing another railway company from laying its tracks through the same. If the pass is so narrow that only one track can be laid, joint use of the same is made mandatory upon the road which has built through it. No point named in the articles of incorporation can be avoided under the laws of California. A map of the road must be filed with the secretary of state after location. Changes in the line must also be filed. In Connecticut a map of an approved route must be filed with the town clerks on a prescribed scale; and, after construction, the lineament of the road can be changed only by permission of the board of commissioners. Florida charters must state the place from which and to which the road is to be constructed; its length, and the name of each county through which it runs. However, the direction of the road may be changed by a vote of two-thirds of the directors. Similar provisions are found in the laws of Georgia.

In a number of States maps are not required to be filed until after construction has begun or is completed, or within a year after the road has been finished. In Indiana, on the other hand, a map must be filed with the county clerk in every county named in the articles of association before construction can begin. If necessary, the route may be changed, but no place named in the articles is to be avoided. Kansas also requires the filing of a map with county clerks before construction; and the road bed may be changed, but not the general route. The map, approved by the president and secretary of the railway company, the attor-

ney-general, railway commissioner, and secretary of state, must be filed in the office of the registrar of deeds under the laws of Michigan. In New Hampshire the railway commission reports to the supreme court on the public utility of the proposed road, and a map of the same, if constructed, must be filed within 1 year after the railway is opened; and the railway commissioner may authorize a change in the location and assess damages caused thereby. The New York railway commission has power to approve or disapprove railway projects; persons interested are given a hearing; and a map must be filed before construction begins. In North Carolina the charter must be filed within a reasonable time after construction. Petitions must be presented to the "statutory court" if the proposed route appears objectionable to the commissioners. To alter the route by a two-thirds vote of the board of directors, to deflect a route from a certain city by a two-thirds vote of the council, are the privileges enjoyed by railway companies chartered under the laws of North Dakota. In that State they are also required to file a map at any time within 6 months after definite location has been decided upon. The names of the termini and the counties through which the proposed railway runs must be filed, under the laws of Ohio. For good reasons a change in the route may be made, but the secretary of state must be notified thereof, and all subscribers and all persons who subscribed for the former route must be released from their obligations. In Wyoming the law simply declares that railway companies may exercise the right of eminent domain in locating or relocating lines. This was a common provision in early charters, under which railway companies were empowered to locate and to relocate the respective roads at their pleasure. Approximately, one-half of the States have statutory provisions governing the location of railways; and only a few cause accurate surveys and maps to be made, so that the exact location of a road may be known before construction begins.

Equipment.—The subject of safety in railway transportation has been one of the most prolific sources of railway legislation in recent years. There are few topics about which so many different laws have been passed, and perhaps none in regard to which more separate acts have been approved by the various legislatures. A majority of these laws relate to mechanical appliances and the physical condition of the road, while numerous others have in view the improvement of cars and stations, in so far as these affect the comfort and health of passengers. Numerous police regulations also appear upon the statute books of recent years, relating chiefly to subjects like stealing rides on trains, shooting at trains or throwing missiles, destruction of railway property, interference with railway signals, destroying tracks, or other things affecting the safety of traffic. A movement is noticeable to encourage the abolition of grade crossings and to guard these more carefully in the many places where they still exist. Bringing trains to a stop at railway crossings, or permitting them to pass without stopping in case interlocking switches are used; the construction of switches and the use of keys for the same; the blocking of frogs, in order to prevent feet of workmen from being caught in them; and similar subjects, relating to safety in the construction of tracks, have called forth numerous recent laws. An old and ever-continuing subject for legislation is that of fences, cattle guards, bells, whistles, etc. The introduction of automatic couplers has been greatly promoted by the legislatures of a number of leading States, as well as the use of continuous train brakes. In a few laws the number of brakeman for every train, or for a certain number of cars, is also prescribed. Several laws regulate the question of precedence among trains, and in almost all States laws have been passed regulating the speed of trains in cities—although these are most commonly limited by municipal ordinance—in crossing each other's tracks, and in crossing bridges. In the southern States the law commonly provides for separate coaches for white and colored persons; in others, the heating of cars and coaches is made compulsory. Fresh water must be supplied at stations and in coaches, and the necessary conveniences for personal comfort provided on trains and in railway stations. In a few cases the laws provide for the examination of employees and the licensing of engineers, and prohibit the employment of persons addicted to drink. The adequacy with which individual States deal with one or more of these topics will be illustrated by the summaries of the laws upon these points in several leading States.

Alabama.—Speed of trains in cities regulated; fresh water supplied; separate coaches for white and colored persons; conductors may assign seats to colored persons; employees may be examined and licensed; the necessary lights shall be kept on switches.

Arkansas.—Separate coaches to be provided; officers assign seats to passengers; fresh water; railways responsible for baggage 48 hours after arrival; the rear of passenger cars kept clear.

Connecticut.—Crossings regulated and frogs locked in the manner prescribed by the commission; safety couplers, approved by railway commission, required; speed of trains regulated by the commission; number of brakemen varies with speed and equipment of trains; fresh water to be supplied, and engineers sworn to obey the law.

New York.—Automatic couplers; automatic air brakes for every train, sufficient to control train; railroad commission supervises the construction of switches and signals; tunnels properly lighted and ventilated; when set-offs are used in cars, the commission may approve or disapprove; railway crossings according to law.

Ohio.—Automatic couplers, and interlocking switches at grade crossings, subject to the approval of the commission; commission to prescribe speed of trains over bridges; crossings constructed according to law; engineers addicted to drink not to be employed.¹

In recent years the commission laws of different States have provided for the reporting of accidents to passengers and employees. These reports are frequently made to the commission in the forms prescribed by that body. In some cases it is made the duty of the commission to investigate railway accidents.²

Quality of service.—Legal provisions falling under this head are closely related to the topics discussed in the section immediately preceding. Under the head of equipment, however, physical conditions were chiefly considered in their bearing upon safety in travel. Although numerous laws on this subject have been enacted, on the whole the physical side of railway transportation has presented fewer difficulties from the point of view of regulation and control than many others; because the immediate self-interest of railway companies made the prevention of accidents necessary, and for this reason uninterrupted progress has been made in the application of those appliances which make modern railway travel so very safe to passengers and constantly less and less dangerous to employees. Recent laws compelling the introduction of automatic couplers and air brakes illustrate this sufficiently. In the present paragraphs relatively little attention will be paid to physical conditions. These will be assumed; but the question that directly concerns us here is that of State influence on the operation of trains when they have once been put into service.

Train service.—The general laws of nearly all the States contain a more or less definite provision to the effect that trains shall be run "at regular times" (to use the phrase of New York), that bulletin boards shall be put up, and that trains running on other than schedule time shall be duly announced on these boards. About one-fourth of the States, however, contain more definite provisions, wider in their scope and looking toward a more direct control of the train service. In Alabama trains may be made to stop at all stations advertised and at county seats. Under certain conditions double-deck cars must be provided, and the speed of trains in cities is regulated. On petition of 50 citizens every train must stop in the city of the petitioners, according to the laws of Arkansas; bulletin boards must be provided and trains run at regular intervals; while provisions similar to those of Alabama govern the use of double-deck cars. In California the railway company may regulate the number and frequency of trains, subject to the legislature. Colorado laws compel trains to stop in cities, and give railway companies the power to designate loading points. At these points cars shall be furnished in proportion to need; and, in case of failure on the part of the railway company to provide them, for one reason or another, an appeal may be taken to the railway commission. The laws of Connecticut are more detailed on this topic than those of nearly all the other States. On petition of 20 citizens the railway commission may order trains to stop whenever they pass within 1½ miles from a village; stations may be established on petition, and the same are not to be discontinued without the assent of the commission. Railway companies are obliged to make proper connections. The Florida railway commission has power to establish train schedules. In Minnesota, in case a sufficient number of cars can not be provided for all applicants, the same shall be distributed proportionately among them. North Dakota railways are by law compelled to run one train each way on each week day. Power to control time tables, and consequently that of the frequency of trains, is given to the South Carolina commission.

¹ In addition to those above mentioned the following States have fairly complete statutory provisions on these subjects: Illinois, Kentucky, Maine, Michigan, Nebraska, New Hampshire, Rhode Island, South Carolina, Vermont. Other States, of which the laws are less complete or practically wanting, are: Arizona, Idaho, Kansas, Louisiana, Maryland, Montana, Nevada, New Jersey, New Mexico, North Carolina, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, New York.

² Among the commissions that have power to investigate accidents are those of Massachusetts, Connecticut, Maine, New Hampshire, Rhode Island, New York, Ohio, North Carolina, and Virginia.

Up to 1899 the laws of Texas provided for regular trains once per day in each direction; but in 1899 (Laws, chap. 48) a law was passed making it obligatory to supply cars, without preference, to applicants. A shipper applying for 10 cars or more is to be furnished with them in 8 days; if the call is for 50 cars or more the same are to be supplied within 10 days. As a protection to the railway company the same may require shippers to deposit one-fourth of the freight rate on the contemplated shipment as a condition of delivery of cars; and this deposit is forfeited in case the cars are not loaded within 48 hours. In addition, the shipper may be fined for actual damages sustained by the railway company for his failure to load the cars ordered by him.

With this we have practically exhausted the legal provisions of the States bearing directly upon the frequency of trains and the delivery of cars. Under the heading of discriminations the same will be indirectly reverted to; because, as is well known, failure to supply cars has been one of the most common forms of discrimination. The subject of publicity of rates will indirectly contribute something to this topic, because the same statutory provisions dealing with one, in many instances, also deal with the other. The question of rates, being so important, will be taken up with much more detail later on, and for that reason train service and the publication of schedules may be dismissed for the present.

Through trains, routes, and bills of lading.—Many of the earlier charters and practically all the later charters and general laws provide that railway companies shall permit connections, junctions, and intersections with other respective lines. Apart from this no direct attempt was made to control through shipments and through service in general. This is primarily a question of interstate commerce and largely out of the control of State authorities. The Interstate Commerce Commission has handed down a large number of decisions bearing upon questions of through rates, routes, and bills of lading, and also on the choice of routes when goods may be directed over different ones varying in length and cost of transportation. The principle has perhaps been well established that railway companies are bound to obey the directions of the shipper, and that without explicit directions the shortest and least expensive route possible must be chosen for the consignment of goods. The legislatures of about one-third of all the States have touched upon this subject in their enactments, and some of them have passed fairly comprehensive laws upon it. The laws of Connecticut give the railroad commission the general power to regulate the exchange of passengers and baggage. In Florida other railways may be authorized to enter terminals and union stations of competitive lines, and two or more railways in the same town may be required to erect union stations. In addition, the Florida commission has the general power to order adequate and proper railway facilities. In case railways send goods over a longer route, when a shorter one could have been used, no more shall be charged for transportation over the longer line. The laws specify that transportation shall be directed over the shortest and most convenient route. The Georgia railway commission has power to establish joint rates, and it is the duty of this commission to investigate through rates, and, if necessary, to make representations before the Interstate Commerce Commission. Likewise, in Iowa, the commission may establish joint through rates and copies of such joint-rate schedules made by the railway company shall be filed with this body. The Maine law of 1899 governing leases and contracts expressly provides that none of the provisions governing contracts among railways shall be construed to prevent agreements between such corporations "allowing the trains of one to run over the road of another, both corporations assenting thereto." Under the Minnesota law joint rates may be established on demand, and under the law of 1899 the railway commission is given direct power in establishing joint rates upon such important objects of traffic as grain, flax, lumber, coal, and live stock. A rather stringent law was enacted in Missouri in 1899. It gives the railway commission power to order close connections of competing lines, when such connections will not cause serious injury to one or more of the roads in question; and in case of refusal on the part of the railway companies to make these connections, under conditions determined by the commission, a fine of from \$500 to \$1,000 may be imposed. Copies of all contracts for joint rates must be filed with the Nebraska board of transportation. The corporation commission of North Carolina has power to establish through rates and to approve contracts for the division of earnings in such cases. The law of North Dakota guarantees ample facilities for transferring freight and passengers from one line to another, and prescribes that no railway company shall do anything which may interfere with shipments of freight from being continuous. In 1899 South Carolina enacted a law making connections compulsory, and providing that the expense involved in making such arrangements shall be borne ratably in accordance with the orders of the commission.

Older laws provide for through bills of lading. The laws of Texas compel the railway companies to receive freight from connecting lines. Penalties are imposed for collecting more than the charges specified in the bill of lading, and goods are to be delivered on the payment of the amount named in the bill. In Wisconsin, on complaint, the railway commissioner shall investigate connections made between railway companies, and if he thinks the case of sufficient importance he shall bring the same before a board composed of the commissioner, the attorney-general, and the governor, who shall try the case and make a proper order in accordance with their findings. Perhaps a half-dozen additional States have laws specifying that railway companies shall permit an interchange of business; that track connections shall be made on demand, and analogous provisions. More than one-half of the States, it will be noticed, have thus far failed to provide by law for matters relating to through traffic. To what extent the Federal law on interstate commerce and the powers given to the Interstate Commerce Commission makes this unnecessary or undesirable lies outside the province of this report.

Consolidation and pooling.—The assumption on which State and Federal railway legislation largely rests is that of free and unrestricted competition among the railways of the country. Provisions on consolidation were rather common among early charters and are almost universal in case of later charters and general laws. Pooling, whether regarded as an end in itself or as a stage in the growth of consolidations, has received much less attention at the hands of State legislatures than discriminations, for more than one-half of the States have no statutory provisions governing pooling contracts or in any way recognizing them. Among economic students it is a familiar fact that railways are not, like many other industries, subject to the laws of competition; that competition acts only within narrow limits among lines of railways. But the accuracy or inaccuracy of the assumptions of our laws is not the problem before us. We are concerned here primarily with the statement of facts in regard to legislation governing railway consolidations and pooling.

Consolidations.—Legislation under this head falls into two groups. On the one hand, those laws which either directly or in a modified form permit consolidations among all classes of railways; and, on the other hand, laws which prohibit consolidation among parallel or competing lines but permit it in cases of continuous lines of railway. In a number of States like Michigan, Maryland, Georgia, and Missouri laws governing the consolidation of continuous lines are very elaborate. It is common to specify a certain number of days' notice which must be given to shareholders when action upon consolidation schemes is to be taken. The number of votes requisite to approve the consolidation contract is usually prescribed, and varies from a unanimous to a majority vote—a two-thirds or three-fourths vote of the stockholders being most common. It is worth while briefly to indicate the contents of a few typical laws of this kind.

Georgia permits the consolidation of continuous lines and the leasing of other railways, but all contracts must be recorded, and suit for the unlawful acquisition of railway lines may be brought in any county through which the same runs. Under the statutes of Maryland one railway company may acquire the property and rights of other railway companies, but articles governing such acquisition and control must be filed with the secretary of state. In Michigan these contracts have no force before a duplicate copy has been filed in the office of the secretary of state and the articles of consolidation have been submitted to and approved by a board consisting of the attorney-general, commissioner of railroads, and the secretary of state. In Wisconsin parallel or competing lines are enjoined from consolidating, but the fact whether or not such lines are competitive may be determined by jury. To quote the laws governing this topic in full, even in one or two States, would unduly increase the volume of this report without adding anything of vital importance to its contents; and it may therefore suffice to give a brief extract from one of the most condensed statutory provisions of this kind: "Any railroad, canal, or other corporation, or the lessee, or purchaser, or manager of any railroad or canal corporation, shall consolidate the stock, property, or franchises of such corporation with, or lease or purchase the works or franchises of, or in any way control any other railroad or canal corporation, owning or having under its control a parallel or competing line; and the question whether railroads or canals are parallel or competing lines shall, when demanded by the party complainant, be decided by a jury as in other civil issues." This is illustrative of the provisions in two-thirds of the States. Only a few, like Delaware, Oregon, and Rhode Island, are silent on this point.

Coming now to that group of a dozen States which permit consolidation within limits, attention may be called to the laws of New Jersey under which domestic—that is, State railways—may consolidate, but consolidation with foreign railways

is prohibited except with the consent of the legislature; and a law of 1900 expressly provides that railway companies may acquire the rights of other companies. While New York laws prohibit the consolidation of parallel lines, such consolidation may, nevertheless, be permitted by authority of the railway commission. New York provisions for the consolidation of continuous lines, like those of Ohio and Michigan, are extremely elaborate. In Massachusetts the consolidations are subject to the approval of the railway commission; and in Florida contracts for the consolidation of competing lines are ultra vires unless approved by the commission.

Without duplicating further legal provisions bearing upon both types of consolidation, the lack of uniformity upon this, as upon so many other questions, is apparent. When we view the facts of railway history, the steady and uninterrupted consolidations which have absorbed line after line, on the one hand, and the contemporary existence and growth and duplication of laws attempting to govern these, on the other hand, the conclusion is irresistible that somehow these laws did not accomplish the purposes for which they were enacted. The wisdom of the purposes of these laws may be, and is, seriously questioned by students of railway transportation; but that is not the problem before us. We are concerned simply with the facts of the law, and these facts clearly and unequivocally reveal a wide disparity between the provisions of law and the facts of railway development.

Pooling.—Both the interstate-commerce act and the antitrust law prohibit pooling. The Trans-Missouri Freight Association, the Joint Traffic Association, and other cases have finally decided the illegality of all combinations, just or unjust, good or bad, for the maintenance and control of rates, the restraint of competition or the arbitrary interference in any other way with the free play of competitive forces. For many years pooling was a favorite and one of the most efficient agencies in checking destructive competition and in maintaining reasonable rates and equitable relations among railways. Less than one-half of the States have prohibitive legislation, directly or indirectly, on the subject of pooling, and only about a dozen prohibit this practice.

"That it shall be unlawful for any common carrier subject to the provisions of this act to enter into any contract, agreement, or combination with any other common carrier or carriers for the pooling of freight of different and competing railroads, or divide between them the aggregate or net proceeds of the earnings of such railroads, or any portion thereof; and in the case of an agreement for the pooling of freight rates as aforesaid, each day of its continuance shall be deemed a separate offense."

In words identical with or similar to these, the pooling of freight or the division of business is prohibited in Arkansas, California, Iowa, Kansas, Minnesota, Nebraska, North Dakota, South Dakota, and Wisconsin.

A group of States, a little smaller than the one just given, contains laws bearing less directly and rigidly upon pooling contracts. The New York law, for instance, authorizes the railroad commission to gather information on contracts and agreements entered into between railway companies. The laws of North and South Carolina make it the duty of their respective commissions to examine and approve or disapprove the contracts among railways. In Vermont the commission is charged with the prevention of unlawful combinations to increase rates. Similar administrative supervision of contracts is provided for in the laws of Florida, Georgia, New Hampshire, Texas, and Ohio. More than one-half of the States have, consequently, no laws regulating pooling.

Tickets: Scalping, redemption of unused tickets, passes.—The public has long been familiar with arguments for and against ticket brokerage, commonly called scalping. Irrespective of the merits of the arguments on either side, the fact can hardly be disputed that scalping may seriously reduce the revenue of railways, become an agency of discriminations and other abuses, and in the hands of weak roads provide the latter the means through which they may dictate, in a measure, at least, to the stronger and larger systems. In all but a dozen States ticket brokerage is extra-legal; that is, the law has ignored the subject, unless we unduly extend the meaning of such general provisions as that found in the laws of California, that railways shall provide tickets. In Connecticut the railway commission may regulate the sale of tickets and prescribe hours during which ticket offices may do business. South Dakota stands alone in that it expressly authorizes scalping. "Any person having an established place of business * * * shall have the right to buy, sell, and exchange passage tickets. * * * Any person purchasing a ticket from the authorized office * * * shall have the right to sell his ticket or tickets to any person doing business under this act." (Revised Statutes, 1899, §§ 8950, 8951.) Villages and cities may, however, regulate this

business by law. Not nearly so wide in its scope is the Alabama provision licensing ticket brokers on paying a fee of \$50 in towns of 10,000 or over. In smaller towns a fee of \$30 is exacted. In Colorado all tickets are transferable. Tickets are limited as to time, but not as to person.

On the question of free transportation and passes, New Jersey occupies a position as unique as that of South Dakota, in that the laws of this State enumerate certain State officers who shall be permitted to ride free. Most of the States that have legislated on scalping have in the same act inserted provisions relating to the redemption of unused tickets or unused portions of tickets. The lists are not entirely identical, scalping being prohibited without providing for the redemption of tickets, and vice versa, in a few States. The nature of legislation of this kind may be illustrated by the following (Laws of Maine, 1899, chap. 69):

"SECTION 1. No person other than a duly authorized agent of the railroad company issuing the same shall sell, offer for sale, or rent any railroad mileage book or any coupons therefrom, or any other railroad tickets limited to the use of a person or persons thereon specified at the time of its issuance by the railroad company, under a penalty of not less than \$10 nor more than \$100 for each offense, to be recovered on complaint.

"SECTION 2. No person, other than the one specified in any railroad mileage book or other railroad ticket limited to the use of the person or persons specified thereon at the time of its issuance by the railroad company, shall offer for passage or in payment for transportation on any railroad any such mileage book or coupons therefrom, or any other railroad ticket limited as aforesaid, under a penalty of not less than \$1 nor more than \$10 for each offense, to be recovered on complaint.

"SECTION 3. Any railroad company which shall issue a mileage book limited to the person or persons named therein, shall, upon presentation thereof by the person to whom such book was issued or his legal representatives, at some one or more of its principal stations in each county through which its road runs, to be designated by such company, at any time after one year from the time when such book was issued, redeem all the coupons then attached to such book at the same rate per mile as such mileage book was sold at."

A similar law passed by the legislature of New York has recently been declared unconstitutional. Other States prescribing the sale of railway tickets through authorized officers are: Florida, Illinois, Minnesota, Montana, New Jersey, Iowa, Texas, and Pennsylvania. In Montana the railway company must provide its agents with certificates which, when presented to the secretary of state, entitle the holder to a certificate authorizing him to sell tickets for the railway in question on the payment of \$1. Selling tickets without such a license is unlawful.

The redemption of unused or unused portions of tickets has been provided for by law in Pennsylvania since 1863. Other States having statutory requirements to this effect are Alabama, Florida, Illinois, Iowa, Michigan, and Minnesota.

Laws governing the free transportation, or transportation at reduced rates, of certain persons or classes of persons have been enacted in less than one-fourth of the States, most of these making it a misdemeanor, punishable by a fine, forfeiture of office, or otherwise, for persons holding public offices to accept passes or tickets at rates other than those charged to the public at large. Excursion and commutation tickets and reduced rates for exhibitions, fairs, political and other gatherings may still be granted, as well as special favors extended to charitable, religious, reformatory, and other institutions. States having legislated on this topic are Alabama, Arkansas, California, Colorado, Florida, Massachusetts, Mississippi, Missouri, North Dakota, Pennsylvania, Virginia, Wisconsin. In most of these the law takes the form of positive prohibition of the acceptance of passes on the part of public officials. In 1899 Minnesota passed a law making it obligatory for railway companies to grant free transportation to shippers of car-load lots of live stock. Free baggage is expressly provided for by the laws of a number of States, 150 pounds being the usual exemption on first-class tickets. In recent years laws declaring bicycles baggage have been enacted in a number of States.

Long and short hauls.—With the exception of discriminations and reasonable rates, there is no subject which the decisions of the Interstate Commerce Commission touch more frequently than that of long and short hauls. During the period covered by its first annual report 58 petitions, representing 95 different railways, were presented to this body for relief under the fourth section of the interstate-commerce law, commonly known as the long and short haul clause. The question of long and short hauls is chiefly an interstate matter, yet nearly one-half of the State legislatures contain the long and short haul provision in one form or another, that used in the interstate-commerce law being the most common.

Among the States prohibiting a greater charge for a shorter distance included within the longer for transportation in the same direction over the same line, under substantially similar conditions, ten introduced the much-needed element of elasticity in that the respective railway commissions, or other authority, may permit the suspension of the long and short haul provision in certain cases and under certain conditions.

"That it shall be unlawful for any common carrier, subject to the provisions of this act, to charge or receive any greater compensation in the aggregate for the transportation of passengers or of like kind of property, under substantially similar circumstances and conditions, for a shorter than for a longer distance over the same line, in the same direction, the shorter being included within the longer distance; but this shall not be construed as authorizing any common carrier within the terms of this act to charge and receive as great compensation for a shorter as for a longer distance: *Provided, however*, That upon application to the board appointed under the provisions of this act, such common carrier may, in special cases, after investigation by the board, be authorized to charge less for longer than for shorter distances for the transportation of passengers or property; and the board may, from time to time, prescribe the extent to which such designated common carrier may be relieved from the operation of this section of this act.

"No railroad corporation shall charge or receive for the transportation of freight to any station on its road a greater sum than is at the time charged or received for the transportation of the like class and quantity of freight from the same original point of departure to a station at a greater distance on its road in the same direction. Two or more railroad corporations whose roads connect shall not charge or receive for the transportation of freight to any station on the road of either of them a greater sum than is at the time charged or received for the transportation of the like class and quantity of freight from the same original point of departure to a station at a greater distance on the road of either of them in the same direction. In the construction of this section the sum charged or received for the transportation of freight shall include all terminal charges, and the road of a corporation shall include all the road in use by it, whether owned or operated under a contract or lease."

This brings before us a typical provision governing long and short hauls. Among others, the law of Florida contains the following clause bearing upon the same point:

The railroad commission "shall have full power by rules and regulations to fix the rates of freight and passenger transportation to be allowed for longer and shorter distances on the same or different railroads, and to fix what shall be the limits of longer and shorter distances."

Alabama expresses the same conditions in almost identical language. Kentucky, Louisiana, Minnesota, Nebraska, North Carolina, Tennessee, and Texas likewise authorized their commissions to suspend the long and short haul provision. In Mississippi the law specifies that "the commission shall regulate and fix the rates to be charged on short hauls in excess of what may be charged on long hauls."

Other States having long and short haul provisions are Arkansas, California, Connecticut, Iowa, Nevada, North Dakota, South Carolina, Vermont, Virginia, and Washington.

Discriminations.—Discriminations have from the first presented the most serious aspects of railway regulation, and we are therefore not surprised to find statutory provisions prohibiting discriminations in 16 State constitutions and in the laws of three-fourths of all the States. A common form of expressing this prohibition is the following:

"If any railroad corporation shall willfully charge, collect, or receive from any person or persons, for the transportation of any freight upon its railroad, a higher or greater rate, toll, or compensation than it shall at the same time charge, collect, or receive from any other person or persons for the transportation of a like quantity of freight of the same class, being transported from the same point, in the same direction, over equal distance of the same road, or if it shall charge, collect, or receive from any person or persons, for the use and transportation of any railroad car or cars upon its railroad, a higher or greater sum than it shall at the same time charge, collect, or receive from any other person or persons for the use or transportation of a car or cars of the same class, for a like purpose from the same point in the same direction, and an equal distance, all such discriminating rates, charges, or collections, whether made directly or by means of any rebate, or other shift or evasion, shall be considered and taken as *prima facie* evidence of discrimination, which is hereby prohibited and declared unlawful, and shall be punished. * * *

The great importance of the legal attempts to wipe out evil practices, known under the names of discrimination, rebates, extortion, abuses, etc., warrants a brief indication of the essence of the statutory provisions found in a number of other States.

Alabama.—What constitutes extortion decided by jury. Penalty, double the damage inflicted upon a shipper plus attorney fees. Commission hears complaint. (Consult constitution, Article XIV, section 21.)

California.—Railway commission given power to correct abuses. Railways obliged to transport for each other without delay, to grant right of intersection, etc. (Consult constitution, Article XI, section 17.)

Florida.—A law of 1890 prohibits railway companies from charging more than reasonable rates and from practicing unjust discriminations.

Illinois.—Extortion and discriminations punished by heavy fines, amply provided for in the law.

Michigan.—Discriminations of all kinds forbidden and rates at noncompeting points not to be greater than those at competitive points.

Nebraska.—Board of transportation shall investigate and prevent discriminations.

Ohio.—Railways shall not discriminate between each other, between way and through freights, between trunk and other railways. Roads shall furnish equal facilities and forward freight by lines specified by the shipper. The latter may enforce by injunction.

South Dakota.—Unjust discriminations and preferences declared unlawful in two separate sections of the law. Discriminations as to goods, cars, railways, persons, etc., expressly prohibited.

Texas.—Discriminations prohibited under former laws; but a law of 1899 punishes discriminations on part of railways against steamship lines in the interchange of traffic. The unusual punishment of not less than 2 and not more than 5 years in the penitentiary is inflicted by the law, but this shall not prevent railways from granting reduced rates to charitable and State institutions, to excursionists, fairs, railway officers, etc.

Additional States legislating on discriminations are Arkansas, Colorado, Connecticut, Georgia, Iowa, Kansas, Kentucky, Louisiana, Massachusetts, Mississippi, Missouri, Montana, Nevada, New Mexico, New York, North Carolina, North Dakota, Pennsylvania, South Carolina, Utah, Vermont, and Wisconsin. In a few of these States the legal provisions simply assert the power of the commission to correct abuses, and in the hands of an energetic commission or other State officer this is probably sufficient to combat successfully the evils of discriminations.

Rates: Publicity and revision.—This subject is closely connected with the powers and duties of railway commissions. Since, however, not all the States have commissions, and laws relating to the fixing, revising, and publishing of rates exist in some of these States, it is necessary to give separate treatment to this question. The intrinsic importance of the subject of rates warrants its being set off by itself for special treatment. Railway rates have long constituted the pivotal point upon which have turned the most complex as well as important railway problems, and it is no exaggeration to say that all the other phases of the railway problem sink into relative insignificance in the presence of this predominant question.

Only 4 States (Connecticut, Delaware, Oregon, and Rhode Island) have no laws regulating rates or providing for their revision and publicity. One of these States, Connecticut, passed laws of this kind at various times from 1853 to 1897. Since the latter date no laws have been on its statute books governing railway rates. In 8 States the laws on this subject are less complete than in the great majority of the other States, providing in some instances for the posting of rates, fixing maximum rates in others, reserving to the legislature the power to alter them or to fix them on complaint, either directly or through an administrative officer.¹ The maximum rates which are established in some instances are so high that they can scarcely be said to afford any regulation of rates; for instance, Nevada prescribes 10 cents as the maximum for passenger rates per mile, and 20 cents per ton-mile for freight, although no railway company need accept less than an aggregate charge of 35 cents for any service of transportation. Another illustration is found in Arkansas, where a law establishes 8 cents per mile on lines of 15 miles in length or less; lines 15 to 75 miles in length, 5 cents; over 75 miles, 3 cents. A company may charge 25 cents "for the carriage of any passenger who may get on or off a train at other than the regular station."

¹These States are Florida, Idaho, Indiana, Kentucky (the commission has no power to fix rates in this State), Montana, New Hampshire, New Mexico, Vermont, and Wyoming.

Coming now to those States which provide more specifically for the establishment and publicity of rates, it will be most convenient to associate such provisions with the considerable number of leading States having enacted them. In Alabama the railroad commissioners may revise or increase rates, always having due regard to the value of the service and other conditions of traffic. Having been approved by the commission, such rates may be published, special as well as general. In Arkansas a legal form very common in earlier charters and laws is still in existence, limiting the power of the legislature to regulate rates and fares so as never to bring the net income on the capital stock of a railway below 15 per cent per annum. The rates on lines 50 miles and less in length are fixed by law, but may be reduced by the commission, not, however, so as to bring the net income below 10 per cent. The classes of freight and corresponding rates shall be posted 5 days before taking effect. Up to 1890 an Arkansas law was in effect exempting railways subject to competition from that provision of the law providing for some days' notice; such roads were permitted to put posted rates into effect immediately. Under its constitution the State of California is empowered to regulate rates. The commission fixes reasonable rates and the railway companies (under the constitution) are liable to a fine of \$20,000 for overcharges. The schedules adopted by the commission must be published by the companies, although the commission itself may publish them. The maximum rates prescribed in California are on the graded mileage system. In Georgia railway companies may control rates on their respective lines, subject to the commission and laws of the State. Rate schedules shall be published by the commission in certain newspapers and railway companies must post the same. Weighing of freight is done by sworn weighers. Publicity is compulsory under the laws of Illinois, and the general assembly directs the commission by law to make schedules. On the application of the mayor and council or trustees of a township the commission shall examine rates under the laws of Iowa, and all rates established by the commission shall be considered just and reasonable until proven otherwise. Railway companies shall promptly post and file with the commission schedules of rates. Ten days' notice is required for an advance in rates, although no previous notice must be given for reductions. The Kansas commission law having been declared unconstitutional the legal status of the question of rates is perhaps uncertain in that State. Formerly maximum rates were prescribed and no rates could be increased without 60 days' notice. In Louisiana maximum rates are prescribed by the laws of 1890 and 1894. The commission adopts changes and regulates rates and governs the relations between main and branch lines. In Maine the legislature may fix rates which shall be subject to the revision of that body and posted. Whenever practicable rules and regulations shall be printed on the ticket. In Michigan railway companies have power to regulate the time, manner, and compensation for their services, within the limits of maximum rates established by statute. The 1,000-mile ticket law of 1891, requiring companies to sell such tickets at the rate of 2 cents per mile, and to redeem unused portions of the same, was declared unconstitutional in 1899. A recent statute regulates the relation of railways to bridge and tunnel companies and fixes the maximum rates for those companies. The commission may report upon the desirability of classifications of freight, as well as compare and fix proportional rates on milk. The Minnesota companies file schedules with the commission. Published schedules can not be changed except on 10 days' notice. A law of 1899 prevents railway companies from raising rates on grain, flax, lumber, coal, and live stock, except on 60 days' notice, unless permitted to do so by an order of the commission in writing. Railway companies are required to give 10 days' notice when the revision of rates is under consideration in Mississippi. The commission may revise both individual and joint rates and approve classifications and rate schedules before the same are posted. The Missouri commission may make classifications and freight rates, and from time to time revise schedules of maximum rates. In Nebraska the legislature prescribes maximum rates, from which companies may take an appeal to the supreme court. On order of the court the board of transportation may reduce and revise maximum-rate schedules. No advance can be made without 10 days' notice, although reductions are permitted without notice. Railways file schedules with the commission. (Consult Nebraska maximum freight-rate cases.) A New Jersey law permits railway companies to charge what they may think reasonable, below a certain maximum established by law. Railways shall not charge more from way stations than between centers. The legislature of New York may fix maximum rates, reduce the same, and require companies to furnish necessary information to the commission. Penalties are imposed for charging excessive rates. The 1,000-mileage-book law of 1895 was declared unconstitutional in 1900. The rates established by the corporation commission of North Carolina shall be considered *prima*

facile reasonable, from which carriers may appeal to the courts. Rate schedules must be posted. In North Dakota railway companies are required to publish schedules of classification, and rates must be examined and revised by the commission. No advance can be made except on 10 days' notice; reductions, without notice. Railway companies may appeal to the district courts from any order of the commission. Maximum rates on coal are especially prescribed. Under the laws of Ohio every company shall post its rates, and accept no less than the published rates except on 10 days' notice. Maximum rates are prescribed for both main and branch lines, charges being "evened up" by nickels. The Pennsylvania bureau of railways shall see to it that no more is charged than what is permitted by special charters or general laws under which the railway companies do business. Maximum rates have been commonly prescribed in charters and statutes of the State. A recent law of South Carolina compels railway companies to post schedules of rates. The latter shall be reasonable and just, and may be made by the commission. On complaint, the commission may also revise and fix rates on milk. The railway corporations of Tennessee are required to file schedules with the commission and to secure a certificate of privilege, with which the same shall be published. If railway companies fail to file such schedules the commission may fix rates. In establishing rates the commission is required by law to take into consideration water competition. The Texas commission may make classifications, establish rates, and provide railway companies with schedules. These can not go into effect except on 20 days' notice. Carriers may bring direct action to test the reasonableness of such rates. In Vermont railway companies may fix rates, subject to revision by the courts on petition of 3 or more freeholders. Railways more than 50 miles in length, wholly or partly in the State, shall sell 1,000-mile books at not over 2 cents per mile, on penalty of from \$500 to \$1,000. The laws of Virginia prescribe maximum rates which, under present conditions, are clearly very much above what any railway company would think of charging, and prevents any statutory reduction as long as the net returns do not exceed 15 per cent. Copies of rate schedules must be filed with the commission, and no changes are permitted except on 10 days' notice for an advance and 3 days' notice for a reduction. It will be noticed that reductions can not be made without giving previous notice. This is important. All other States not mentioned thus far have analogous laws on the subject of rates. Some of them do not provide as liberally as many of those which have been quoted, and all of them, in one way or another, cover the subject.

Access to books.—In about one-half of the States legal provisions governing access to books of railway companies are not very stringent and frequently do not go beyond the general statement that such books shall be open to officers, directors, and stockholders, or a certain number of them. Railway commissions or other State officers have no direct control over the records of companies.¹

To illustrate the nature of legal provisions in the other group of States brief statements of laws governing access to books in them may here be introduced. In Alabama the commission shall examine books and records of a railway company on application of 1 director or representatives of one-fiftieth of the capital stock or of one-fiftieth of the total indebtedness. The results of this examination may or may not be published, discretionary power lying with the commission. A committee of the general assembly may investigate the books of Connecticut companies. In Massachusetts the commission shall examine books and papers on request of 1 director or the holders of one-fiftieth of the stock and bonds of the company. The commission of South Carolina may at any time examine the books, or on written application of 1 director or of the holders of one-fiftieth of the stock, bonds, etc., the commission shall make such examinations. In Texas the commission, a committee of the legislature, and 3 stockholders, and "any officer or agent of the State may examine books of railway companies." In States other than those mentioned commissions have access to books and records by law. These are Arkansas, California, Colorado, Florida, Georgia, Illinois, Iowa, Kansas, Maine, Massachusetts, Michigan, Missouri, New Jersey, North Dakota, North Carolina, Rhode Island, South Carolina, South Dakota, Texas, and Vermont.

Annual and other reports.—Reference to the sections on charters, as well as early general laws, will recall the fact that annual reports were frequently called for under private as well as public laws, and that such reports vary in their comprehensiveness not only among different States, but also among charters granted by the legislature of the same State. In some charters and laws such reports

¹ States falling into this group are Arizona Territory, Colorado, Delaware, Idaho, Indiana, Kentucky, Maryland, Minnesota, Mississippi, Montana, Nebraska, Nevada, New Jersey, New Mexico, Ohio, Oregon, Pennsylvania, Tennessee, Utah, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

include only a half dozen or dozen items relating to mileage, capital stock, and bonds. In others, a hundred or more items were carefully prescribed and penalties imposed for noncompliance with the provisions of the charter or of the laws. The reports which are called for under existing statutes differ quite as widely as those made pursuant to early legislation. Typical provisions existing at the present time in the laws of those States which provide in a legal way for these needs can be illustrated by reference to the laws of the States here given. In Maine the commission prescribes the form for the annual report of railway companies which shall "be designed to produce uniformity" in the annual returns of all the railroads in New England. Similarly, in Massachusetts, an act of 1899 aims to bring the returns of railway companies into harmony with those of the Interstate Commerce Commission. Reports must be uniform, as prescribed by the commission, and quarterly financial statements shall be made. In New York railway companies make annual reports in forms prescribed by the commission and the commission in turn makes its annual report. In Pennsylvania officers of railway companies are required to report annually to stockholders and at such other times as the legislature may require. The law of 1897 orders the secretary of internal affairs to supply blanks for reports of railway companies, copies of which shall be sent to the government and members of the legislature. The bureau of railroads also keeps these reports on file. In Illinois railway directors are required to report annually to the auditor in the manner prescribed by law; also to the commission in a form embracing 41 items. The commission is required to file and tabulate the reports of railways. The law of Iowa is similar to that of Illinois except that the annual report, as prescribed by the commission, contains only 11 items, and, instead of reporting to the auditor, "a detailed exhibit" of receipts, etc., shall be presented to the government.¹

Twenty States have statutory provisions less definite and comprehensive in their scope, calling for reports to stockholders by boards of directors, or reports of railway officers to some State officer or officers, or to the legislature, or to two or more of all these.²

Issues of stocks and bonds.—Many controversies have been waged over the question of the capital stock of our railways. A conservative student of the question has placed the capitalized value of the railways of the country at \$60,000 per mile, and this he does not consider excessive nor appreciably above the real value of the plants as they exist at the present time. So far as State laws are concerned it would be difficult to determine the truth of this matter on the basis of information railway companies have been obliged to furnish under the statutes. In Massachusetts an increase in capital stock or signs of indebtedness may be made only on authority of the commission before which such questions are determined on hearing. Ohio railways shall report to the commission the cost of the road, the amount of capital stock, indebtedness, etc. The aggregate indebtedness shall not exceed the capital stock. In Pennsylvania railway stock is limited to \$150,000 per mile, bonds to the same amount, and the total of the stock, bonds, and other papers to \$300,000 per mile. In Arkansas consolidated companies shall not cause the aggregate of their stocks and bonds to exceed the sum represented by constituent companies. By a majority vote of the stockholders the company may borrow, at 7 per cent, an amount not greater than the total capital stock. In Colorado all stock shall represent labor, services, money, and property; the same shall be increased only under general law and by a majority vote of the stockholders. Kentucky companies can increase capital stock only on recommendation of the commission. The amount of indebtedness shall never exceed the total cash paid in. In Indiana boards of directors may not increase capital stock; capital stock may not be increased to exceed \$15,000 per mile, and a certificate stating the amount of such increase shall be filed with the secretary of state. The New York commission may regulate stock issues and pass upon an increase or a reduction in the same. Other States having similar provisions are Indiana, Illinois, Louisiana, Maine, Maryland, Mississippi, Missouri, New Hampshire, New Jersey, South Dakota, Texas, Wisconsin, and Wyoming.

This leaves a group of more than one-half of the States which do not attempt directly to regulate the issuance of stock by law. In some of them it is provided that a certificate of increase shall be filed with the secretary of state or some

¹Other States calling for annual reports, more or less comprehensive, either to the commission or to some executive or administrative State officer, in forms prescribed by the commission, are Colorado, Connecticut, Florida, Illinois, Iowa, Kansas, Kentucky, Maine, Michigan, Minnesota, Mississippi, Massachusetts, Missouri, Nebraska, New Hampshire, Ohio, New York, Rhode Island, South Dakota, South Carolina, Texas, Vermont, Virginia, and Pennsylvania.

²These States are Alabama, Arkansas, Arizona, California, Georgia, Idaho, Indiana, Louisiana, Montana, Nevada, New Jersey, New Hampshire, North Carolina, North Dakota, Oregon, Tennessee, Utah, Washington, West Virginia, and Wisconsin.

other State officer, and that a two-thirds' vote of the stockholders is necessary before directors may authorize an increase in capital stock or the issuance of bonds.¹

State railway commissions.—The railway commission laws sometimes embody all the railway legislation in existence in the State. This was true in Oregon; and when in 1898 the commission law of that State was repealed Oregon was left practically without any legislation on the subject of railways. In addition to Oregon, Delaware, Rhode Island, and Arizona are the only States which have failed to legislate on railways to any considerable extent. In States where the commission laws embrace only regulative features, questions of organization and management are treated in the general corporation laws or in subtitles under these. The general statement, however, holds true that the regulative features of railway legislation of the different States of the Union are embodied in our commission laws in all States in which commissions exist. The railway commissions represent the only active administrative agent which our laws have provided, and the adequacy or inadequacy of State administration depends upon the authority vested in this agent.

In their composition our commissions represent the same degrees of variety that exist in legislative provisions on most other railway topics. In the number of members they vary from 1 to 5; in the number of years during which they held office, from 2 to 6. In the manner of their appointment we find popular suffrage, appointive power of a governor, and the advisory power of a branch of the legislature. Their salaries vary from \$1,000 to perhaps more than 5 times that amount, being entirely independent of the duties performed by them, and bearing no relation whatever to the responsibilities vested in them. The funds from which the salaries are paid are sometimes provided by general taxation, sometimes by an assessment on railways in proportion to mileage, and again by levying a certain per cent on the net income of the railways in the State. The absolute lack of system will be apparent to anyone who makes even a cursory examination of these provisions.

In qualifications we find less although some variety. It is generally provided that the commissioner or commissioners shall be qualified voters of their respective States; that they shall be citizens of the State, and, in some instances, of the United States; that they shall have attained a certain age, usually that of qualified voters, and finally that they shall have no financial interests in any of the railroads over which they are expected to exercise control.

The jurisdiction of railway commissions varies from controlling railway companies alone, on the one hand, to exercising administrative control over a large combination of corporate interests representing practically the entire industrial life of the Commonwealth, on the other. The latter is strikingly illustrated by the industries over which the corporation commission of North Carolina is legally bound to exercise supervision. These embrace street railways, steam railways, steamboat and canal companies, express companies, sleeping-car companies, telephone and telegraph companies, banks, building, loan, and trust associations. The Pennsylvania bureau is required by law to exercise administrative control over railways, banks, mining, and manufacturing establishments. The Illinois, Nebraska, and Minnesota commissions exercise control over railways and warehouses. The New York commission, in addition to railways, has charge of sleeping and drawing-room car companies. Others are charged with railway and street railway companies. Others also with bridges and ferries. Not a few of the commissions are by law obliged to devote more or less of their time and energy to institutions which lie entirely outside of the means of transportation and communication. From the point of view of efficient administration the tendency, if such exists, to empower a single administrative organ to exercise control over a great variety of industrial establishments can not receive the approval of thoughtful men. All of our great industrial establishments represent interests which are peculiarly their own, and other features which are characteristic only of similar establishments. This calls for special agencies, whose duty it should be to concentrate all their efforts in that particular field. The inclusion of so many industries inevitably leads to a division of interests, and the equally inevitable diminution in concentration and efficiency. Special types of industry require special administrative agents, and that tendency in our laws which burdens a single administrative organ with a great variety of complex duties can not be looked upon as desirable. It is beside the mark to attempt to maintain that a large

¹ These States are Alabama, Arizona, California, Delaware, Florida, Georgia, Iowa, Kansas, Kentucky, Michigan, Minnesota, Montana, Nebraska, Nevada, New Mexico, North Carolina, North Dakota, Oregon, Rhode Island, South Carolina, Texas, Utah, Vermont, Virginia, Washington, and West Virginia.

administrative body can, in its membership, be differentiated in such a way as to represent in a consolidated form the specialized interests of all the different leading industries of a State.

Railway commissions are frequently divided into two general classes—advisory and regulative—the former being illustrated by the commissions of States like Massachusetts, Wisconsin, Vermont, Alabama, and the latter by Illinois, Iowa, Nebraska, and Texas. So far as a formal statutory enumeration of specified powers goes this classification is doubtless correct. But we should not lose sight of the fact that an advisory commission, with its powers exercised by thoroughly competent men familiar with the railway business and capable of handling the duties of their office with facility, may in the long run accomplish infinitely more than a regulative commission of the strongest type, represented by men whose tenure of office is uncertain, whose familiarity with railways is the most imperfect and superficial, and whose purpose in the attempt to exercise their duties must at best be vague and beclouded. The efficiency of all control and regulation through commissions must ultimately rest upon the man. It is the power that lies behind the throne which vitalizes the machine. A railway commissioner in a State embracing some of the most important railway systems of the country not long ago made the statement that in the office now occupied by him little was done except the gathering of statistics and the giving of useless advice. He pointed out in detail how the efficiency of that particular office had varied very greatly with the incumbency of different types of men. Without anticipating what may be said in later sections of this report it will add something to the interest that may attach to an examination of the powers and duties of different commissions to state at the outset that the vital weaknesses of all the legislation of all the different American States may be grouped under two heads: First, the lack of adequate administrative machinery; second, the lack of organic connection between this administrative machinery and the railways on one hand and the public on the other; also, this same lack of mutual understanding and vital connection between the railways and the public. To bring about the latter there is not a single efficient provision in all the railway laws of the United States; and the fact that railways have voluntarily, and in some instances with marked success, brought about such mutual understanding by no means affords a sufficient excuse for the absence of provisions establishing such organic connections by law. It has often been said that in America the weakest line is capable of dictating with success to the strongest, and that the strongest, finding itself at the mercy of the weakest, is under the circumstances obliged to pursue a course which is as ruinous to its own interests as it is antagonistic to the interests of the public. No one whose privilege it is to know the railway men of the country will for a moment maintain that these are not, as a body, sincerely desirous of serving the public in the best possible way. Their aspirations and ambitions, altogether legitimately and necessarily keeping in view the immediate interests of the corporations which they represent, go beyond the horizon of narrow selfish interests and take into view the larger field of mutual prosperity and common gain. But granted that 99 per cent of the railway managers and officials are voluntarily inclined to do that which we believe the public interests demand, what is there to prevent the one recalcitrant road from holding out and demoralizing the entire service and preventing the ninety-nine from living up to their good intentions? The sincere desires of the best railway officials may be frustrated by the arbitrary demands and reckless dictation of a single unscrupulous manager. In this point lies the fatal weakness of American railway legislation. One feels again and again the absolute helplessness in which the shipper finds himself on the one hand, and the good railway manager on the other. No administrative machinery has been provided whereby this one outlaw can compulsorily be brought into harmonious action with the ninety-nine promptly, thoroughly, and finally. Demoralization in railway affairs has again and again been the result of the imposition upon the ninety-nine considerate officials of the inferior and defective code of the one unscrupulous manager. In view of the great importance of commission legislation, it has been deemed desirable to give in greater detail the provisions governing them. Some provisions which are common to many laws, such as those relating to certain qualifications of commissioners and employment of secretaries, clerks, deputies, and experts by these commissions, will not be repeated in all the States. Likewise those clauses governing railway taxation and railway labor and the duties of commissions with respect to these topics will be omitted, because the same are included in special reports of the Industrial Commission. Nor will repeated references be made to reports made by commissions to governors, auditors, and other officers and legislatures. It will be understood that the making of reports is one of the regular duties of commissions.

Summary of commission laws.—*Alabama.*—Three commissioners, holding office for 4 years, appointed by the governor with the advice and consent of the Senate. Removable by the supreme court on impeachment, like other State officers. The commission may settle disagreements between connecting roads with appeal to chancery court; exercise general supervisory power and make recommendations to railway companies and governor, to whom an annual report must be submitted. Railways shall furnish necessary information to commissions. Commission to carry on correspondence with similar bodies in other States.

Arkansas.—Three commissioners, elected by qualified voters, shall hold no Federal offices; railways shall submit rate schedules; commission may make rates and approve schedules; no change in rates except on 10 days' notice; they shall investigate and hear complaints; railway officers shall furnish information; facts as found by commission to be prima facie evidence; may employ experts; examine books of companies; shall determine cost of reconstruction, and, on petition, order connections and fix joint rates; report annually to governor.

Arizona.—No commission.

California.—Three commissioners, elected by districts for 4 years; legislature may remove by two-thirds' vote (consult constitution, Article XII, section 22): "The board shall have power to issue writs of summons and of subpoena in like manner as courts of record." Commission hears complaints, and defendant companies shall appear within 15 days; decisions and grounds upon which same are based to be given in writing; shall hold public session in San Francisco every month, and, if necessary, at other places.

Colorado.—One commissioner appointed by governor, with consent of senate, for 2 years. He shall inspect railways and make recommendations to them; has no power to change manner of operating roads; county commissioner or 25 citizens of a county may enter complaint before commissioner, who shall investigate rates and so on; but such complainants shall bear the expense of investigation; commissioner decides on appeal the ratio of cars which shall go to individual shippers; he may call and examine witnesses.

Connecticut.—Three commissioners appointed by governor, with consent of senate, for 4 years; one to be a lawyer, another a civil engineer, and the third a business man; commission inspects railways twice each year; publishes and posts important railway legislation; may order gates, flagmen, signals, and so on; subpoena witnesses; investigate accidents; recommend to railway companies in writing things conducive to public safety and interest. Appeal from decision of commission may be taken to superior court.

Delaware.—No commission.

Florida.—Three commissioners appointed by governor and senate for 4 years. The first commission was composed by law of 1 lawyer, 1 railway man, and 1 farmer; succeeding commissioners elected without reference to vocation. Commission has power to establish classifications, rates, and regulations which shall be just and reasonable; hearings must be given to persons and corporations; decisions of commission published at its discretion; commission may examine books, agents, etc.; non-compliance with laws subject railways to fines; commission may institute proceedings through attorney-general; railway officers making false reports fined heavily. The commission has judicial power—"that said railway commissioners are hereby vested with judicial powers to do or enforce or perform any function, duty, or power conferred upon them by this act, to the exercise of which judicial power is necessary." (Laws, 1899, number 39, section 22.) Commission has also power to create rating or basing points: "Provided That the said commissioners shall have the power to create rating or basing points at places where competing lines meet, or where water or other competition exists, and to break the continuity of rates to and from such points, so as to maintain competition between rival lines and points, and may, in fixing the rate upon any commodity, take into consideration the competition between different localities or shipping points producing or shipping such commodities." (Laws, 1899, No. 39, sec. 6.) Duty of commission to bring proper matters before Interstate Commerce Commission.

Georgia.—Three commissioners appointed by governor and senate for 6 years—one a lawyer and one a railway man. Commission may make reasonable and just rates and regulations, "for each of the corporations doing business in the State." They shall examine rates into and out of the State; may examine agents and officers under oath; compel evidence to be given; penalties are imposed for disobedience to the rules of the commission; commission appeal to Interstate Commerce Commission. (Consult Georgia commission cases: 5 I. C. C., 324; 99 Fed. Rep., 52; 168 U. S., 144.)

Iaho.—No commission.

Illinois.—Three commissioners appointed for 2 years by governor and senate; commission shall "visit each county" twice each year and examine railways and warehouses; may bring action in any county court for violations of law; attorney-general may compel compliance with orders of commission; commission in its report shall pay especial attention to the possibility of classifying railways in regard to rates and fares; may employ civil engineers.

Indiana.—No commission.

Iowa.—Three commissioners elected for 3 years; commission has general supervision over railways, and shall investigate matters relating thereto; recommend changes, examine bridges semiannually, subpoena witnesses, administer oath, and enforce orders through district courts, but the same court may also issue injunctions if the orders of the commission seem unjust. (Marked similarity between this and the Federal act regulating commerce.)

Kansas.—Kansas commission law recently declared unconstitutional, but as showing the trend of legislation, salient features of that law are here inserted. The law created a court of visitation composed of 3 members—1 chief justice and 2 associates—elected for 4 years. This commission had power to compel adherence to impartial and reasonable train service; require the construction of depots, switches, and other facilities; regulate intersections and joint operation of roads; prescribe the movement of trains and necessary measures of safety for passengers and employees; require uniform appliances; hear and decide cases relating to freight rates, switching and demurrage charges, and to apportion such charges among connecting railways; regulate rates for carload and less than carload lots, including live stock; classify freight and restrict railways in the exercise of their powers to charter privileges, and compel obedience to railway law.

Kentucky.—Three commissioners elected by districts for 4 years. No power to fix rates, but a law of 1899 requires commission to hear complaints of extortion and excessive rates "when complaints shall be made to the railway commissioners accusing any railroad or corporation of charging, collecting, or receiving extortionate freight or passenger rates over its line or lines of railroads in the Commonwealth, or when said commission shall receive information or have reason to believe that such rate or rates are being charged, collected, or received, it shall be the duty of said commission to hear and determine the matter as speedily as possible." (Laws 1899, chapter 2.) In addition, commission gives notice, fixing time and place of hearing, whereupon rates may be agreed upon and put in operation on 10 days' notice. The commission shall also examine through rates and bring proper matters before the Interstate Commerce Commission. It may order improvements and, if its advice is not heeded, call the attention of the attorney-general and the legislature to those matters.

Louisiana.—Three commissioners, elected for 6 years by districts, shall inspect railways; hear and determine complaints against classification of rates; compel attendance of witnesses. Sheriffs refusing to execute and enforce process or order of commission subject to penalty as in similar civil cases. "It shall be lawful for the commission to fine and commit to the parish prison of the parish where the commission may be in session at that time any witness or other person adjudged to be in contempt of the authority of said commission, the same as in cases of contempt before the district courts of this State." Railways may appeal from decisions of commission to courts, pending which commission orders are suspended.

Maine.—Three commissioners for 3 years, appointed by the governor and council. Commission shall examine railways and rolling stock, and give certificate showing their condition to railway companies; may reduce speed on unsafe roads; settle disputes among connecting lines; order erection of stations; investigate accidents; make rulings as to crossings, which are final, unless appealed from within 14 days; compliance with orders may be compelled by court.

Maryland.—No commission.

Massachusetts.—Three commissioners, appointed for 3 years by governor and council; commission to exercise supervision of railways; to see that laws are complied with; to inform corporations of necessary improvements, changes, etc.; to examine condition of roads on complaint of city or town authorities; to investigate causes of accidents; to be furnished with information as to condition, management, etc., of roads; to examine books, accounts, etc.; on request, to publish financial condition; summon witnesses; employ experts; approve by-laws of railway relief societies.

Michigan.—One commissioner, appointed by governor and senate for 2 years. Commissioner shall examine condition and management of railways; examine tracks; hear petitions for better railway facilities; subpoena witnesses; arbitrate on joint use of stations and terminal facilities; prescribe uniform systems of accounting; prescribe forms of signals and order automatic bells at crossings.

Minnesota.—Three commissioners elected for 4 years. Commission to investigate rates, fares, and classifications; visit each county annually; hold sessions in any part of State; inquire into management of common carriers, and, at discretion of commission, these may be sued for noncompliance with orders; attorney-general ex officio attorney for commission; commission notifies carriers of petitions and complaints, and fixes rates either on complaint or on its own motion; subpoena witnesses; prescribe uniform systems of accounts; may require uniform gauges if thought necessary after examination.

Mississippi.—Three commissioners, elected for 4 years by districts. Commissioners may apply to courts of chancery to compel obedience to State laws, lawful orders, decisions, and determinations. "Every railroad ought to use the same classification of freight, and, as far as practicable, the railroad commission shall require them to do so, and to conform the classification to that in use in interstate commerce, when practicable." (Revised Statutes, 1892, section 4, 818.)

Missouri.—Three commissioners, elected for 6 years. Commissioners shall prosecute complaints involving unreasonable rates before Interstate Commerce Commission, subpoena witnesses, call for papers and books, and secure other evidence. Courts may revise orders of commission. Commission may classify freight and reduce rates; institute proceedings against railway companies; promote the consolidation of parallel lines, and prosecute companies for preventing competition between express companies. The commission also has power to establish connections between competing lines.

Montana.—No commission.

Nebraska.—Board of transportation composed of attorney-general, secretary of state, auditor, treasurer, and commissioner of public lands. The law prescribes classification of freight in full. The commission shall inquire into the management and business of railways for the protection of public interests; subpoena witnesses and invoke power of courts; courts may compel obedience by injunction, but railways have power to appeal to supreme court. Proceedings of commission accepted as prima facie evidence; commission shall report investigations in writing.

Nevada.—No commission.

New Hampshire.—Three commissioners, appointed by governor and council for 3 years. Commission has power to fix maximum rates; investigate accidents and complaints; administer oaths, summon witnesses, and compel them to testify; institute proceedings against railways for violation of law; examine railways annually; investigate accidents, and report to supreme court on necessity of new roads, bridges, or on the desirability of consolidations.

New Jersey.—No commission.

New Mexico.—No commission.

New York.—Three commissioners, appointed for 5 years by governor and senate. Commission exercises general supervisory powers over railways. Attorney-general may prosecute railways for failure to comply with orders of commission; investigate accidents; make recommendations after hearing, for which the attendance of witnesses is compulsory; make rulings on grade crossings, from which rulings appeal may be taken within 60 days; no mortgages, except purchase mortgages, shall be issued without consent of the commission.

North Carolina.—Corporation commission, composed of 3 members elected for 6 years. Commission has general supervisory powers; may establish rates; prevent discriminations, rebates; call the attention of the Interstate Commerce Commission to proper cases; investigate books and papers; examine officers, and exercise powers and jurisdiction of a court of general jurisdiction on subjects embraced in the act; establish stations, and pass upon applications for discontinuing the same; investigate accidents; act as arbitrators between disagreeing companies. In fixing maximum rates the commission shall always consider the value of services performed and other factors entering into the composition of rates. The commission may make special rates, with a view of developing certain industries. (Compare Tennessee laws.)

North Dakota.—Three commissioners, elected for 2 years. Commission shall have general supervision; inquire into violations of law, neglect of duty, etc. Attorney-general ex officio counsel to enforce decrees of commission. Hearings shall be given on petitions, for which witnesses may be subpoenaed and oaths administered. Where railway companies cross on same grade commission may compel construction of Y's.

Ohio.—One commissioner, appointed for 2 years by governor and senate. Commissioner shall examine complaints; subpoena witnesses; call for books; enforce acts against railways having inexperienced employees, the act regulating height

of bridges, automatic couplers, limiting the hours of service of employees, fire extinguishers on train, and interlocking switches (interlocking switches are compulsory); investigate accidents.

Oregon.—No commission. Commission established in 1887, and in 1898 commission law, and with it practically all other railway legislation, was repealed.

Pennsylvania.—Secretary of internal affairs, elected for 4 years, appoints a deputy, who supervises railways. The secretary of internal affairs shall supply the blanks for reports of railway companies, copies of which shall be sent to the governor and members of legislature; such reports filed in bureau of railroads. Special reports may be required. Bureau of railroads shall see that corporations act within legal limits, hear complaints, and, if well founded, instruct attorney-general to institute proceedings against offending companies.

Rhode Island.—One commissioner, appointed by governor for 3 years. Commissioner shall "personally examine into the proceedings of any railroad corporation," secure compliance with laws, investigate accidents, subpoena witnesses, approve or disapprove the abandonment of stations, order flagmen at crossings, and make orders in regard to grade crossings, from which an appeal may be taken. Commissioner shall report annually to the general assembly, "so far as the public interest may require, with such suggestions and recommendations as he may deem necessary or expedient."

South Carolina.—Three commissioners, elected by general assembly for 6 years. Commission shall have supervision of all railways; investigate complaints, accidents, etc.; may require information concerning rates with connecting roads; may ask additional questions with respect to schedules, and make requests and give advice; investigate accidents. Jointly with railway companies commission may make special rates for the purpose of developing industries of the State. No new railway may be opened without examination and certification of commission. Railway company may appeal from decisions of commission to circuit court.

South Dakota.—Three commissioners, elected at large for 6 years. Commission shall investigate complaints and furnish report of investigation to complainants; subpoena witnesses; examine books; fix schedules of maximum rates and classifications; establish joint rates on petition of disagreeing railway companies; exercise general supervision, and institute action to compel compliance with law.

Tennessee.—Three commissioners, elected for 6 years by grand divisions of the State. Commission shall supervise and fix rates, charges, and regulations of freight and passenger tariffs; correct abuses; prevent unjust discriminations and extortions. Commission may subpoena witnesses, examine books, and compel testimony to be given, but no railway employee, officer, etc., shall be subject to legal process on basis of his own testimony; investigate through rates and, in case of violations of law, report to the Interstate Commerce Commission; attorney-general conduct proceedings. Circuit, chancery, and justices' courts shall have jurisdiction of cases arising out of the act.

"Railway companies may make contracts with coal, mining, and manufacturing companies or persons for special rates of freight not to be controlled by this article" (Rev. Stat., 1896, sec. 3000). This section relates to long and short hauls, and should be read in connection with section 10, chapter 24, laws of 1897, which provides that nothing in the act shall be construed to prevent railways from giving special rates to encourage infant manufacturing industries, and for the encouragement of any other new industry, or for the transportation of any perishable goods.

"That it shall be the duty of the railroad commissioners, by correspondence or otherwise, to confer with the railroad commissioners of other States and the Interstate Commerce Commission, and such persons from States which have no railroad commissions as the governors of such States may appoint, for the purpose of agreeing, if practicable, upon a draft of statutes to be submitted to the legislature of each State, which shall secure uniform control of railway transportation in the several States, and from one State into or through another State, as will best serve the interests of trade and commerce of the whole country."

Texas.—Three commissioners, appointed by governor and senate, holding office for same period with governor. Commission shall adopt all necessary rates, charges, and regulations to govern and regulate railroad freight and passenger rates; to correct abuses and prevent unjust discriminations and extortion; may change rates and fix same for empty and loaded cars. Emergency freight rates established by law as amended in 1899: * * * "Said commission shall have power, when deemed by it necessary, to prevent interstate rate wars and injury

to the business interests of the people or railroads of this State, or in case of any other emergency to be judged by the commission; and it shall be its duty to temporarily alter, amend, or suspend any existing freight rates, tariffs, schedules, orders, and circulars on any railroad, or part of railroad, in this State, and to fix freight rates where none exist."

"Whereas interstate cut freights from other States to Texas are frequently made and put in force on 3 days' notice to the Interstate Commerce Commission, to remain in force often for only 10 days at a time, suspending the regular rates for that time; and whereas these temporary cut rates are intended and actually do benefit only a favored few, who are notified in advance; and whereas such cut rates tend to demoralize traffic and create rate wars, to the great detriment of Texas railway companies and the public generally; and whereas under the law as it now exists emergency rates to meet such cuts and prevent such rate wars can not be put in force until 3 days' notice to the roads interested, an imperative public necessity and emergency exists for the suspension of the constitutional rule, requiring bills to be read on 3 several days, and this bill shall therefore take effect and be in force from and after its passage."

Utah.—No commission.

Vermont.—Three commissioners, appointed by the governor and senate for 2 years. Commission exercises general supervision; examines books and witnesses; may employ experts; make recommendations and apply to supreme court to compel compliance with its orders; inquire into lack of connections; recommend repairs, improvements, etc.; and, in general, see that the laws are complied with. So far as consistent with State laws commissions shall conform to the rules, etc., of the Interstate Commerce Commission.

Virginia.—One commissioner for 2 years, elected by general assembly. Commission shall inquire into and examine conditions of railways, and, in general, bring about obedience to law; on complaint of mayor, aldermen, councils, certain judges, commission shall investigate and report to the board of public works, composed of governor, auditor, and treasurer. Persons suffering from violation of law may seek relief in court of equity through commission. Commission shall report on actual working of the railway system in its relation to the business and prosperity of the State; make suggestions as to general railway policy; investigate accidents; and require railway companies to furnish information regarding the management and operation of roads.

Washington.—No commission.

West Virginia.—No commission.

Wisconsin.—One commissioner, elected for 2 years. Commissioner shall inquire into neglect of duty or violations of law; inspect railways, and ascertain their pecuniary conditions; notify railway companies of complaints, and give notice of hearing; subpoena witnesses; request attorney-general to prosecute in behalf of commission. Decisions of commissioner final unless appealed from within 20 days.

Wyoming.—No commission.

PART V.—FOREIGN RAILWAY CHARTERS AND IMPORTANT LAWS.

Introductory.—In these times of commercial expansion and the establishment of more far-reaching and complex international relations a survey of foreign experience is especially appropriate. The railway as an institution is everywhere the same. As an industry it presents characteristics which are in many respects different from those common to other industries. These peculiarities of the railway business have been so often pointed out that it is not necessary to repeat them here. Railway legislation, like legislation in other domains of the industrial world, must bear definite relations to the business treated in such laws, and the fact being indisputable that the intrinsic nature of railway enterprise is everywhere the same, the corollary must go unchallenged that railway legislation must, in its essential features, bear the same degree of similarity and identity. It is only in secondary and local characteristics that we find differences of importance in a study of railways of different countries; hence it follows that only in such secondary matters should laws aiming at the control of railways differ in the substantial elements of their contents. The experiences of foreign countries have frequently been brushed aside on the assumption that whatever success or failure may have characterized foreign effort, nothing of vital importance to American States could possibly be discerned therein because of differences in conditions which, it is alleged, exist between the United States and the respective foreign countries. No one will be inclined to deny that certain important differences do exist, but the position can be successfully maintained that, so far as railways are concerned, these differences do not, as a rule, touch upon the essential features of the railway problem, and that along the large lines of industrial growth and development every important modern nation is cosmopolitan; that is, modern, social, and economic conditions have the world over become more and more alike, and as this similarity increases the need for similar legislation in all the different countries becomes increasingly urgent.

Railway charters—using this term in the sense of special legislation as well as grants of railway charters under general laws—are essentially alike the world over so far as the great nations are concerned. In all the different countries railway charters bear upon them the marks of lineal descent from early English charters, which in turn were copied directly from the charters granted to canal and road companies. This similarity between railway and macadam or plank road charters can be readily detected in our laws. Many common road charters are identical in language with contemporary railway charters, the only differences lying in a few things peculiar to road companies, such as the smaller size of shares, provisions on toll gates, the use of the road by drovers, etc. Were one to take out of a railway charter and a common road charter clauses relating directly to these topics, it would probably be impossible to determine whether a certain charter had originally been granted to a common road or a railway company. Certain archaic features which were embodied in the Liverpool-Manchester charter, reference to which will be made later, may be discerned in charters of different States in the United States, as well as in those of foreign countries. One of the most common of these is the right of different shippers to use the same track. One of the most serious objections brought against some of the early railway projects was the impossibility of using ordinary coaches and vehicles in the transportation of persons and property over railways. Inventors during the earlier decades of the nineteenth century devised contrivances by which carriages could be used on both common and rail roads. These provisions were inserted in some cases for the purpose of reserving to the State certain rights which it might otherwise find difficult to assert. It was thought that the State, or a person or persons authorized to do so by the State, could become active competitors over

the same tracks, and thus enforce rules of justice. The fallacy of this theory was soon discovered, but the archaic clauses continued to find their way into charters.

In surveying the legislation of foreign countries one is impressed with the promptness with which Japan apparently adopted many of the more advanced ideas, as expressed in legislation of other countries, and for this reason the laws of Japan will be considered first. England naturally takes its place at the head, or very near to it, because of the vital relations existing between the laws of our own and the mother country. For obvious reasons some attention is also paid to English colonial history. Prussia deserves to be dwelt upon at some length, because in that country the most successful system of State railways that the world has thus far known has been in operation for nearly a quarter century. For the sake of completeness, as well as for the sake of the interest which attaches to leading features of railway legislation of other countries, France, Austria, Switzerland, Norway, and other foreign States will be considered. Students of railway affairs feel the need of a thorough study of foreign systems. They have the feeling that the experiences of foreign countries have not yet been adequately brought before us, and that, in order that we may profit by whatever lessons such experience may convey, a much fuller presentation of the subject of foreign railways should be made. It is needless to assert that this paper makes no such attempt. All that the writer hopes to accomplish in these paragraphs is to point out the most important features of foreign charters and laws in their bearing upon practical questions of regulation and control.

Classification of foreign railways.—In connection with the discussion of foreign railway legislation it will be necessary to refer to the different kinds of railways recognized in the laws of other countries; and, as a matter of convenience, it may be well to bring together here the classifications of the leading countries. In the United States we are accustomed to speak of trunk and branch lines only. In England no real classification exists. However, a law of 1868 imposes less onerous duties on "light railways," this term implying railways the speed of which does not exceed 25 miles per hour and whose burden is not greater than 8 tons per axle. Prussia has from the first recognized primary and secondary railways; but not until 1892 were narrow gauge and other local railways included in the term "railway" at all. French law formally recognizes only 2 classes, but a very rigid administrative division of the first class into 2 subclasses, really creates a third class of roads. These 3 classes are, the primary network of railways of general interest, the secondary network of railways of general interest, and railways of local interest. The particular class to which a railway shall belong depends upon the place which is assigned to it by the authorities of the State in the "declaration of public utility." Belgium recognizes 3 classes—railways of general interest, parochial, and urban railways. In Holland 3 classes also exist—primary, secondary, and regional. The Austrian and Hungarian classifications are essentially like that of Prussia, including main and local roads. The Italian law of 1879 distinguishes between 4 classes, based upon the proportion of the total cost of the railways borne respectively by the Federal Government and by subordinate political unities. Secondary railways are divided into 5 classes, depending upon the width of tracks, speed, curves, grades, etc.

The convenience of classifications of this kind is apparent; and, furthermore, such classifications are in themselves a recognition of varying degrees of importance attached to different kinds of railways. Under the laws of the different States in the Union, except for purposes of taxation, all railroads are practically put into the same category and treated, so far as the law is concerned, as if they all stood upon a plane of intrinsic equality. A short and insignificant road in an isolated corner of the State is governed by the same laws through which an attempt is made to control and regulate the most extensive system embracing thousands of miles of double, triple, and quadruple tracks. Along this line, foreign legislation may teach us a valuable lesson in that it points out to us the imperative necessity of recognizing in the law decisive differences in the social and economic importance of different railway systems.

Japan.—Apart from the important changes which have been made in the laws bearing upon administrative organs, the fundamental railway law of Japan is "the act for a private railway," passed in May, 1887. Under this law 5 or more persons desiring to build a railway for the transportation of passengers and goods are required to hand in an "estimation" of their project to the central government through the provincial authorities. The estimation is similar to the American articles of incorporation, and is divided into the following 5 sections:

Section I: Name of company; place of main offices.

Section II: Names of termini and of places through which railway is to pass; also a general map of the route.

Section III: The total amount of capital stock and the number and size of the shares.

Section IV: Estimated expense of building road, together with an estimate of the probable volume of business.

Section V: Names and addresses of incorporators; also the number of shares for which each is responsible; but the number of shares held by the incorporators must exceed 20 per cent of the whole amount of the capital stock.

After examining the estimation, if the central government approves of the project, a preliminary charter may be granted and the provincial administration may be ordered to permit the incorporators to make an exact statement regarding the lines, work, means, probable cost, and rules of the company. The Government shall reject the proposal if it considers that the new railway interferes with other railways already in existence, and that the necessity of the construction of the proposed railway can not be fully demonstrated.

If, after a careful investigation, the Government recognizes the project as a desirable one, a permanent charter shall be granted. Until the permanent charter is granted the incorporators can not receive subscriptions as a company; neither can they begin constructing the road.

When authority to do so has been granted, the company must start within 6 months after registration in the work of construction, and must finish the road within the term indicated within the charter. If sufficient reason exists, an extension of the charter time may be granted on application to the provincial government at least 2 months before the expiration of the time limit, but under no circumstances shall this extension in time exceed one half of the charter period.

The sections on eminent domain, right of way, and the amount of land which the company may hold are almost identical with similar sections in American charters, with the very important difference that all land is purchased through governmental authorities. In case the railway runs through public lands, such lands must be bought from the Government for an agreed price; but if it is private land which the company proposes to cross or use, the Government is empowered to purchase the same, according to the provisions of such laws governing such transactions, and then to sell the acquired land to the company. Provisions on crossing public roads, bridges, and canals, as well as on the construction of bridges, crossings, fences, gates, embankments, and the like, are much like similar parts of American charters.

As soon as the company desires to open a part or the whole of the road for traffic, a communication must be addressed to the head of the national or central railway department, now the department of communication. The department of communication, having received such notice of the intention of the company to open its new line to traffic, shall order an inspection of the road, with respect of gauge, bridges, rolling stock, buildings, etc., in accordance with the provisions of the estimation. If the inspection is satisfactory, then a business charter or "grant to begin business" is given to the company. This charter finally authorizes the corporation to do business. It will be noticed that under the Japanese system the entire grant of franchise to the company is divided into 3 parts, beginning with the preliminary charter, continuing through the permanent charter for construction and equipment, and culminating in the business charter. The first or the preliminary charter, which merely gives to the company the right to make detailed estimates and surveys, is open to competition. In the nature of the case, no competition can be permitted after the permanent or construction charter has been granted.

The department of communication is required under the law to send inspectors, not only during the period of construction, but also after the road has been completed; and if at any time such inspection reveals defects, or prejudices public safety and comfort, repairs and even rebuilding may be ordered.

The Government reserves the right to construct telegraph lines on the right of way of a company; and the company may use, on payment of the proper price, such telegraph posts. (In Japan the telegraph is owned by the Government). The company must give up the use of a part of its land and station houses, without charge, for the postal and telegraph service. In case rebuilding is necessary in order to accommodate the Government the latter shall pay the actual costs of construction. Regulations relating to pay for the mail service are also contained in the law, as well as provisions governing free transportation of postal and other officials. Prisoners and police officers may travel at half price, and in time of war the use of railways may be determined by special decree. At any time, if army or naval officers desire improvements or changes in construction, such may

be ordered on paying the actual cost. In addition, the department of communication may order all private railway companies to do those things which are required of State railways for the purpose of insuring public safety and promoting the public good. All regulations of State railways apply to private railways, unless specially ordered otherwise. If a company desires to make changes in the operation of its road, it must first secure permission from the Government. Rates are established and changed under the direction of the department of communication, and maximum rates are established in the law. All changes in train schedules must be reported to the central Government. A semiannual report is required of each company, which must be sent to the central department within 40 days after the expiration of the term for which the report is made.

A railway company may mortgage a part of or the entire plant, but the amount of such indebtedness shall never exceed five-tenths of the total amount paid by subscribers; no dividends can be declared before the debt for that term has been paid. Other provisions govern systems of accounting, intersections, and junctions.

The Government reserves the right to purchase railways after 25 years of chartered existence, and the purchase price may be fixed on the basis of the average price of shares during the 5 years immediately preceding the time of the purchase. Upon any violation of the act on the part of railway companies, or upon any violation of the proper use of railways, the Government may order the election of a new set of officers or authorize the State railway bureau to operate the road; but in case the State continues the operation of a railway the profits accrue to the company.

The department of communication, which has been mentioned a number of times, is divided into 2 bureaus, the railway bureau and the bureau of operation and accounting. The latter has charge of all State railways, comprising about one-fourth of the entire network. The railway bureau supervises and controls private railways and is virtually the authority which grants charters, provided such charters do not unduly interfere with existing railways, and when real need for the construction of a new line can be shown to exist. The bureau may establish and alter rates and time-tables in accordance with the provisions of the law discussed above.

The notable features of the Japanese law, connected with the grant of the franchise and the purchase of land, have already been discussed. A third provision deserves especial attention. This relates to the advisory council, in the establishment of which the Japanese seem to have followed in the wake of the most progressive European countries. The Japanese advisory council is composed of not more than 20 persons, representing the cabinet departments, both houses of the Legislature and, for special purposes, members with limited tenure, who serve as experts in the council. The powers of the council are only advisory, and relate to questions of location, construction, financiering, and operation. While the department of communication and other branches of the Government may direct inquiries to the council, the latter may also act on its own initiative and bring its conclusions and findings before the proper officials. A comparison of the Japanese with the Prussian councils shows important differences in their composition. Under the Prussian law bureaucracy is guarded against by the exclusion from the council of all immediate State officials. In Japan, on the other hand, the law specifically provides for the inclusion, in the council, of cabinet officers and members of the Legislature. In this respect the Japanese council system is probably inferior to the Prussian. Bureaucratic influence is said not to have made itself felt up to the present, but that there exists a real danger of an undue influence in an advisory body of this kind, when its members are so closely connected with the Government, is too obvious to require argument. However, Japan deserves credit for having incorporated in her laws so many of the most desirable features of epoch-making laws of foreign countries.

England.—The history of English railway charters is not essentially different from that of the charters granted in the United States, except that the process of mutilation by which, during succeeding years, numerous important provisions were eliminated from them, never developed so far in England as it did in our own country. It is an error, however, to suppose that the great crops of railway charters which marked the legislative activity of our numerous States did not find their counterpart in England. In the year 1825, Parliament granted no less than 59 charters, and during several of the years from 1840 to 1850 more than 200 charters were granted in each year. These were nearly all for short railways, just as in our own country numerous local lines, projected, constructed, and for a while also operated, under separate charters, were the material out of which the present systems have been constructed. The Stockton and Darlington was chartered in 1820, and on May 5, 1838, Parliament granted the epoch-making

Liverpool and Manchester charter. The latter is a long and cumbersome document of 200 sections, many of which are archaic, and bear the impress of turnpike and canal charters. It is unnecessary to specify in detail the provisions of this important charter, for these do not differ materially from those found in the best charters granted by our States. In another place¹ the writer has traced this similarity between the Liverpool and Manchester charter and charters granted in the United States through the provisions bearing upon a number of the essential points of a charter; and, as result of this parallel study, the fact has been firmly established that many American charters embody, literally, sections of English charters, and that probably all the American charters found in English legislation their form and content.

Early attempts were made in England to legislate through general laws. The first general bill for railways was introduced in 1825, and provided that "dividends be limited to a certain rate," and that Parliament reserve to itself the power to fix periodically the tolls on passengers and goods. During the same year a distinguished member of the House of Lords advocated a forfeiture clause in railway charters; and another member of that House submitted a plan under which the elaboration of the English railway system was to be intrusted to a technical board approved by the Peers. A resolution in the House of Lords, excluding members of that House from railway projects in which they themselves were interested, indicates another phase of English public opinion at that time. Following the example of the earlier turnpike charters, a prominent member of the House of Commons demanded a periodical revision of maximum-rate schedules every 21 years. Although none of these resolutions and bills brought about immediate changes, they are important in that they show a recognition, on the part of Parliamentary leaders, of some of the peculiarities of this new means of transportation, out of which were later to grow some of the most complex problems with which administrative authority has ever had to deal. In 1842, the board of trade was empowered to appoint inspectors of railways, with sufficient authority to postpone the opening of railways, to pass upon by-laws of railway corporations and to bring legal proceedings against companies for violating existing statutes. The board of trade also had power to compel railway companies to report accidents and to furnish information with respect to railway traffic and rates. The first commission was established in 1846. It was empowered to do essentially those things which the board of trade had previously been authorized to do. Other experiments were made with a different type of commission, and also with a retransference of power to the board; but administrative control was not placed upon a permanent footing until the regulation of railways act of 1873. This act established a new tribunal, known as the "railway commissioners," composed of 3 members, 1 experienced in law and 1 in railway matters. The principal duty of these commissioners was to enforce the observance of the "reasonable facility section," of the act of 1854, the exact text of which is here inserted:

"Every railway company, canal company, and railway or canal company shall, according to their respective powers, afford all reasonable facilities for the receiving and forwarding and delivering of traffic upon and from the several railways and canals belonging to or worked by such companies, respectively, and for the return carriages, trucks, boats, and other vehicles, and no such company shall make or give any undue or unreasonable preference or advantage to or in favor of any particular person or company, or any particular description of traffic, in any respect whatsoever, nor shall any such company subject any particular persons or company or any particular description of traffic to an undue or unreasonable prejudice or advantage in any respect whatsoever; and every railway company and canal company and railway and canal company having or working railways or canals which form part of a continuous line of railway or canal or railway and canal communication, or which have the terminus, station, or wharf of the one near the terminus, station, or wharf of the other, shall afford all due and reasonable facilities for receiving and forwarding all the traffic arriving by one of such railways or canals by the other, without any unreasonable delay, and without any such preference or advantage or prejudice or disadvantage as aforesaid, and so that no obstruction may be offered to the public desirous of using such railways or canals or railways and canals as a continuous line of communication, and so that all reasonable accommodation may, by means of railways and canals of the several companies, be at all times afforded to the public in that behalf."

The commissioners also had power to enjoin the forwarding of the traffic of other roads on request of railway companies, and were, furthermore, empowered to act as a board of arbitration.

¹ Meyer, Early Railroad History of Wisconsin, Wis. Hist. Col., XIV.

The law of 1873 stood until 1888, when it was superseded by "An act for the better regulation of railway and canal traffic, and for other purposes." The law of 1888 is to be construed as one with that of 1873 and the acts amending the same, and all these acts "may be construed together as the railway and canal traffic acts, 1873 and 1888." Under the new law the railway commission is composed of 2 permanent, appointed members, and, in addition, an ex officio member, being 1 of 3 officers representing England, Scotland, and Ireland, respectively. The ex officio member attends only the sessions held in the country represented by him, and is designated in England by the lord chancellor, in Scotland by the lord president and the court of sessions, and in Ireland by the lord chancellor of Ireland. His Majesty appoints the 2 permanent members on the recommendation of the president of the board of trade. One of these shall be of experience in railway business. The law specifies the commissioners' salary, time and place of meeting, and other details. A list of bodies and corporations through whom complaint may be brought is enumerated, including harbor boards, common councils, and other representative bodies, justices, associations of traders, chamber boards, commercial and agricultural societies, etc.

The board of trade may require security for costs to be given before granting permission to bring action before the commission.

The commission is given full power to execute existing railway regulations, to exercise jurisdiction over questions and disputes relating to rates, to order traffic facilities and award damages, and, in general, exercise full supervisory powers over the railways of the country. Sections 25 to 35, inclusive, of the act relate to classifications, through rates, group rates, and similar matters. Section 17 is one of great importance because it deals with a subject in which the weakness of much American legislation has long been supposed to exist:

"(1) No appeal shall lie from the commissioners upon a question of fact, or upon any question regarding the locus standi of a complainant.

"(2) Except as otherwise provided by this act, an appeal shall lie from the commissioners to a superior court of appeal."

In order to show that the conditions out of which English legislation grew are not radically different from those which shape American legislation, brief reference will here be made to Parliamentary reports of 1872, 1882, and 1893. The conclusions and recommendations of the committee of 1872 were summarized as follows:

"1. Past amalgamations have not brought with them the evils which were anticipated.

"2. Competition between railways exists only to a limited extent, and can not be maintained by legislation.

"3. Combination between railway companies is increasing, and is likely to increase, whether by amalgamation or otherwise.

"4. It is impossible to lay down any general rules determining the limits or the character of future amalgamations.

"5. The most urgent question now pressing for solution is whether, under the present state of things, the interest of the public is adequately provided for and protected, and is not, whether any and what improvements can be made in railway legislation, consistently with the fair rights of the companies, which would protect the public against certain evils incident to the present system.

"6. The self-interest of the companies alone will not effect the object, since their interest is only to a limited extent the interest of the public; and it becomes, therefore, necessary to consider what can be done in the way of statutory obligation.

"7. There can be no doubt that the introduction of certain amalgamation bills, which have been the immediate occasion of the appointment of the committee, affords opportunities for imposing conditions on the companies which may be desirable in the public interest.

"8. But it has been impossible to separate the consideration of such conditions from the consideration of measures, which it may be expedient to adopt, with respect to all railways; and such measures, if adopted by Parliament, might remove some of the objections to the present and future amalgamation.

"9. Whilst, therefore, the committee advise further legislation of a general character, they are of opinion, that, in the absence of such legislation, the measures they recommend should be imposed as conditions, so far as applicable, on the companies which are now seeking, or which may hereafter seek, to amalgamate with other companies."

Conditions which prevailed in 1882 are carefully described in the report of the select committee to Parliament of that year. Complaints brought against railway companies in respect of freight traffic—complaints in regard to passenger traffic were practically not made—were arranged by the Committee under 6 differ-

ent heads. The first, relates to charges in excess of rates authorized by law; the second, shows the existence of discriminations between different kinds of goods when transported over the same line under the same conditions; the third, is directed against discriminations unfavorable to commodities consumed at home and preference shown to export goods; the fourth, relates to discriminations between rival shippers; the fifth, asserts that rates were, in certain instances, much higher than they had been many years before, and that excessive, though not illegal, rates prevent traffic, to the prejudice of the public and of the railways; in the sixth, the question of obtaining redress on the part of private individuals is dwelt upon, especially in cases of overcharges and discriminations; and finally that, because of imperfect classification and defective schedules, it is practically impossible for private shippers to ascertain the particular class to which any article belongs, and the rates which are applicable to it. In another part of the Parliamentary report reference is made to the great difficulty which private persons frequently encounter in approaching a railway company and securing information which ought to be at their disposal. The report further discusses the disputed questions which arise out of station and terminal facilities and services incidental to conveyance. The committee called attention to the imperfect classification of goods and the lack of uniformity in these classifications and in the rates based upon them. Almost every railway company, says this committee, charges rates under several different charters, applicable to different portions of the same system, and that in some cases reference must be made to more than 50 charters, in order to determine the various rates the company is authorized to charge. The committee is unable to discover any general principle on which maximum rates have been fixed or in accordance with which articles have been classified; and in many cases the exceptions are so numerous and the determination of the rate otherwise so uncertain that an ordinary trader will prefer applying to a railway official to quote the rate. Railway charges represent all sorts of anomalies, and many witnesses urged the general advantages in fixing rates on some intelligible principle. Another complaint, which in these times of rapid railway consolidation certainly does not find such wide application in the United States, is that regarding the needless expense involved in the duplication of managements, as illustrated by the railways of Ireland, which were then represented by 270 directors, 37 secretaries, 20 managers, and a corresponding staff of subordinate officers for the administration of railways having a capital of £36,000,000; whereas the Great Western Railway of England, having a capital of nearly twice that amount, is managed by a single board of 18 directors, a secretary, and a general manager."

Many witnesses testified before the committee to the reluctance of traders to make complaints, because of the pecuniary or other disadvantage to which the railway might subject such a witness. Furthermore, the testimony showed that, because of the great interests involved in the litigation and the losses almost inevitably accompanying even a successful suit, together with the great inconveniences encountered, shippers were prevented from bringing action. It is a noteworthy fact, however, that the committee did not hear many complaints against personal discriminations. The report on railway rates and charges for 1898 contains the following significant sentence: "Very few cases have been brought before the commission, and the number of times on which its members have been engaged in court has not averaged more than 23 in each year." In England, as well in the United States, there probably exist good reasons for this, some of which have been indicated in the discussion of the report of 1892. That legal actions should be so few is not surprising when competent authority asserts that "law reports show no case of a recovery for damages resulting from a transportation rate unreasonable in and of itself."

It is facts like these which the writer had in mind in formulating the earlier statement in this report that a feeling of absolute helplessness was bound to overcome an aggrieved shipper after investigating the efficiency of the machinery through which our railway laws are administered.

Canada.—The three charters submitted by the minister of railways as typical of those granted under Canadian law vary in length from 2 to 6 octavo pages. Each of the charters contains a preamble in which reference is made to a petition previously presented to Her Majesty's Government. The names of the incorporators are given, and the project is "declared to be a work for the general advantage of Canada." Section 306 of the general railway law pronounces certain Canadian railways works for the general advantage of the country, and provides that every branch line or railway now or hereafter connecting with or crossing these lines of railway shall be regarded as a work for the general advantage of Canada. This feature of the Canadian law is similar to the declaration of public utility required under French law, and also similar to declarations made

under earlier laws in the North Atlantic States. The Canadian charters indicate that there is room for those variations in law which grow out of differences in individual and local conditions. A railway projected through a thinly settled frontier district is very different from one to be operated in a densely populated fertile country. This the Canadian charters recognize and the general law permits. The special railway acts of Canada are little more than a means of providing for the peculiarities of the particular road authorized under the act, and specifying to what extent provisions of the general law shall or shall not apply in that particular case. These charters state the amount of capital stock to be issued, and place a definite limitation upon any future issue of bonds, debentures, or other railway securities in proportion to the length of the railway constructed. This supplies a noteworthy provision in which, it will be recalled, one of the greatest weaknesses of the American railway charters was found. Both the general law and the special charters specify to what extent public aid may be received; and one of these special charters makes provisions for agreements with other railways, subject to the approval of two-thirds of the shareholders and the governor in council.

Coming now to a consideration of the general railway law of Canada, attention should be called at the outset to the list of definitions with which the act opens. Much confusion and indefiniteness has resulted from this lack of definition in American laws. The Canadian law defines such terms as "company," "county," "court," "department," "deputy," "goods," "highway," "inspecting engineer," "judge," "justice," "lines," "map or plans," "near," "owner," "railway," "railway company," "sheriff," "special act," "toll," "tariff," "the undertaking," and "working expenditure." Neither the American interstate-commerce act nor the general laws of our States contain definitions of the term "railway." (The so-called definition of the interstate-commerce act does not define.)

Supreme administrative control over railways is vested in a railway committee of the privy council, composed of the minister of railways and canals, who is chairman of the committee, the minister of justice, and two or more other members of the Queen's privy council for Canada, who, from time to time, are appointed by the governor in council. For purposes of comparison with the powers of American railway commissions, the powers of the railway committee of Canada are here stated in full:

The railway committee may—

(a) Regulate and limit the rate of speed at which railway trains and locomotives may be run in any city, town, or village, or in any class of cities, towns, or villages described in any regulation; limiting, if the said railway committee thinks fit, the rate of speed within certain-described portions of any city, town, or village, and allowing another rate of speed in other portions thereof—which rate of speed shall not in any case exceed 6 miles an hour unless the track is properly fenced.

(b) Make regulations with respect to the use of the steam whistle within any city, town, or village, or any portion thereof.

(c) Make regulations with respect to the method of passing from one car to another either inside or overhead, and for the safety of railway employees while passing from one car to another, and for the coupling of cars.

(d) Impose penalties, not exceeding \$20 for each offense, on every person who offends against any regulation made under this section—which penalties shall be recoverable upon summary conviction.

2. The imposition of any such penalties shall not lessen or affect any other liability which any person may have incurred.

11. The railway committee shall have power to inquire into, hear, and determine any application, complaint, or dispute respecting—

(a) Any right of way over or through lands owned or occupied by any company.

(b) Changes in location for lessening a curve, reducing a gradient, or benefiting the railway, or for other purposes of public advantage.

(c) The construction of branch lines exceeding one-quarter of a mile in length, but not exceeding 6 miles.

(d) The crossing of the tracks of one company by the tracks of another.

(e) The alignment, arrangement, disposition, or location of tracks.

(f) The use by one company of the tracks, stations, or station grounds of another company.

(g) The construction of works in navigable rivers.

(h) The construction of railways upon, along, and across highways.

(i) The proportion in which the cost of fencing the approaches to crossings on railways constructed or under construction on the 19th of April, 1884, shall be borne by the company and the municipality or person interested.

- (j) The compensation to be made to any person or company in respect of any work or measure directed to be made or taken, or the cost thereof, or the proportion of such cost to be borne by any person or company.
- (k) Tolls and rates for the transportation of passengers and freight.
- (l) The adjustment of such tolls and rates between companies.
- (m) Running powers or haulage.
- (n) Traffic arrangements.
- (o) Transshipment or interchange of freight.
- (p) Unjust preferences, discriminations, or extortions.
- (q) Any highway, street, ditch, or sewer, water, gas, or other pipes or mains over or through lands owned or occupied by the company.
- (r) Any matter, act, or thing which by this or the special act is sanctioned, required to be done, or prohibited.

In addition, the committee has power to investigate accidents, and to inspect railways and accessory works, examine books, papers, administer oaths, and so on. An important difference in the powers of the Canadian and American commissions lies in the standing given to the decisions of the Canadian committee. Subject to modifications by its own order, "every decision and order of the railway committee shall be final; provided, always, that either party may petition the governor in council, and the governor in council may, in his discretion, rescind, change, or vary such order as he deems just and proper."

The provisions of the law relating to incorporation contain nothing noteworthy except that some definite relation is maintained between capital stock and the length of the railway, and that a financial qualification is required of directors, no shareholder being eligible to this position unless owning 20 shares of stock absolutely in his own right. Petitions for a private charter must be heard by the minister of railways, and if, after such hearing, the desirability of building the projected road has been established, this official issues a certificate declaring such projected road to be necessary in the public interest. Plans and surveys are required containing a general description of the land, names of owners and occupiers, and everything else necessary for the right understanding of such map or plan and profile. The minister examines these plans and must permit persons interested to secure access to the same. Finally, when the road is completed, another map must be deposited with the minister within 6 months after the opening of traffic. The law contains specific provisions governing crossings and junctions. Periodical inspections are required, and, upon the report of an inspecting engineer, a railway may be condemned, repairs and modifications ordered. The by-laws and rules of the company must be submitted in writing and approved by the governor in council; until such approval has been given the same have no force or effect.

Rates are established in the first instance by the company itself; but the governor in council, through the minister, may from time to time prescribe uniform classifications of freight, which the company is bound to accept; and all rates must finally be approved by the governor in council. Schedule and rates, after revision by the governor in council, must be published and posted and kept in places convenient of access for shippers. Provisions on discriminations and special rates are much like analogous sections in American laws and equally strong in their prohibitions. The influence of water competition is recognized, and companies are permitted to discriminate under the stress of such competition; but secret rates of any kind are forbidden.

Although one railway company is enjoined from purchasing or otherwise acquiring shares of stock, bonds, and securities issued by another railway company in Canada, close traffic arrangements may be entered into under the law, as the following quotation will indicate:

"The directors of any company may, at any time, make and enter into any agreement or arrangement with any other company, either in Canada or elsewhere, for the regulation and interchange of traffic passing to and from the company's railways, and for the working of the traffic over the said railways respectively, or for either of those objects separately; and for the division and apportionment of tolls, rates, and charges in respect of such traffic; and generally in relation to the management and working of the railways, or any of them, or any part thereof, and of any railway or railways in connection therewith, for any term not exceeding 21 years; and to provide, either by proxy or otherwise, for the appointment of a joint committee or committees for the better carrying into effect any such agreement or arrangement, with such powers and functions as are considered necessary or expedient; subject to the consent of two-thirds of the stockholders voting in person or by proxy, and also to the approval of the governor in council."

The above are the most noteworthy features of the Canadian law. The usual provisions relating to safety appliances, bells, whistles, regularity of trains, handling of baggage, guarding crossings, investigating accidents, etc., are incorporated in the act; but all these are rather of a secondary nature and do not differ essentially from analogous sections of the best laws in our own States.

India.—The early Indian railway charters took the form of contracts between the East India Company and the railway companies. To illustrate this early type of charters, the leading features of the contract between the East India Company and the Great Indian Peninsula Railway will be given.

The Great Indian Peninsula Railway Company was incorporated under an act of Parliament for the purpose of constructing and maintaining such railways as the company jointly with the East India Company might determine. In the determination of the route the East India Company agreed to cooperate with the railway company; also in the construction of the road, and, in addition, to provide the necessary lands. The East India Company reserved the right of establishing grades, fixing the weight of rails, and the manner of laying them. The usual provisions governing the capital stock and its division into shares were inserted. The number and speed of trains to be operated by the railway company was subject to the approval of the East India Company. The rates charged for passengers and freight were likewise subject to approval by the East India Company, and whenever the net receipts exceeded 10 per cent, reductions in rates were to be made. The East India Company reserved the right to purchase the railway company on 6 months' notice at the end of 25 and also 50 years, and at the end of 90 years the charter was to expire and the entire railway buildings and fixtures were to revert to the East India Company on payment of the full value of the plant. In the board of directors the company was represented by one member. Periodical accounts, showing the financial condition of the road, were to be submitted to the East India Company. If at any time the East India Company should find the service inadequate or unsafe, and should be compelled to order repairs or improvements, the same could be ordered done at the expense of the railway company by withholding the sums of money thus expended from the interest which the East India Company had guaranteed to the railway company.

The later railway charters of India are in most essentials similar to those of England and Canada, with the exception that the secretary of state is capable, under the law, of exercising unusually large powers. In fact, he seems to have almost absolute control over the railways. The State reserves important rights, which will be considered under the general law, and insists upon systematic train service and adequate facilities of traffic in general. The military features are somewhat important. The charter to which reference is here made was granted in 1892, and, like the general laws, begins with a number of definitions. The road is located under the direction of the secretary of state, under whose guidance, likewise, stations, equipment, and improvements are ordered. Maximum and minimum rates are not provided, but all rate schedules are subject to the approval of the secretary. Railway property may be used for establishing telegraph lines, and all employees in the telegraph service must be provided with free transportation. The secretary of state becomes financially responsible for capital outlays, but the company pays a fixed rate of interest, and keeps such accounts as the secretary of state may require. All moneys must be handed to the secretary and accounts audited by him. Net earnings are to be divided between the secretary of state and the railway company in proportion to the amount of stock held by them respectively. Junctions with other railways may be established if this is necessary for the perfection of the railway system of India. This same subject is more fully dwelt with in the general laws, which will next be considered.

Like the general law of Canada, the Indian Railways' Act begins with a number of important definitions, including such terms as "ferry," "inland water," "railway administration," "railway servant," "inspector," "goods," "rolling stock," etc. Administrative power over railways is vested in a railway commission, composed of 3 members, 1 law and 2 lay commissioners. One of the lay commissioners must be experienced in railway affairs. The law commissioner shall act as chairman. The commission has jurisdiction in cases arising out of complaints of violation of the law, agreements required or authorized to be referred to arbitration, and such other cases as may be brought before it on application through the governor-general in council. In hearing cases the commission may exercise all the powers which are exercised in the hearing of an original civil suit by a high court. A majority decides, and the "final order in the case shall be by way of injunction and not otherwise." As in case of Canada, no appeal lies from the commission upon any question of fact on which 2 of the commissioners are agreed. In case of an appeal from the order of the commission, the court, of which the law commissioner was a judge, shall hear the same. The governor-general in council

may make rules regulating proceedings before the commissioners and enabling them to carry into effect the provisions of the law, and he may also prescribe fees to be charged for proceedings before the commissioners. Special reports on each case are to be submitted by the commission to the governor-general.

Acting through the commission, the governor-general exercises supervisory powers in the construction and maintenance of railways. The latter may, by notification in the official paper, invest, absolutely or subject to conditions, any local government with any of the powers or functions of the governor-general in council, under the law, with respect to any railway; and he may also by that, or a like notification, declare what local government shall, for the purposes of the exercise of powers or functions so conferred, be deemed to be the local government in respect to the railway.

The sanction of the governor-general is necessary before the opening of a railway, and follows an inspection of the road with respect to rolling stock, track, in regard to width, weight of rails, strength of bridges, etc., adequacy of equipment, and a satisfactory showing that the railway can be opened to the public without danger.

Joint traffic arrangements are specially provided for as follows:

"Any railway company * * * may from time to time make with the governor-general in council, and carry into effect, or, with the sanction of the governor-general in council, make with any other railway administration, and carry into effect, any agreement with respect to any of the following purposes, namely:

"(a) The working, use, management, and maintenance of any railway;

"(b) The supply of rolling stock and machinery necessary for any of the purposes mentioned in clause (a) and of officers and servants for the conduct of the traffic of the railway;

"(c) The payments to be made and the conditions to be performed with respect to such working, use, management, and maintenance;

"(d) The interchange, accommodation, and conveyance of traffic being on, coming from, or intended for the respective railways of the contracting parties, and the fixing, collecting, apportionment, and appropriation of the revenues arising from that traffic;

"(e) Generally the giving effect to any such provisions or stipulations with respect to any of the purposes hereinbefore in this section mentioned as the contracting parties may think fit and mutually agree on:

"Provided that the agreement shall not affect any of the rates which the railway administrations parties thereto are, from time to time, respectively authorized to demand and receive from any person, and that every person shall, notwithstanding the agreement, be entitled to the use and benefit of the railways of any railway administrations parties to the agreement, on the same terms and conditions, and on payment of the same rates as he would be if the agreement had not been entered into."

The law calls for periodical reports from railway companies and establishes maximum loads for freight cars. Established rates must be posted where they are easily accessible to shippers, and in case of disputes over terminal charges the governor-general may direct the commissioners to make a decision. Discriminations and preferences are prohibited under the law. The granting of passes is made unlawful. In addition, the law grants the necessary police powers, and includes other provisions relating to safety in traffic and the fixing of responsibility in case of accidents.

New South Wales.—The railways of New South Wales, like those of other Australian States, are owned chiefly by the government, although private railways still exist, and charters for the same are from time to time granted in the different States. To illustrate the nature of the private charters granted there, the chief points of such a charter granted by the parliament of New South Wales in 1893 will here be outlined.

In the first place, it may be noted that the title of the act itself contains as full a description of the proposed route as is found in most of the better charters granted in American States. A detailed description of the route is appended to the charter as a part of the act. This will be reproduced in Appendix I to this report, to which reference is here made. Quite in harmony with long-established custom in England and English colonies, the charter opens with a preamble, which is likewise reproduced in the appendix. The earlier sections of the charter authorized a certain person to construct three railway extensions. The gauge is made to conform with that of government railways; crossings, gates, fences, and drains are provided for, and the general technical features of the undertaking brought into harmony with the plans upon which government railways are constructed. In this, as in other matters, the railway commissioners have advisory powers. The charter establishes maximum rates for passengers and freights, and

further provides that these maximum rates may, if necessary, be increased with the approval of the railway commissioners. A large part of the charter is taken up with matters relating to the exercise of the right of eminent domain. The appointment of arbitrators is provided for, and these in turn appoint an umpire, who has final decision upon matters in which the arbitrators disagree. The manner in which the valuation of property shall be ascertained and apportionment of the costs of arbitration are described. On the whole, these provisions are essentially similar to those found in the better charters of American States. An important right is reserved to the State by giving railway commissioners "running powers" over this private railway; provided, however, that the exercise of this privilege shall never seriously interfere with the ordinary traffic upon the railway nor deprive the public of the use of such railway. The incorporator is empowered to make the necessary rules and by-laws governing the times of the arrival and departure of trains, the loading or unloading of cars, preventing the smoking of tobacco and the commission of any other inconvenient and disagreeable thing connected with railway traffic, to issue proper tickets and prescribe rules for the use of the same—in short, the incorporator is given full power to manage the railway, subject to the approval of governmental authorities. Another right reserved by the State is that of purchase. At any time, on giving due notice, the incorporator may be required to sell his railway property to the government upon payment of a fair valuation of the same, including compensation for compulsory sale not exceeding 10 per cent. In case of differences as to the value of the railway property, a method of arbitration is provided for in accordance with the public works act of 1888. All private railways are, as has been before indicated, subject to the railway commissioners.

The railway commissioners are organized under the government railways and tramways act of 1888. This act opens with definitions covering such terms as "commissioners," "governor," "justices," "magistrates" and "minister," "prescribed railway vessel," and so on. As a whole, the act deals with the management rather than with the construction of railways, an attempt being made in the legislation of New South Wales to separate the latter from the former. The railway commission is composed of 3 persons appointed by the governor. The commissioners are empowered to appoint the necessary assistants. All government railways are placed absolutely into the hands of the commission. The ownership of railways and tramways, piers and wharves, lands, telegraph posts and lines, and all other things constituting a part of the railway system are vested in fee simple in the commission. All railway property is exempted from taxation.

There is nothing extraordinary in the duties assigned to the commissioners, these embracing all things necessary for the successful operation of the railway system. They are enjoined from giving preferences to persons, corporations, or industrial sections, and in no case can special rates be quoted to one person or interest which is not at the same time open to all others. "The reasonable facilities" clause of the English act of 1854 is in substance inserted. The commissioners have power to issue passes to members of the legislative council, the legislative assembly, officers of parliament, persons of distinction visiting the colony or officially engaged in some public duty, and to certain former officeholders enumerated in a schedule appended to the act, and including cabinet officers, justices, executives, presidents of councils, and speakers of assemblies.

While the commissioners are concerned primarily with the management of railways, they must be consulted with respect to the regulation and construction; and before the second reading in the legislative assembly of any bill authorizing the construction of new lines of railway the commissioners shall transmit to the minister a statement showing their estimate of the traffic on each proposed new line and any other returns likely to be derived from such new line. This estimate of the commissioners must be placed before the assembly by the minister before the bill can be read a second time. Ample provision is made for disputes arising out of bills of lading and rates charged for freight traffic. Quarterly reports must be made by the commissioners to the minister and annual reports to the parliament.

The telegraph lines of the State are under the control of the commissioners.

All the Australian States have been remarkably free from railway accidents; nevertheless this commission has ample power to investigate such accidents as may occur and order whatever improvements may be possible and necessary to avoid their recurrence in the future. Thirty-two different subjects are enumerated in the law regarding which the commissioners may make rules and by-laws. It is unnecessary to enumerate these different topics; suffice it to say that they cover all phases of railway traffic and do not differ from similar regulations on other roads.

One of the most interesting features of the law is the establishment of an elaborate system of railway service. All employees, excepting occasional supernumeraries, are obliged to pass a satisfactory examination under a board of examiners appointed by the governor. A record of all examinations and appointments must be kept and, in case the number of successful candidates in an examination exceeds the number of vacancies to be filled, the names of such successful candidates are placed upon the books and their appointments follow as vacancies may occur in the order of their relative ranks. Original appointments are made upon probation for a period of 6 months, after which such appointments may be made permanent on presentation of a certificate from the officer at the head of that branch of the service, stating that such probationer performed the duties of his position in an efficient and satisfactory manner. Promotions to the higher grades of the railway service are made on the basis of competitive examinations. Officers at the head of the different branches of the railway service have power, for good cause, to reduce employees in rank, and even to dismiss them from office; however, such employees have the right, under the law, to sue the commissioners in any court for such dismissal, or for any other cause. The usual police provisions and punishments for fraudulent and other misdemeanors are contained in the law.

France.—For nearly a quarter of a century the railway history of France has been the history of the "conventions" or contracts made between the Government and the 6 great railway companies. In no country has territory been parceled out so systematically, and no pretense is made of active competition between the different lines, for each controls quite absolutely its own district.

The earliest history of French railways is very similar to our own. Up to 1833 charters were granted containing practically no restrictive features and no reserved rights of the State. In later years the State usually reserved the right of repurchase or caused a railway to revert to the State after a certain period of time; these provisions are entirely wanting in the earliest French charters. Passenger traffic was not then considered of importance, and charters contain no reference to it. A very simple schedule of freight rates was used; and the entire project left in the hands of the company.

In 1833 a turning point was reached, for in that year a law "on expropriation for causes of public utility" was enacted, after which a declaration of public utility, which has remained an essential preliminary step to this day, was necessary before a railway could be chartered. Frederick List, whose name is identified with the early railway history of Germany and of the United States, had elaborated a complete system of French railways, which, however, did not in those early years appear to be within the resources of the State. He succeeded in interesting the Government, and it was perhaps in part as a result of his agitation that 500,000 francs were set aside for the study of railways in France. In 1835 a new set of conditions was inserted in French charters. Corporate life was limited to 99 years and the powers, duties, and privileges of the corporation carefully described in from 40 to 50 different sections. The Government had evidently seen the necessity of departing from the earlier method of *laissez faire*. As early as 1835 a plan was proposed for the construction of certain main lines by the Government and the building of branch lines through private effort. With some modifications this was enacted into a law in 1842, under which railway companies provided the rolling stock, while the Government contributed heavily to the cost of construction. The crisis of 1847 compelled the State to assume the operation of several of these roads in order to prevent the complete cessation of traffic. As a result of this reaction, the Government refused to give direct financial aid; although in 1851 governmental authorities encouraged railway building with much vigor through the establishment of great railway corporations. The number of railway companies was never so great as in England and the United States—due in part perhaps to the early reaction against the theory of free competition. In 1846 there were but 33 railway companies in existence; in 1855, 24; in 1857, 11; and in 1859, excepting 8 subordinate lines, only 6, constituting the great companies of to-day. The feverish activity which had prevailed in railway circles during the early fifties received a setback during the crisis of 1857, as a result of which railway building practically ceased for a time. The investigation of the railway crisis of 1857 led to the contracts of 1859 between the Government and the railways. The conventions of 1859 divided the railways of France into 2 groups, known as the old and the new networks, respectively; to the former, including the 6 great railways of the country, the Government guaranteed a certain normal amount, while to the latter it guaranteed a certain rate of interest. From 1859 to 1876 numerous other agreements were made with a view of correcting the errors which had crept into the estimates of 1859. In 1876 France entered upon a

career of State railways. Freycinet, whose "programme" of 1878 became law the following year, was the champion of this system. His programme involved a careful elaboration of the present railway systems through the construction of new lines by the State. He estimated that 10 or 12 years would be sufficient to carry out his programme and practically to complete the "normal railways"—that is, standard-gauge main lines. In the attempt to carry out the programme, railway construction was prosecuted simultaneously in all parts of the country. There was a lack of concentration of effort and, as a result of the division of energy in so many different parts of the land, progress in construction was checked whenever the treasury found itself in difficulties. It was soon found that the execution of Freycinet's programme was impossible, and in 1883 the Government entered into the conventions or contracts under which the great railway systems of France do business to-day.

Under the contracts of 1883 the railway companies bound themselves to complete the construction of the roads embraced in Freycinet's programme, and to construct the so-called "third network." The former division into old and new network was abandoned. Eventually, companies might come into possession of other lines in case a declaration of public utility was issued. The Government reserved control of further extensions of the different systems. The chartered railways were henceforth to be constructed by the State, but the companies must advance 25,000 francs per kilometer and supply the rolling stock. The remainder of the capital necessary for construction was to be advanced by the companies to the State, but the State agreed to pay the interest and amortize the stock of the company in 74 years. In case the earnings of the company are inadequate, and the State must pay out of the treasury sums of money to make up the guaranteed rate of interest, such sums with interest must be returned by the company out of future earnings. Indebtedness incurred under the contracts of 1859 on the part of the companies was to be liquidated under the new contracts by assuming that advances had been made to the respective companies by the State to the extent of their indebtedness under the earlier contracts.

Reference to the sections on classification of foreign railways will recall the administrative division of French railways into three classes. General laws governing the incorporation of railway companies for the construction of each of these classes have been enacted by the national legislature. These laws, while distinct from one another, are identical in their arrangement and very similar in their contents. The differences existing between the general laws governing railways of general interest of normal width, and railways of general interest with narrow tracks are only such secondary variations, which naturally result from the different degrees of importance represented by these 2 classes of roads. And in comparing the general law for the construction of local railways, the differences noticeable are still of minor significance, the latter law containing only 69 sections, while the other 2 laws contain 70. In the case of local railways, Part IV of the law containing, among other things, a classification of freight and charges for transportation, rates must be supplied for every road chartered, while, in case of the other 2 classes of railways, these rates are prescribed in the laws themselves. In this connection the fact should also be recalled that in some of the early American charters the rates established involved 2 parts, one being assumed as a charge for "toll," or the privilege of using the road, and the other a charge for transportation, or a return for services actually performed. In all 3 of the French laws this division of the aggregate price of transportation, into a charge for toll and a charge for transportation, is maintained.

Under these general laws the minister of public works has supervisory power over the railways of the country. All projects for the construction of new lines must first receive his approval. The petition for a charter must be accompanied by a map and profile stating distances, grades, and curves, and, in addition, it must contain a memoir in which the necessity of the projected railway and its beneficial influence on social and economic life are established. The minister of public works has power to order the establishment of stations, freight houses and to supervise the construction of tracks. The law prescribes that all material used shall be of good quality, and certain minimum requirements, such as weight of rails, are indicated. The conditions under which the right of eminent domain can be exercised are described, and all incorporators are bound to maintain the entire road in good condition. The Government reserves the right to purchase the entire railway, and the manner in which the price is to be determined is prescribed in the law. The relation between railways and the post-office is prescribed, as well as the right of the Government to maintain telegraph lines on the right of way. It general, it may be asserted that the 3 laws illustrate the French love of system. First, a systematic classification was established, and then a law enacted to govern the railways in each class.

With the exception of the Orleans system, a State railway controlling transportation in that district, the railways of France are in the hands of 6 great companies. The few lesser companies are not of sufficient importance to be seriously considered in the study of French railways. A view of the railway map of France shows at a glance a clear-cut division of that country into sections, each absolutely controlled by some one railway administration. In no country has the theory of railway competition been so completely abandoned, under a system of private management, as in France. The railways of France are, in their nature, similar to the railways of every other country; but in that country it would seem strange, indeed, if someone were to arise at this time and advocate a régime of free and unrestricted competition among railways—a theory which was long ago abandoned.

Norway.—The first important Norwegian railway was constructed by an English company, with the assistance of the State, under a charter of 1850. The experiences of the State with this company were not favorable, and a policy of State railways was early entered upon, and has been continued into our own times. The English company had power to appoint one-half of the board of directors, while the State appointed the other half. In case of the so-called State railways of Norway, the administration is centered in the minister of public works and subordinate officials, the entire State system being divided into 6 circuits, each having its appropriate set of officers. The State railway companies are organizations in which private and public interests are merged. The State, as a rule, furnished the necessary lands on which the company agreed to make a certain return; the additional capital was supplied by the State, and subordinate political units and by private companies, each contributing approximately one-half of the entire capital.

The fundamental railway law of Norway is found in the acts of 1848, 1854, and the supplement of 1898, the latter being very brief and not important.

The law of 1848 sets out with the stipulation that private persons desiring to begin the construction of railways must submit a plan for the approval of the King, acting through the proper officials. Having been satisfied as to the usefulness of the projected road, the probability of the satisfactory execution of the plan, together with the reasonable certainty that it will be a success, a charter may be granted, authorizing the petitioners to obtain possession of the necessary lands and materials. Iron and other essential materials in railway construction are exempted from import duties. The time for which chartered rights may be granted is not to exceed 100 years.

Section II of the act prescribes time limits during which the railway must be constructed, and prescribes the manner in which rates shall be established, keeping in view the public interests involved in maintaining the lowest possible rates. While rates are supposed to be fixed before the road is opened, in case it seems impossible to make equitable schedules of rates before the road is opened for traffic, this may be postponed until the road has been operated for a reasonable length of time. The company is bound to transport government property, mails, and munitions of war at all times in return for fair remuneration. The manner of constructing crossings is regulated, and other measures for the security of the public prescribed, including the usual inspection by order of the King before the railway is opened. The State reserves the right to purchase the railway and the manner of determining the purchase price is described. Succeeding sections deal with possible differences as to reasonable rates which may arise between the railway corporation and the Government, and a system of arbitration on rates is outlined. In this connection a law of 1830, regulating the fee system, is referred to. Other provisions of the law do not present any peculiarities worthy of special mention.

The law of 1854 deals largely with the question of appropriation and police regulations. A limit is fixed within which only fireproof houses and sheds can be erected, and other considerations of safety, regulating excavations and the construction of accessory arrangements, introduced. Penalties are provided for persons who prejudice the safety of railway traffic or do injury to railway property. Employees who neglect to do their full duty or become intoxicated become liable to fines prescribed in the law. In all these matters final authority resides in the King.

The supplement of 1898 to the law of 1848 merely states that all railways or street railways for public use not operated under the direct management of the State can only be constructed and operated under a charter expressly granted for that purpose in accordance with the terms of the law of 1848. No subordinate political unit can grant a franchise which is valid without special recognition from the King.

The charter which was submitted as typical of Norwegian charters was granted in 1899, and in many respects it is quite similar to charters granted in other countries. A number of commissioners are named and a certain amount of government subsidy is specified, together with the contributions to be made by the districts through which the proposed road is to run. The charter is granted under the same general conditions under which previous charters have been granted, in accordance with the terms of the general laws just considered. The minister of public works must approve the construction of the road from time to time as progress is made. A map and profile must be submitted, not only to the department of public works but also to military authorities before the full franchise can be granted. The charter regulates the relation between this and other railways in regard to the common use of tracks, stations, crossings, etc. Minimum curves are fixed, the width of track, weight of rail, and other matters relating to the physical requirements of construction, with the final power of decision in the department of public works. A careful estimate of costs must accompany the map and profiles, and the laws of 1848 and 1898 are expressly made a part of the charter. The incorporators are empowered to exercise the right of eminent domain, a detailed plan of all lands necessary having been previously approved by the King. Rails, locomotives, cars, coal, and other materials necessary for construction may be imported free of duty. Railway property is exempt from taxation under the law of 1848 for a period of 30 years from the date of opening. The limits for beginning and completing construction are stated, and it is further specified that Norwegians shall do the work. The incorporators and their franchises are subject to the control of the State, acting through the proper railway officials, who may order minor changes. The department of public works may also approve safety appliances, the rules regulating speed of trains, and similar matters. The capital stock of the company can not be increased without the consent of the Government. A reserve fund is provided for and pensions for employees, and these, together with the working capital of the road, are governed by regulations issued by the King. No money can be borrowed by the company, the interest on which is to be paid out of the railway income, except with the consent of the Government. The Government has the right to appoint two commissioners to assist in supervising construction, and one or two to examine accounts and to assist in controlling the operation and management of the road. The minister of public works represents the Government, to the extent of the amount of stock held by the same, at stockholders' meetings. The King may order several roads to be operated as a single system, and all rates are ultimately determined by him; that is, the company submits schedules and rules for royal approval. The rates for the transportation of troops and munitions of war are prescribed. The company is not entitled to damages resulting from war. The franchise can not be sold or transferred without the consent of the King. Should the company fail to construct the road, the Government may itself complete the same or grant the franchise to others. Similarly, if the road is not operated in a satisfactory manner, the Government may assume the duty of managing it. The company deposits permanently in the Government treasury \$5,000 in cash or negotiable paper, which is forfeited in case of violation of charter privileges. The Government reserves the right to build telephone and telegraph lines along the right of way without compensation to the company. Forms for periodical reports are prescribed. The State reserves the right to purchase the railway after 30 years, and, if necessary, at any time before the expiration of that period, on giving 1 year's notice. The purchase price is to be determined according to one of two methods prescribed in the charter.

The company must accept all future laws which may be enacted on the subject of railways, and the King has authority to construe the application of such laws.

Switzerland.—Two railway charters, granted in 1898, and submitted by the minister of railways as typical for primary and secondary roads, respectively, constitute a fitting introduction to the railway legislation of Switzerland.

The charter for the primary road was granted for a period of 80 years. All the incorporators are required to be citizens of Switzerland. The entire line is to be completed within 2 years after the beginning of the work of construction; but even after construction has been begun the federal council may demand such modifications in the plans as conditions of safety and other contingencies may make necessary. The Cantonal Government preserves the right to claim all fossils and other objects of scientific and historical interest. (This provision is similar to an analogous section in the charter of New South Wales, in accordance with which minerals and oils discovered by the incorporators remain in the possession of the State.) The charter makes it the duty of the railway officials to furnish the federal officers with all the information and other means necessary for the execution

of their duties of supervision; and any railway official who is derelict in the performance of his duties and is not dismissed by the management may be temporarily discharged by the federal council. The number of trains per day in each direction is specified, and the minimum rate of speed prescribed. In addition, the railway is subject to all the provisions of the regular Swiss railway regulations. Passenger cars are to be constructed on the American plan, and all trains must contain a specified number of classes of coaches, unless expressly permitted to do otherwise by the federal council. On demand of the council passenger coaches may be attached to freight trains. Rates of fare are fixed for each of the different classes of passengers, being 20 per cent less in case of freight trains. Children under 3 years of age must be transported free, and those from 3 to 10 years old at half fare. Freight rates for the transportation of different classes of animals are fixed in the charter, and differences in rates are allowed in case of carload and less than carload shipments. A classification of freight is also included with corresponding rates for the different classes. All rates are subject to the approval of the federal council 2 months before the railway is open for traffic. The rates may be lowered whenever more than 6 per cent net profits are realized. In case of disagreement upon this point between the railway company and the federal council, the national assembly shall decide. On the other hand, whenever rates are not high enough to provide adequately for the expense of operation, they may be raised with the consent of the federal council. The railway company is required to maintain a reserve fund and a benefit fund for its employees. In accordance with the provisions of the federal law, all railway employees are required to carry insurance. In common with provisions of the general law of 1872, this charter reserves to the State the right of repurchase at any time after the expiration of 30 years of the life of the charter on 3 years' notice, and on every 1st of May thereafter. The company is to hand over the property in first-class condition, and all rights of employees, with respect to the benefit fund and insurance, are guaranteed in case of a transfer of the property of the road to the State. Should the railway property be in imperfect condition and the reserve fund not sufficient to enable the State to repair such defective portions, a sum of money shall be deducted from the purchase price equal to such deficiency in the reserve fund. The purchase price is determined under the charter as follows: In case the railway is purchased before the year 1935, the price paid shall be 25 times the average of the net profits of the 10 years preceding the giving of notice of such contemplated purchase to the company; if the repurchase is made between 1935 and 1950, the price shall equal 22½ times the average net profits of the last preceding 10 years; and if the repurchase is made in 1950, 20 times such average net profits. The net profits are defined as that sum that remains after all expenses, including contributions to the reserve and amortization funds, have been met. In case the State does not purchase the road until the expiration of the charter period of 80 years, the company may take its choice between a refund of the original cost of construction or a price fixed by the federal court, which tribunal shall also decide all other questions with respect to redemption. In case the Canton in which the proposed railway is to be constructed has already purchased the railway, the federation nevertheless has the right of repurchase along with all other rights and privileges which may have been conferred upon the cantonal authorities.

The charter granted to the railway company organized to construct and operate the secondary road, using electricity as motive power, is essentially like the charter which has just been described, only differing in certain details. The corporate life of this company is limited to 80 years, and the approval of the federal council is necessary for the construction of the line. The width of the track is prescribed, and the period during which construction is to be completed is likewise indicated. The federal council may establish the speed of trains and approve the type of cars to be used. The minimum number of trains in each direction is fixed; and rates are indicated, though without reference to different classes of passengers. As to freight and the transportation of animals, the same classification is adopted, although the rates are somewhat higher. The State reserves similar rights of repurchase, but the price is fixed at 22½ times of the net profits from 1935 to the expiration of the charter.

The discussion of general railway legislation in Switzerland will be confined to a few of the more important landmarks, beginning with the constitutional provisions of 1848. Under this constitution the federation reserved the power to undertake public works in its own interests or of a large part of the country at public expense. For this purpose it was empowered to exercise the right of expropriation, and had power to prohibit the erection of any public works which might prejudice military interests.

From that day to the present time, Switzerland has had its series of laws culminating in the important repurchase act of 1898, under which the present scheme of nationalization of railways is being carried out. The idea of State railways had its beginning in the law of 1852, according to which the federation reserved the right to permit either cantonal governments or private companies to construct railways. The culmination of this idea found its expression in article 1 of the law of 1897:

"The federation may purchase and operate on its own account, under the name of 'Federal Swiss Railways,' all those Swiss railways which, because of their economic or military significance, serve the interests of the Eidgenossenschaft or of the major part of the same, when these can be acquired without making disproportionate sacrifices."

Thus the laws of 1852 and 1897 constitute the "boundary posts" between public and private railway enterprise in Switzerland. Under the former law, construction by the State was considered chiefly as a possibility, while under the latter it is regarded as an immediate probability. Furthermore, the law of 1897 places the entire railway system in the hands of the federation, while that of 1852 left it between the cantons and private companies.

The next important law is that of 1872, which brought order and system into Swiss railway legislation. Before that time much confusion, incoherence, and uncertainty had existed in railway statutes, all of which was done away with by the systematizing and unifying influence of the new law. Besides, the law of 1872 is in many of its essential features still operative through their incorporation in later acts. This law placed a time limit upon corporate life, granted in charters, and restricted transference of charter privileges to direct assent of federal authorities. Time limits, during which construction could be completed, were also fixed, and provisions having in view sound financial organization introduced. The Government reserved the right to order the establishment of stations, double tracks, and other facilities. Railways were obliged to submit, on completion of a line, a detailed and accurate account of the expense of construction to the Bundesrath. Mail were to be transported free, and the Government had the privilege of using the roads during times of war. The manner of establishing railway rates was prescribed, and system and unity were introduced into the classification of rates, as well as into the physical organization of the railway system.

Another important step toward uniformity was accomplished in the enactment of a "normal concession bill." As the name indicates, this law furnished a normal charter, the provisions of which, it was assumed, would be incorporated in every railway charter to be granted in the future, only individual and local variations requiring modified forms. The railway companies had been reluctant to demand the right of the State to legislate in any manner interfering with what they considered their charter privileges. Both the law of 1852 and the normal charter law assert the right of the legislature to enact general laws which supersede the special charters in so far as there is a conflict between them. The charters granted during the years following this legislation contain repurchase provisions. What these were is not essential, since the law of 1898 contains what is applicable to this subject. In 1883 and in 1896 so-called accounting laws were passed. These were a necessary preliminary to the later repurchase act, in that they brought about greater uniformity in systems of railway accounting, and, in addition, provided the data upon which calculations of the repurchase price could be made. It has also been asserted that the methods of accounting prescribed under these laws resulted in lower valuations being placed upon railway property and a consequent saving in repurchase on the part of the Government. Under the federal law of 1897, approved by a heavy majority of the referendum in 1898, the federation is empowered to repurchase all the Swiss railways in accordance with the repurchase provisions of their respective charters and the general law. The funds necessary for such repurchase are to be raised by the issuance of bonds. The entire indebtedness is to be canceled within 60 years by means of a well-elaborated plan of amortization prescribed in the law. Other plans may be adopted in case of mutual agreement between the companies and the Government. The ultimate measure of success of the Swiss scheme of nationalization can only be awaited with interest. It is at present altogether too early to pronounce judgment upon it.

In the management of their railways the Swiss have adopted a system similar to that which will be described in case of Prussia. The railway side of the administration rests in the hands of a general directory of from 5 to 7 members and 5 circuit directories, the latter being subordinate to the former. These two classes of administrative organs may be considered as the legally responsible railway authorities. Running parallel with these are two other classes of authorities, advisory and deliberative in their nature. These are the administrative

council and the circuit railway council. In the organization of these bodies the representation of political, economic, and social interests is made the chief aim.

Austria.—In order to illustrate the most important features of Austrian railway legislation, the chief provisions of a charter granted in 1868 to the Austrian Northwestern Railway will here be presented.

The minister of trade is the authority upon whom the final approval of the plan devolves, and no changes and modifications can be made without the consent of the authorities of the State. The franchise is granted for a period of 90 years, during which time the company is protected against the construction of competitive lines. The State may purchase the road at any time after 30 years of corporate life; and in case State purchase does not take place before the expiration of the charter the railway shall revert to the State without compensation to the company at the expiration of the charter limit. The incorporators are also bound by all the provisions of the general laws of 1851 and 1854. The time limits, during which construction shall be begun and completed, are established for different sections of the road and not for the road as a whole, as is common in the United States. The company must permit connections to be made with other railways at any time, and the incorporators must furnish bond in cash or negotiable securities for the faithful execution of all the provisions of the charter. Telegraph lines may be constructed by the Government on the right of way without special compensation to the company, and mails, together with necessary employees, must be carried free up to a certain limit, beyond which the stipulated amount of pay may be exacted by the company. Maximum rates are fixed in the charter for both passengers and goods on the zone system, which was elaborated and generally adopted in both Austria and Hungary in 1899. Special rates must be published as well as the regular rates, and the State authorities have power to reduce rates whenever net profits exceed a certain amount. Rates are also fixed for the transportation of troops and munitions of war. In case of famine and want, special rates known as "famine rates" may be established. The charter limits the indebtedness of the road and makes provisions for the amortization of the same.

Charters granted in 1865 and 1870 are essentially like the one just described, only that in one instance direct reference is made to the Northwestern charter, and the document containing this reference is abbreviated in a manner very similar to that in which New York charters were abbreviated by reference to the Attica and Buffalo charter. One of the companies is specially bound to build whatever branches may be necessary for the development of the territory in which the road lies. In another charter, according to the terms of which the State may become a stockholder, representation of the State in the management of the road is provided for.

These charters contain no reference to pooling, although, as is well known, pooling is legally permitted in Austria. All roads entering into a pool must be duly represented in the commission which draws up the pooling arrangements, and all such arrangements are subject to supervision by State authorities.

PART VI. - PRUSSIAN RAILWAYS.¹

Early development.—More attention is given to Prussia than to any other foreign state because of the significance which the system of state railways in Prussia has attained in the railway history of the world. Prussia has developed a system which is peculiarly her own, and which, in many respects, is the most perfect of its kind. In the earlier history of Prussian railways one can find tendencies similar to those which are discernible in the historical development of railways in every other country; but the manner in which Prussian legislation met various contingencies affords instructive lessons to those countries in which legislative bodies pursued a different course. Prussia was not the first German country to begin the construction of railways. One very important road was built in Saxony before the first great Prussian railway was built; and a short road from Nuremberg to Fürth was the first modern railway in the present German Empire. The latter will be briefly considered, because in its projection things were done which are quite typical of procedure in connection with early German railway projects. For purposes of comparative study a presentation of the present legal and administrative organization of Prussian railways would perhaps be sufficient; but in its local history there are so many instructive lessons that one can not afford to pass over Prussian railway development from its beginning to the period of radical reorganization in 1894, upon the basis of which the present system rests.

The Nuremberg-Fürth Railway.—The history of the Nuremberg-Fürth Railway dates back to 1814, when a prominent Bavarian engineer began to interest himself actively in railway projects. Not until 1832, however, when John Scharrer, a wealthy citizen of Nuremberg, revived the project, was work begun in earnest which led to the completion of the road in the immediate future. The men who were associated with Scharrer were practical business men, and the manner in which they entered upon the novel undertaking of a railway shows that their enterprise rested upon business principles. By actual count they determined the number of people that traveled between the two cities. The result showed a daily average of 1,184 persons on foot, 494 in carriages, and 108 vehicles of various kinds. From this daily average they estimated the annual movement of persons between Nuremberg and its suburb, Fürth, at 612,476 persons, and 39,420 pleasure trips. On the basis of this count a detailed plan and estimate were elaborated, fixing the capital stock of the proposed company at 132,000 gulden, on which an annual return of at least 12 per cent was estimated. The stock was sold on May 14, 1833. The largest part of it remained in the two cities between which the railway was to be built, and the Government became a shareholder to the extent of 200 gulden. Following this the shareholders secured a royal charter and a confirmation of their statutes, by which the company secured the exclusive privilege of building and operating a railway between the two cities for a period of 30 years. The organization of the company has remained intact up to the present time, and the financial history of the road has been one of the most prosperous in Germany. This is one of the few early roads which was built with especial reference to passenger traffic. Not until 1836 was freight carried in any quantity. On the 11th of July of that year the first cargo of freight was shipped from Nuremberg to the "Wirth zur Eisenbachen" at Fürth; and, quite in keeping with Bavarian custom, the cargo consisted of "2 Fässchen Bier von Lederer."

¹In addition to official documents, the writer wishes to acknowledge his indebtedness to the legal works of Klein, Eger, and Schroetter; to the historical essays of List, von Mayer, and von Fleck; to the financial compilations of Hoepfer, to the economic publications of von der Leyen; and to various essays in the *Archiv für Eisenbahnwesen*.

The Leipzig-Dresden Railway.—Although not located in Prussia, this railway is mentioned because it is the first great road that was ever built in Germany, and can, in a sense at least, be considered the technical foundation of great systems of railways in the German Empire. Roads projected before this time were more isolated and chiefly local. The Leipzig-Dresden road constitutes the corner stone of the industrial mechanism of modern Germany. All of the stock was sold in 1835, exactly 2 years after the stock of the Nuremberg-Fürth Railway had been sold. A great wave of enthusiasm followed this event which led to the projection of 9 different roads. An expropriation law for the benefit of this company was enacted in 1835, and construction was begun the following year, and a part of the line opened on April 24, 1837. The entire line was not opened for traffic until April 7, 1839.

A ministerial report.—The attitude of the Prussian Government at the opening of the railway era is clearly indicated in the report of Herr Rother, the chief of the department of trade, manufacture, and building, on "the development of highways and the building of chaussees." It is dated August 16, 1835, and addressed to King Frederick William III:

Railroads as avenues of trade, with steam propulsion, have to within very recent times, and with few exceptions, been found only in the few States of North America and in Great Britain. The reports received about dividends paid by these roads, in so far as they are undertakings on stock companies, appear to be unreliable and highly colored in the interests of stock speculation.

Herr Rother then refers to the difference in the conditions under which roads must be built in the several countries. He quotes the case of the first Austrian road from Linz to Budweis and of the French road from Lyon to St. Etienne as having yielded but a small return. (The former 25 per cent and the latter even less.) And the railway built by the Government of Belgium from Brussels to Mecheln (2; German miles), he says, can not be taken as typical for other states, or even for Belgium. He says the Continent can not yet show a railway which has been successful and which has satisfied a real want. (Serving as an avenue of trade—*Handelsstrasse*.) Another objection he raises is that there is no experience on the technical side to fall back upon. He even doubts whether he could answer in the affirmative the question whether or not the German means of communication, such as they were, needed any improvement. He points out that the tolls on macadam have been reduced so much that land transportation comes into active competition with that on water. He fears that many demands will be made on the state in consequence of industrial changes (*"Verschiebungen"*) resulting from the building of railways. Additional objections enumerated in the report are: that the small towns will gain but little, if at all, on being connected with a railway; that the expense of keeping the chaussees in repair will remain the same, while the receipts from tolls will decrease; that the use of the railway (i. e. the track) can not be extended to ordinary wagons; that the cars (*"Eisenbahnwagen"*— railway wagon) can not be used on chaussees and ordinary roads; that it appears difficult to make a railway pay, and that, finally, there is no occasion for the state to grant valuable charters or to give financial aid to such undertakings.

Rother's report may be taken as a true reflection of public opinion up to May 11, 1835. The report is dated August 16, 1835, and is thus a little behind time, on which day the stock of the Leipzig-Dresden road was sold, and a high wave of railway enthusiasm sent over the country.

The Magdeburg-Leipzig Railway.—The importance of this railway lies in the fact that the charter, under which it was constructed, was made the foundation of the Prussian railway law of November 3, 1838, which has continued in force until to-day, and which in all its essentials constitutes the present railway law of Prussia. It may be said that the Magdeburg-Leipzig Railway accomplished in the province of railway legislation what the Leipzig-Dresden Railway effected toward systematization in railway construction. In the reply of the Government to the committee of Magdeburg merchants who sought a charter as early as May 22, 1835, there can be detected the central thought of all future Prussian railway legislation: that it is the duty of the state to take such a position in relation to railways that it may at any time in the future interfere in behalf of public interests. The royal order, confirming the statutes of the Magdeburg-Leipzig Company and granting the charter privileges, is epoch-making. After extending to the corporation the privileges usually accorded to legal bodies of this kind, the order expressly limits the reserve fund provided for in the charter to 2 per cent of the total original cost. It further expressly states, and makes it a condition of the acceptance of the privileges granted to the company, that the same shall, at any time in the future, be bound by all laws, rescripts, and orders issued in relation to railways. The royal order discussed the relation of railways to the state

and to the public; and because of the quasi-public nature of the undertaking, which was thus early recognized by the German Government, all rights necessary for a proper ordering of the relations between the railways and the public were reserved to the state.

Periods of Prussian Railway development.—A general notion of the historical development of Prussian railways may be obtained from a presentation of the periods into which the same may be divided. At the outset, a word of comment may be inserted on the somewhat popular impression that in European countries the earliest railways were built largely, if not entirely, by public funds, and that in the United States they were built by private capital. The exact opposite is true. It is a well-known fact that nearly all our early railways received important aid from towns, counties, villages, and cities through which they passed. On the other hand, the earliest English and most continental roads were obliged to pay heavily for the right of way. The same was true in Prussia. Before the year 1843 only private railways existed in that state. From 1843 to 1847, inclusive, the state aided in the construction of railways by guaranteeing a minimum rate of interest on the capital stock or by investing in shares of the company. The period of the founding of state railways is marked off by the years 1848 and 1862; and is followed by an era of speculation from 1863 to 1877, during which numerous private roads were projected. From 1878 to the present time the state railway system has steadily grown in extent and importance, and, in general, it may be said that the dominating administrative influence from that day to the present time has resided in the head of the department of public works.

Constitutional basis of Prussian railway legislation.—The following are the provisions in the imperial constitution of April 16, 1871, upon which the railway legislation of Prussia rests:

ART. IV. 8. The Empire reserves the right of control and of legislation on the subject of railways, highways, etc.

ART. VIII. 5. The Bundesrath is constituted a permanent committee on railways, post, and telegraphs.

ART. XLII. Railway, which may be deemed necessary for the defense of Germany or for the interests of the general traffic, may, by virtue of a legal enactment of the Union, even in opposition to members of the Union whose territory may be crossed by such roads, without impairing their right of sovereignty, be built by the Empire or by private undertakers to whom the Empire may have granted a concession and the right of expropriation.

Every existing railway is bound to permit a junction with the newly built road at the expense of the latter.

Those legal provisions which grant to existing railways the right to control the building of parallel or competitive lines are without impairing acquired rights, hereby repealed for the entire Empire. And such a right (*Widerpruch-recht*) shall be incorporated in any concessions which may be granted in the future.

ART. XLIII. The Federal Government binds itself to cause the German railways to be managed in the interests of the general traffic as a uniform network, and, for this purpose, to cause new roads to be built and equipped according to uniform norms.

ART. XLIII. In accordance with the above, uniform regulations for the operation of roads, especially uniform railway police regulations, shall be introduced with all practicable dispatch. The federal government shall take care that the railway management, at all times, preserves the roads in such a state of repair and provides them with such an amount of rolling stock as the interests of safety and the public traffic may demand.

ART. XLIV. In consideration of the customary compensation, the railway managements shall be bound to provide for the preparation of mutually supplementary time tables for passenger trains with the requisite speed, likewise to introduce freight trains sufficient for the requirements of the traffic, and to provide for the direct transfer of passengers and goods from one road to another.

ART. XLV. The Federal Government reserves the right to control the tariffs. The same shall strive to effect, (1) the introduction of a uniform system of regulations for the operation of all German railways, (2) the unification and reduction of rates, especially in the long-distance hauls of coal, coke, wood, ore, stone, salt, pig iron, fertilizers, and similar articles applying the wants of agriculture and industry. (Note.—The constitution further provides for the transportation of these articles, as soon as feasible, at a 1-penny rate, except in Württemberg, which, by a treaty of November 25, 1870 (Berlin), with the North German Union, Baden and Hessen is exempted from the 1-penny rate for all the enumerated articles (Art. III, sec. 2 of the treaty). This exemption was necessary because of the different conditions under which transportation was carried on in Württemberg.)

ART. XLVI. In times of distress, especially with an exceptional rise in the price of the necessities of life, the railways shall be bound to introduce, temporarily, for the transportation of (especially) grain, flour, leguminous products (*Hilfsfrüchte*), and potatoes, reduced rates, to be fixed by the Emperor on recommendation of the committee of the Bundesrath; provided that such tariff shall not be reduced below the lowest rate in force on the respective roads for the transportation of raw material.

The above, as well as the provisions contained in articles 42 to 45, shall not be binding on Bavaria. However, the Federal Government reserves the right to exact of Bavaria, by means of legislative enactment, uniform norms for the construction and equipment of such roads as are important in the defense of the Empire. (This provision practically repeats section 8 of Article IV.)

ART. XLVII. The several railway managements shall be obliged to meet unconditionally the demands of the Federal authorities for the use of the railways for the defense of Germany. Especially are troops and all accoutrements of war to be transported at uniformly reduced rates.

It is almost unnecessary to add that all these provisions have been supplemented by rescripts, orders, and statutes. All the rights of the Federal Government over railways may be enumerated under 5 heads:

1. The right to legislate.

2. The right to grant charters.
3. The right to control tariffs.
4. The right to supervise the building, operation, and administration of the roads.
5. The right to employ the roads for the national defense.

All these rights in turn may be looked upon as the logical sequence of what is technically termed the (a) culture and welfare aim (*Kultur- und Wohlfahrtszweck*) and (b) right and might aim (*Recht- und Machtzweck*) of the State.

The legal basis of private railways.—A private railway is any railway not owned and operated by the Prussian State. Thus, railways built and operated in Prussia by a municipality, circuit, province, or another State are private railways in the eyes of the law as well as those owned and operated by a single individual or by a corporation. A railway may be in private possession but operated by the State. This was one of the stages in the transition from private to State railways. The law does not apply a technical term to these mixed roads. In addition to private, mixed, and State railways the law recognizes federal railways. Those in Alsace-Lorraine and a military road from Berlin to shooting grounds near by are the only railways of this kind.

The constitutional basis of charters.—By article 41 of the federal constitution the Federal Government concurrent with the several States has the right to build and operate railways. The Federal Government, within limitations already indicated, has left this right to the States. The right to build railways is an attribute of sovereignty. In case of State railways the question is not one of right but only of undertaking, while in case of private roads it is a question of right or legal privilege and of undertaking. This legal privilege is the charter. State railways require no charters, for the undertaker is the source of privileges granted in a charter to private persons. According to section 1 of the law of 1838 a charter is required for the building and operation of a railway by a physical or legal person (stock company, commune, province, circuit) or another State in the Prussian State. A charter is also required when the right to operate a road without acquiring the rights and privileges vested in the first and when a private road is to serve public interests exclusively. The aim of the law is to define a responsible person in all cases.

Economic and political premises.—The undertaking must serve public interests. It must be permissible from a military point of view. It must be useful and beneficial to the public at large, although it may stand in opposition to private and sectional interests. The law requires the undertaker to furnish objective proof of the usefulness of the proposed enterprise before an application can receive the attention of the authorities. Such proof consists of reliable statements of the present traffic and passenger frequency, an explanation—technical and economical—of the choice of this particular route, grades and curves, estimates of cost, etc.

The enterprise must not frustrate or make more difficult other and more useful projects. This principle would be violated, for instance, were a charter to be granted for a narrow-gauge or secondary road where the building of a primary road would be better.

The undertaker must offer objective proof of his ability to meet all the requirements of the charter which he seeks. This involves not only sufficient capital to build and equip the road, but also the ability to operate it successfully. Bonds are usually required as security.

The proposed railway must be technically practicable.—All these provisions are contained in a cabinet order of March 11, 1839, and, with the law which followed on November 3 of the same year, is still in force.

Preliminary considerations.—By section 1 of the law of 1838, all applications for charters must be directed to the minister of public works. The application must state the direction of the route, with an enumeration of the towns to be touched by the road. A law of August 9, 1845, revised in October, 1871, prescribed the form of maps to be submitted, together with an estimate of costs, arranged under 17 heads.

A circular letter of July 20, 1874, of the minister of public works, requires the applicant to consult with the foresters whose territories will be crossed by the proposed route. A like decree of May 2, 1887, requires the cooperation of the head of the department of mines in determining the route through mining districts.

The charter.—After all the preliminary work has been done, the detailed plan is subjected to an examination by the president of that circuit in which the management of the projected road has its seat. In this examination private and local claims are heard and recorded. This is known as the *Landes und Ortspolizeiliche*

Prüfung. All changes agreed upon among the interested parties in the examination, as well as those ordered in the subsequent examination by the minister of public works, are entered in their proper places in the plan in blue ink; and all changes not agreed upon, but recommended by the authorities, are entered, with the proceedings, in the journal, which is transmitted, together with the plan, to the minister of public works. The plan thus amended is next submitted to the war office for a special examination with reference to military interests, while mechanics and builders examine the technical details of the plan. The final examination is made by the minister of public works, who pays special attention to the project as a whole in its relation to the entire railway system. If the project is approved by him, it is recommended, together with the power of expropriation, to the king, through whose order the charter can finally be granted. The power of the minister of public works does not end with the granting of the charter, but continues during the period of construction, as well as during the entire life of the road. Changes and additions which he may recommend must be made at any time.

The legal basis of State railways.—The building of a State road is a problem of administration, and could be undertaken by the administrative branch of the Government alone were it not for one thing—the money. The building of a State railway requires a State loan or the use of other funds, and for this the vote of the Landtag is necessary. The annual budget, called *etat* in Prussia, contains sums for the building and improvement of highways, railways, a definite sum to meet the expenses of preliminary work, etc. All this is known collectively as the railway *etat*, just as there are marine, military, and educational *etats*.

A ministerial circular of June 14, 1887, requires the following points to be covered in the application for a new State railway:

1. A territorial map.
2. Contour and relief plans.
3. An explanatory statement.
4. An estimate of costs.
5. A memorial or petition.
6. An estimate of probable earnings.

The preliminary work requires no estimate of the probable net profits to be made, as in the case of private roads. But the financial side, although of secondary importance with State roads, must still be an important one. Hence, it is required that the memorial shall contain an elaborate account of the probable effect of the proposed railway on other roads owned and operated by the State, its probable effect on other State property, etc. All the preliminary work is done by order of the minister of public works. The approval of the entire project depends upon the Landtag, or rather the budget (*Etatgesetz*). However, a special royal order is required to exercise the right of eminent domain, and to name the particular authority which is to execute the plan. When the law does not specify whether a primary or secondary railway is to be constructed, either may be decided upon, depending upon the motives which led to the adoption of the plan, while in case of charters granted to private companies, primary railways are understood unless otherwise specified.

When the law of 1838 was passed, it was thought probable that several undertakers might desire to use the same track. Paragraph 27 gives the minister of public works the right, after careful examination of all the facts, to grant to second parties the privilege of transportation on the same track with the original incorporators, provided that no such privilege shall be granted within 3 years after the charter shall have been granted. Several other paragraphs of the same law are related to this one.

Influence of public interests in railway construction.—Both the economical and technical interests are drawn into consideration when the State fixes the plan. The technical unity of all railways is an absolute necessity, and follows the requirements of the federal constitution, that railways shall be operated as a uniform system. All roads are now built according to the norms prescribed in the law of July 5, 1892, which are necessarily general in character. In so far as any part of the construction of a railway, with all its adjuncts, falls outside these norms, it must be determined by the minister of public works according to paragraph 4 of the law of 1838. The location and construction of station houses, store-houses, switches, roundhouses, walls and barriers of any kind, bridges, canals, dikes, etc., require not only ministerial sanction, but also the approval of other authorities within whose jurisdiction the control of such things lies, such as the police and military authorities and building commissioners. But it must be remembered that the power of the authorities is only cooperative. Their decisions are not final, nor are they binding on the minister of public works, in whom final authority is vested.

It may be mentioned here that Germany, France, Italy, Austria-Hungary, and Switzerland agreed upon the technical unity of all international lines in February 1887. Belgium, Servia, and Greece entered this union in 1890. No uniform norms to test economical considerations (such as which route to choose, which localities to cross) have yet been adopted.

Military interests.—The law of 1838 does not mention the railways in their relation to the national defense, except in granting the charter. Article 4 of the Federal constitution reserves to the Government the right to employ railways for the national defense. But how this is to be done, how far the undertaker may be forced to meet the emergencies of war, who is to bear the expense, and similar considerations, were left entirely undefined until the Franco-Prussian war of 1870. A law of December 21, 1871, divides the land surface immediately surrounding fortifications into three belts, for the crossing of any one or all of which the consent of the commandant is necessary. Questions arising under this law are decided by a Federal commission. A law of June 13, 1873, binds railway companies to meet all the necessary requirements for the transportation of troops and supplies in case of war.

The post-office.—The discussion on the relation of the Magdeburg-Leipzig railway to the post-office was the beginning of the law of November 3, 1838. Article 27 of this law authorized the post-office to run its own trains over all roads, if necessary. As the law now stands, the railways, whether private or state, are required to furnish necessary accommodations for railway mail officials and all rooms and appliances, such as trucks, lifts, etc., needed for the railway mail service in all depots or station houses subsequently to be erected.¹ It is also required, in the absence of necessary private dwellings in the immediate vicinity, to provide rooms for officials in all station houses which are rebuilt or enlarged. Railways may be required to do such building at the request of the post-office department, for which they receive rent to the amount of 7 per cent of the cost of buildings or parts of buildings erected for the department. Laws and regulations governing other buildings apply also to these. Persons who use such rooms must furnish them and keep them in repair.

Custom-houses.—A rescript of the minister of public works, of June 13, 1878, makes it the duty of the railways to give due notice to custom-house officials and to receive an expression of their opinion in regard to projected buildings. The undertaker is further required to provide adequate space for the inspection of goods and baggage by the custom-house officials. The law is construed to mean that the undertaker must furnish and keep in repair, without special remuneration, sufficient and safe rooms for the inspection or storage of goods and for the accounting connected with the same. Dwellings for custom-house officials are not included, although the railways find it good policy to furnish them at reasonable rents in order to avoid delays.

Other public interests—Streets and roads.—Paragraph 8 of the law of 1838 gives the undertaker the right to acquire not only the necessary land surface for tracks, stations, switches, space in which to deposit excavated material, but also the ground necessary for all other buildings and roads needful for the most effective operation of the railway in the interests of the public. Under these provisions the undertaker is empowered to open new roads or streets and to cross roads and streets. All these, like other provisions of the charter, are subject to revision by the police authorities. Roads leading to stations, if used exclusively for the business connected with the railway, like all other private property, are governed by ordinary laws. The undertaker must keep them in repair and attend to cleaning and lighting. Where the roads serve public interests as well, the local authorities are responsible for police and sanitary requirements; the railway authorities are responsible only so far as these affect railway traffic.

Protection against fire.—Ministerial rescripts on this subject were issued as early as 1847 and 1848. An ordinance of 1875 prescribes uniform rules for the entire Prussian State, with the exception of the cities of Berlin and Charlottenburg. This ordinance requires special permission of the police authorities to erect buildings or to store easily combustible material within a horizontal distance of 38 meters, if the track lies in the same plane with the land surface on which such buildings are to be erected or the material to be stored. When the track lies on an elevation, the width of this belt is increased by one and a half times its height. Thus, for a track lying on an embankment 6 meters high the width of the fire belt would be increased to $(38 + 6 \times 1\frac{1}{2})$ 47 meters. These questions go before what we would call a county commissioner ("Kreislandrath"), without whose consent no buildings can be erected on this strip. But this applies only to buildings

¹ Law of February 9, 1876, amended in 1878 and 1881.

or stores in the possession of parties other than the undertaker. In case of buildings or stores of combustible material erected or located before the road was projected, special contracts are necessary. Buildings or stores may be placed within this legal limit when they do not endanger the lives or property of third parties, and when neither the undertaker nor the builder refuses to enter upon the necessary agreement. For secondary railways the limit is 25 meters, and the corresponding extension when the track lies on an embankment.

Different regulations exist in relation to forests, turf, and grain. In all Government forests a broken surface of from 2 to 4 rods in width, depending upon the elevation of the track, is continually kept clear of leaves, grass, etc. Frequently these strips are cultivated by people connected with the railway on payment of rent to the undertaker. In the State forests of upper Silesia, where there is much needle wood, in addition to this safety strip, a ditch 2 feet wide in the bottom and 8 feet at the top is dug at a distance of 10 rods from the track. All branches and twigs overhanging such ditches are kept trimmed, and the land surface between the ditch and the safety strip is kept broken. However, such a wide strip is not necessary in all places. The erection of any fireplace within 75 meters of any part of a forest of more than 100 hectares is forbidden. The undertaker and the proprietors of adjacent lands (when these are not public) usually find it to their interests to come to an agreement on these matters at the time the expropriation is executed. It is customary for the State (when the State is the undertaker) to purchase with the right of way such a safety strip and to rent it to employees. The State also employs, whenever necessary, "Brandwerther," who follow limited trains through their circuit, and sometimes also ordinary trains.

Influence of private interests in railway construction.—Paragraph 14 of the law of 1838 makes it the duty of the undertaker to build and maintain all crossings, drains, roads, fences, etc., which the Government may deem necessary, to insure the owners of adjacent property against dangers and disadvantages in the use of their property. Paragraph 14 of the expropriation law of 1874 relates to the same subject. In 1880 the minister of public works, pursuant to the decision of the Bundesrath, issued a rescript in which these paragraphs of the law were construed to include also all changes which, from time to time, must be made in order to protect private property. There exist also legal norms, by which the amounts to be paid to owners of damaged property are determined. It may be noted that even during the period of private railways, from the beginning of the railway era in Germany, the undertaker has been held responsible for injury to private property to the extent to which the Government deemed it just.

A Prussian law of 1865, supplementary to paragraph 20 of the law of 1838, gives specific instruction about the relation of railways to mines. A ministerial rescript of May 2, 1887, makes it incumbent on railway undertakers to consult the interests of mining properties. The law of 1865 prescribed only the relations between the operator of the mine and the operator of the railway. Under this law a mine owner could not prevent the building of a railway, nor was he entitled to compensation for any but direct damages. Losses which he might sustain after the railway charter had been granted had to be borne by him alone. Gleim says that if no special legislation ("Bergwerkrecht") had been enacted during earlier years (1865 and following) it is doubtful whether the subject of mines would have been taken out of general statutes governing private property.

Classification of Prussian railways.—The law of 1838 recognized only 2 classes, primary and secondary railways. Objectively considered, these did not differ in any essentials; but in the manner of their operation differences existed which found expression in the law. Secondary roads were governed by less onerous restrictions with respect to mails, transportation of troops, munitions of war, speed, the percentage of brakes to axles, and similar matters. In 1892 the so-called local railway law was enacted, which recognized additional classes, making in all 5 classes of railways. Of these 5, two are unimportant for present purposes because they include isolated private roads and so-called "Privatanschlussbahnen," the latter being defined in a negative way in the law of 1892, as railways which do not serve public traffic, but the tracks of which are connected with local railways or with railways subject to the law of 1838, in such a manner as to enable rolling stock to pass over from one track to another. Local railways had, of course, existed before 1892, but not until that time did they exist in the eyes of the law. Local railways in the technical sense are railways which are chiefly intercommunal, and not local in the larger sense in which secondary railways of the law of 1838 were considered local. Whether or not a railway falls within the jurisdiction of the law of 1838 or of that of 1892 depends upon a decision of the minister of state. The construction of local railways requires the approval of various authorities designated by the minister of public works. These authorities differ as the road lies within one parish, circuit, or province, or as it lies

within 2 or more of these. The examination which must precede the granting of a local railway charter is confined to the nature of the road and the rolling stock to be employed, with special reference to their safety and to their influence upon private property. In addition, the technical nature of the undertaking is examined and the qualifications of the persons to be employed, as well as other public interests, duly considered. This examination is granted only on application accompanied by a plan. The nature of this plan is not prescribed as under the law of 1838, and is left entirely to the incorporator or incorporators as in case of any other purely private enterprise. In case of applications for the construction of local railways, one of the chief questions is not "Does this plan contain everything required by the law?" as in case of primary or secondary roads, but "Does the plan contain anything which is not in harmony with the provisions of the local railway law?" The incorporator of a local railway is thus made to stand upon the same legal basis that any other private operator stands. The law reserves certain rights to the post-office department, and where highways are crossed or fortifications affected the incorporator must make satisfactory arrangements with the respective authorities. The same rule applies to parishes or other political units when they engage in the construction and operation of local railways. Although a local railway is looked upon by the law as a purely private enterprise, no such railway can be built until after the plan has been exhibited in specified public places for at least two weeks. The time and place of such an exhibition of plans for the inspection of the public must be advertised in accordance with the customary manner of making announcements in that locality. Any person may raise objections, either in writing or verbally, against the project, and a time must be set for the hearing of the interested parties. This hearing must be given in the presence of competent persons. On the adoption of the plan, the undertaker becomes personally responsible for its successful execution. For the first 2 years the local railway incorporator or company has full power over rates within the limits established by the charter, but after that period the proper authorities may, "with due consideration for the financial condition of the road," establish a maximum tariff rate. If at any time, in the opinion of the minister of state, a local railway attains such a degree of importance in the public traffic that it may be regarded as a part of the general network of railways, the State may, on payment of the full value of the road and after 1 year's notice, incorporate the local railway in the system of State railways. The law of 1892 prescribes rules for the determination of a fair price.

Time-tables and train service.—All time-tables of German railways are published by the administration in what is called a course book (*Kursbuch*). The small time-tables, to which Americans are accustomed, are rarely or not at all seen there, except in case of special trains. In the adoption of time-tables local wants are considered. Blanks, upon which the wishes of the respective localities are to be made known, are sent out to the various stations. Then, paying due consideration to these reports, through trains are first decided upon. Then the ordinary passenger trains are fixed, in the determination of which school time, market and factory hours, theaters, etc., are drawn into consideration. Connections between primary and secondary railways are to be so arranged as not to require night trains on the latter class. The introduction of night service on secondary railways depends upon the minister of public works, and the decisive point in the question is the income of the road per train kilometer. It is permitted to run secondary trains over tracks of primary roads, but only alternatively, and in cases where the building of additional track can thus be saved. To illustrate: A and B are important cities connected by a primary road. C is a small city lying off the main line, midway between A and B. Instead of building a road from A to C, trains may be run from A to (say) X on the main line, from which a track is built to C. The route CX is clearly a secondary road, but its trains may run over the track AX or XB, according to regulations governing all other trains of secondary roads. It is also permitted to run certain trains over primary roads, even though they do not answer all the requirements of regular primary railway trains. According to the manner in which trains are operated, they are classed as trains supplying regular wants (*Bedarfszüge*), trains for the nobility, theater, and pleasure trains. The 3 last classes are governed by special time tables and instructions. The first class of trains is divided into the following subclasses: Fast, passenger, goods (local), mixed, work, and laborers' trains. The several names sufficiently indicate their character. Military trains are a heavy strain upon the railways during maneuvers. May 1st and October 1st are the days on which the regular time tables go into effect, and all requests or changes must be submitted to the proper authorities at least 4 weeks before the date on which the table is to go into effect. Then there are special tables for employees. These contain distances and stations, time of arrival, length of stops, time of departure, time it takes

to make the run from one station to another, crossings and junctions, maximum and minimum speed. The distances given are not real, but virtual distances. It is evident that grades and curves diminish the speed of trains. This might be adjusted in time-tables by allowing more time; but it is customary to add such a number of kilometers to the real distance as the train could traverse under normal conditions during the time which is lost through curves or grades. This sum is known as the virtual distance, and is the distance given in time-tables. All passenger trains must contain at least 2 (first and second) classes of coaches. Whether or not third and fourth class coaches must be run depends upon circumstances. In South Germany the fast trains frequently run only first and second class coaches, while in North Germany they add third class also. The so-called *Personenzüge* always carry first, second, and third class passengers, and usually fourth as well, while fast trains do not carry fourth class. (Note.—Fast trains correspond to the American limited trains, and the passenger train, *Personenzüge*, to the ordinary American local passenger trains.) The heating and lighting of trains, their speed and manner of running, train police regulations, kinds of coaches and manner of forming trains, railroad clearing houses, and international train service, etc., are all treated in Prussian regulations.

How tariffs are fixed.—The great variety and number of conveyances undertaken by a railway makes it impossible to enter into a special contract with each individual applying for railway service. But even if this were possible, considering the public nature of transportation and the many public, as well as private, interests involved, legislatures have regarded it prejudicial to these interests to leave the adjustment of rates entirely in the hands of the undertakers and entirely removed from public inspection and influence. Experience has shown that it is the tendency of undertakers, not under direct control of disinterested authorities in whose power lies the "promotion of the general welfare," to yield to other great private interests and charge different rates for the transportation of the same quantity of goods when shipped by persons who stand in varying degrees of favor. The cautious German lawmakers had early surmised the evils of discrimination in rates, and the law of November 3, 1838, as well as the Federal Constitution, reserved to the Government all powers necessary for its prevention. Special reference is here made to articles 4, 45, and 46 of the Federal Constitution quoted above. They indicate in a general way the power of the National Government over all railways in the Empire. Paragraphs 26 to 40 of the Prussian law of 1838 deal with the power of the State over rates. The essential feature of these provisions, as modified by supplementary legislation and ministerial rescripts, as well as the provisions of the law of 1892 on the same subject, are indicated below.

The State, acting through the minister of public works, has the right, after the expiration of 3 years from the January 1st next following the opening of a railway, to approve (1) all tariff schedules (the 3-year limit is practically void because of the reservations the State makes in granting charters); (2) any proposed lowering, raising, or other changes in existing rates; (3) the establishment of freight tariff schedules, tariff instructions and regulations, exceptional (special) and differential rates. The degree in which the State has made use of these rights has varied with conditions. This applies only to primary railways. Secondary roads may, during the first 8 years of their existence, raise or lower rates at will, provided they do not go above a certain maximum, prescribed by the minister of public works for that period of time, and that their rates do not conflict with general tariff principles enforced on State lines. Before the passage of the law of July 28, 1892, railways of purely local significance enjoyed special privileges which are now defined for all classes of local roads. It must be recalled that prior to 1892 the law recognized only primary and secondary (*Haupt- und Nebenbahnen*) roads, and that these local roads (using local in the narrow sense) had no well-defined legal position. The law of 1892 makes the following provisions concerning rates on local railways: "That authority upon which the approval of the project devolves is required to make an agreement with the undertaker as to time-tables and rates; and the periods of time in which such agreements shall be subjected to revision, provided that the undertaker may be allowed to establish his own rates during the first 5 years, and that thereafter the State shall only fix maximum rates, in doing which due consideration shall be given to the financial interests of the road." The law gives the State this privilege, but does not make it a duty, and it is the policy of the State not to interfere with any arrangements the undertaker may see fit to make, provided he does not discriminate and does not do anything contrary to public interests. The law simply reserves to the State the right to act in behalf of the public. What Prussia reserved for herself in her laws, the Federal Government reserved to itself in

the Constitution. The latter also has the right to interfere in behalf of the general welfare, even if the several States had not reserved that right; and it is possible, too, that circumstances may arise in which the Federal authorities must overrule the State. As to military rates, the Constitution gives the Government the right to fix them (reduced at a uniform rate), but neglects to designate a particular authority. The "Reichsgesetz über die Naturalleistungen für die bewaffnete Macht im Frieden," of February 13, 1875, vests the power of fixing and revising military rates in times of peace exclusively in the Bundesrath. The Bundesrath has the same power in fixing and revising rates in times of war. In neither case is a hearing of the undertakers mandatory. Next, the relation of railways toward the post-office department may be mentioned. The railway-mail law now in force was passed on January 1, 1876, and consequently applies only to primary and secondary roads. But it was found necessary to exempt secondary roads from the provisions of this law and subordinate them to special legislation (May 24, 1879). The post-office department may cause the primary roads to meet the following conditions: (1) To transmit free of charge all letters, newspapers, money—including uncoined gold or silver, jewels, and precious stones without regard to weight—and all other mail packages weighing 10 kilograms and less. Also all railway-mail employees, going and returning. These provisions are limited only in case more than 1 car on every scheduled train is required for the transportation of the mail, in which case a nominal sum is paid by the post-office department to the railway undertaker, private or State. The post-office authorities are required also to send early notices of probable demands for additional cars. This is especially important during holiday seasons. The duties of undertakers of secondary and of local railways are legally defined, that of the former in the regulations of 1879 and of the latter in the law of July 28, 1892. Because of the numerous conditions influencing the fixing of rates on these railways the schedules are much longer and involved than those of primary roads. Similar regulations have been made concerning telegraph and custom-house officials in their relation to the railways.

Publicity of rates.—All railways—State or private, primary or secondary, or local—are required to publish their rates under the supervision of the same authorities which fix them. Such publication is required of all tariffs—passenger, freight, local, through rates, incidental fees, etc.—together with the rules and regulations governing their application and all changes that have been made in them. Tariff rates of all State roads are published in the *Staats- und Reichsanzeiger*, the official paper of the Government. However, no definite rules exist as to the particular form or place of publication. As a rule, all the important papers of the towns interested publish them, and, of course, they are required to be posted in all station houses and railway offices. Every advance in rates must be published, together with the old rates, at least six weeks before the same shall take effect. The instructions of the minister of public works for the practical application of the law of July 28, 1892, declare that local railways shall be required to publish their rates in a local paper to be designated in the charter.

Financial obligations.—*The capital stock.*—Section 1 of the law of 1838 provides that the sums of money required for the original investment (*Anlagekapital*) must be raised through the sale of stock. The amount of stock is fixed in the charter. Section 2 provides that no stock shall be issued until its full face value has been actually paid in. Partial payments are simply accepted. Every signer of stock is responsible for 40 per cent of its face value, even though he should transfer his stock to a third party. For the emission of additional stock and for the taking of loans, in which purchases on credit shall not be included, the approval of the minister of public works must first be obtained and a sinking fund established. Ministerial consent is also necessary for contracting floating debts. With issues of priority obligations and preferred stock it is different. These require special authority ("landesherrliche Genehmigung") and official publication of the amount to be issued, rate of interest, purposes for which the money is to be expended, and the method of amortization. Since 1872 these powers are exercised by the minister of public works. Before that time special privileges of this kind were granted by the Government according to a law of June 17, 1833.

Appropriation of earnings.—By the law of March 16, 1867, all railway undertakers are under obligation to submit annually, not later than May 1, a full account of their receipts and expenditures, together with the necessary papers (bills, vouchers, etc.), and by a court decision they are compelled to submit monthly reports if requested to do so. The law further provides that all taxes (*Abgaben*) shall be paid out of that part of the gross earnings over and above those parts employed in meeting the expenses for maintaining, managing, and running

the road. All sums paid into the renewal and reserve funds are to be considered part of the running expenses. The reserve fund has its origin in provisions of sections 29, 33, and 38 of the law of 1838, and is usually expressly provided for in the by-laws and charter of the company. The renewal fund was created later, but by rescripts of 1857 and 1858 it applies to all roads irrespective of the time during which they were built. It is kept distinct from the reserve fund; and, in case earnings are insufficient to meet the regular demands of both, the available earnings go to the former. The size of the renewal fund and its rate of increase depends much upon the character of the road, and is determined for each separately. The general nature of these funds being that of insurance, their accumulation becomes unnecessary in case of State roads; nor do the legal restrictions on the issue of stock apply to the latter. The various provisions for the distribution of dividends have in common the requirement that certain maximum portions of the gross earnings may be distributed as net profits. Such distribution is not obligatory. Paragraph 34 of the law of 1838 establishes normal formulæ for computing gains and for gathering necessary statistics. The most important legislation on the appropriation of earnings still in force is the "Gesetz, betreffend die Verwendung der Jahresüberschüsse der Verwaltung der Eisenbahnangelegenheiten" of March 27, 1882. It provides that the annual surplus shall be expended for the following purposes in the order given: (1) To pay the interest on the State railway debt; (2) to meet certain deficits in the State budget which would otherwise have to be met with loans, not to exceed 2,200,000 M annually; (3) to pay off the bonded indebtedness.

Taxation.—*Law of November 3, 1838.*—By section 38 of the law of November 3, 1838, railways are under obligation to pay taxes in proportion to the total capital stock, less the expense of maintenance and operation and the annual contribution to the reserve fund. Railways are exempted from the tax on industries (Gewerbesteuer). The succeeding paragraph provides that this tax shall be paid into the State treasury as a compensation for expenses incurred by the Government on account of the roads and for the amortization of the original stock. After such amortization, the undertaker may be bound to arrangements of such a nature that the receipts ("Ertrag der Bahngelder") shall not exceed the cost of managing and operating the road. These provisions of the fundamental railway law were followed by important supplementary legislation.

Law of May 30, 1853.—This law has reference only to railways owned by stock companies. Under its provisions the first tax was levied in 1854 on the net proceeds of the year 1853. The taxable net proceeds are defined as that sum which remains for distribution on the capital stock after deducting from the gross receipts the cost of administration, maintenance, and operation, the necessary contribution to the reserve fund, and the sums required for the payment of interest and loans. Capital, on which a fixed rate of interest is paid without being entitled to dividends, even if raised by means of preferred stock, shall not be included in the capital stock, but it shall be considered equivalent to loans. The rate of taxation is fixed at one-fortieth of the net proceeds, not exceeding 4 per cent of the capital stock. For net proceeds exceeding 4 per cent of the capital stock the following shall be provided:

From 4 to (inclusive) 5 per cent, one-twentieth; from 5 to (inclusive) 6 per cent, one-tenth; from 6 per cent and over, two-tenths; in addition to the one-fortieth on all net proceeds up to 4 per cent. To illustrate: Take capital stock to the amount of \$10,000, the net proceeds of which equal the sums given in Column I, then the amount of the tax equals the sums in Column II, and the sums remaining for distribution among the stockholders are given in Column III.

I. When the net pro- ceeds equal—	II The State receives—	III. And the stockhold- ers re- ceive—
\$100.00	\$2.50	\$97.50
200.00	5.00	195.00
300.00	7.50	292.50
400.00	10.00	390.00
450.00	12.50	437.50
500.00	15.00	485.00
550.00	20.00	530.00
600.00	25.00	575.00
650.00	35.00	615.00
700.00	45.00	655.00
750.00	55.00	695.00
800.00	65.00	735.00

The law further provides that all railways which are under statutory obligations to pay certain sums to the Government are subject to this tax for all sums (net) in excess of the amount paid to the Government. All railways upon which the State guaranteed interest are exempt from taxation during years in which the State advanced money by virtue of such agreement. All moneys realized through the collection of these taxes shall be employed by the State in purchasing railway stock, and all interest and dividends accruing to stock thus purchased shall be used for the same purpose; nor shall any such (purchased) stock be again put upon the market. The provisions of this law are general except as modified by special contracts with the State.

Law of May 21, 1859.—This law repeals the provisions of sections 39 and 40 of the law of 1838 and section 6 of the law of 1853 so far as they prescribe the utilization of the funds raised by taxation. It orders all receipts of such taxes henceforth to flow into the general State treasury, and consequently it dissolves the amortization fund.

Law of March 16, 1867.—The law of 1853 applied directly to railways owned by stock companies. The law of 1867 applies to all railways "not in the possession of the State or of domestic railway stock companies." It provides that the possessors shall be responsible for the payment of the tax. The rate of taxation is identical with that given in the law of 1853, but it defines the taxable net proceeds differently. It deducts from the gross receipts the cost of operating, maintaining, and managing the road, contributions to the reserve and renewal funds, but makes no allowance for sums disbursed out of the reserve fund. It states expressly that these sums shall be deducted from the gross receipts, while the law of 1853 does not say from what the sums named shall be deducted. The law of 1867 states that "the taxable net proceeds constitute that portion of the gross earnings which remains after deducting the expenses of maintenance, operation, and administration." This latter definition is law at present. As has been stated before, all railways are required to submit authentic reports, on the basis of which the authorities fix the taxable proceeds and publish it in the *Reichsanzeiger*. For State railways the excess of receipts over expenditures, after deducting 3 per cent interest, is determined by the minister of public works and likewise published in the *Reichsanzeiger*. The law of 1867 also defines original stock (*Anlagekapital*) as that sum which has been expended usefully in the construction and equipment of the road, including rolling stock. Five per cent interest is allowed (i. e., it is included in the *Anlagekapital*) on all sums expended before the opening of the road, provided no unnecessary delays have been made. If railway undertakers fail to submit reports, the authorities fix the amount of capital stock which shall be taken as the basis of taxation. It must be borne in mind that the rate of taxation depends upon what per cent the net proceeds are of the capital stock, and that the larger the capital stock the lower the rate of taxation, other things being equal. Money expended for renewals and extensions shall be included in the capital stock only so far as these have been caused by extraordinary circumstances and have not been taken out of the reserve and renewal funds. Several railways in possession of the same person are taxed as a unit. In case of parts of roads owned by foreigners, i. e., not Prussians, the capital represented by such parts shall be determined by the authorities, if the same has not been fixed in the charter.

Law of July 27, 1885 (Nothkommunalsteuergesetz).—This was an attempt to regulate the parish income tax. The law provides that railways and other industries listed in Section I shall pay a tax to the parish (*Kommunalabgaben*) in proportion to the amount of their income in that parish. This applies alike to private and to State railways. The tax is payable in that parish in which the railway has its seat of management, a station, workshops, or any other plant. The net proceeds, as defined by the laws of 1853 and 1867, shall be taken as the basis for taxation of private roads. For State roads, the excess of receipts over expenditures, plus 3½ per cent interest on the capital stock (or consols), is to be used. They are taxed as a unit, and the total of the taxable income is fixed annually and published by the minister of public works. A noticeable feature of this law is that the parish into which certain railway earnings happen to flow is entitled to a proportional share of the total income of that place. Thus a station located in a parish which has done little service to the road may have a comparatively large income, on a share of all of which it has a legal claim. It should be noticed also that local railways (section 40 of the law of July 28, 1892), not being railways in the sense of the law of 1838, are not liable for the payment of the tax provided for in the law of 1885. They are subject to the tax on trades (*Gewerbesteuer*), of June 24, 1891, from which railways subject to the laws of 1853 and 1867 are exempt.

Law of July 14, 1893.—This is an important date in the history of Prussian financial legislation. Three different laws on finance received the royal signature on that day. They were, "Gesetz wegen Aufhebung direkter Staatssteuern,"

"Ergänzungssteuergesetz,"—a tax on all mobilia, except household goods, and immobilia, minus the debts on the same—and "Kommunalabgabengesetz." The last law empowers parishes to levy direct and indirect taxes, and to exact services and payments in kind according to the provisions of the law. So far as it deals with railways it will be discussed here. All of these laws went into effect April 1, 1895, with the exception of one provision about the distribution of railway taxes among certain classes of parishes.

The same as under the law of 1885, State railways are considered as a single unit of taxation. Together with private roads, they are taxed in the parishes in which there are stations, shops, offices, etc., but not in parishes in which there are only watchmen's huts and tracks. Stock companies which receive a fixed rent for roads owned by them, but operated by the State, are not considered possessors of the road, and hence not subject to this tax. While all railways are taxable under this law, local railways, not being "railways," are not affected by it. The taxable income of State roads and of roads operated by the State is the excess of receipts over expenditures, plus 34 per cent of the invested capital (Anlage- beziehungsweise Erwerbskapital), according to official statistics. The taxable income thus determined is to be fixed and published annually. The taxable income of private roads is determined according to the laws of 1853 and 1867, only that moneys expended in the liquidation of debts, and interest on the same, shall be regarded as expenses under the law of 1867. The law of 1885 gave parishes a claim on railway incomes according to the receipts (net) of the road in that parish. The law of 1893 entitles parishes to such moneys in proportion to the sums expended for salaries and wages in the respective parishes on the basis of a 3-years' average. In the computation only one-half of the salaries of administrative officials and two-thirds of the wages of shop and linemen are included.

Prussian railway administration.—The writer discussed this subject in an article published in the *Annals of the American Academy of Political and Social Science*, for November, 1897, a part of which is here reproduced. The system is to-day what it was then, and minor changes which may have been introduced since that time do not affect the general system. Prussia has made her railways a success. Discriminations are unknown. The "special rates," which are published, together with the reasons for which they were established, like regular rates, are open to everybody. During the fiscal year ending March 30, 1900, Prussia expended nearly \$25,000,000 in extending her secondary system, and about one-fifteenth as much for primary roads; and, notwithstanding this great extension of less profitable lines, her railways yielded a net profit of about \$140,000,000.

The Prussian railway administration was reorganized on April 1, 1895. Previous to that time there had existed two distinct official bodies, or "resorts," immediately below the minister of public works. The latter was then, and is now, the executive head of the railway administration, and the two bodies subordinated to him were known as *Eisenbahndirektionen* and *Eisenbahnbetriebsämter*, respectively, the one having direct charge of the operation of the railways and the other performing purely administrative functions. Of the *Direktionen* there were 11, and of the *Betriebsämter* 75. The functions of both of these have now been consolidated in the royal State railway directories, of which 20 have been created, with their seats at Altona, Berlin, Breslau, Bromberg, Cassel, Cologne, Danzig, Elberfeld, Erfurt, Essen, Frankfurt a. M., Halle a. S., Hannover, Kattowitz, Königsberg, Magdeburg, Münster, Posen, St. Johann-Saarbrücken and Stettin. Each directory is composed of a president, appointed by the King, and the requisite number of associates, two of whom, an *Ober-Regierungsrath* and an *Ober-Baurath*, may act as substitutes of the president under the direction of the minister. Each directory has complete administrative control over all the railways within its limits, although the subordinate civil administrative organs of the State, such as the *Oberpräsident*, *Regierungspräsident* and *Landrath* have certain powers in the granting of concessions, police regulations, etc. The directory decides all cases arising out of the action of special and of subordinate branches of the administration; and, representing the central administration, it may acquire rights and assume responsibilities in its behalf. The directories may be characterized as general administrative organs, one of whose great functions is the proper coordination of all the parts of the railway system.

Below and subordinated to them are special administrative organs, upon whom falls the duty of local adaptation and supervision. There are 6 classes of these local offices, and their names indicate in a general way their functions: operating, machine, traffic, shop, telegraph, and building offices or *Inspektionen*, as they are called. Shortly before the new system went into operation the minister of public works issued special business directions for each class of offices. The contents of

each of these ministerial orders may be grouped under 3 heads: (1) the position of the office in the railway service; (2) its jurisdiction in matters of business; (3) general provisions. To give a detailed analysis of the functions of the local offices is out of the question here. It should be added, however, that all phases of the service, whether from the point of view of the railways or of the public, are carefully provided for. Thus one of the foremost duties—"die vornehmste Aufgabe"—of the local traffic office is to maintain a "living union" between the railway administration and the public. For this purpose the chief of the office is in duty bound, by means of numerous personal interviews and observations, to inform himself concerning the needs of the service in his district, to investigate and to remedy complaints and evils without delay, and to take such measures as will secure the most efficient service. It is also one of his duties to inform the public concerning the organization and administration of the railways, so as to avoid idle complaints. This single provision in the rules governing one of the local offices illustrates the spirit of them all.

Private railways, which before April 1, 1895, had been supervised by a special railway commission, are now subject to the jurisdiction of the president of a directory and his alternates. This was another step toward greater unity in the system. The directories upon whom the supervision of the private roads devolves are those at Altona, Berlin, Breslau, Cassel, Cologne, Elberfeld, Erfurt, Essen, Frankfurt a. M., Halle, Hannover, Königsberg, Magdeburg, Münster, St. Johann-Saarbrücken and Stettin. As there are 20 directories, and only 16 supervise private railroads, it is evident that jurisdictions for private roads are not identical with those of directories. Nor does each directory have an equal number of miles of private or State roads within its jurisdiction. This depends largely upon the geographical distribution of the railways and upon the intensity of the traffic. Thus, the Berlin directory supervises 587 kilometers of State roads, while Halle has 11,884 kilometers. The other directories lie between these two extremes. It may be added that on April 1, 1895, the private roads represented together only 2,200 kilometers (not including Anschlussbahnen, and 71 kilometers rented to private parties) against 27,060 kilometers¹ of State roads, of which 10,470 kilometers contained two or more tracks.

All Prussian railways, then, whether State or private, are subject to the jurisdiction of a carefully graded administrative system—local, intermediate, and central—each part of which is connected with every other part in such a manner that, without interfering with the ability to act promptly in cases of emergency, every act not only finds its responsible agent, but the central organ can also make its influence felt in the remotest branch of the system and at the same time not transcend its responsibility to the public.

Advisory councils and other bodies.—Whether we regard the interests of the railways and of the public as identical or not, there are certainly times when harmony between the two does not exist. This may be due to the failure of each to understand the other, or to some wrongful act which one of them may have committed. Whatever the cause, if such circumstances do arise any organ which can promptly and prudently remove the friction performs an admirable service in the interests of public traffic. Such an agent is found in Prussia in the advisory councils and other bodies which cooperate with the legally responsible parts of the railway administration. These councils are created by law, and are required to meet regularly for the purpose of cooperating with the State administration upon all the more important matters pertaining to the railway traffic, especially time-tables and rate schedules.

The first German advisory council was organized in the federal domain of Alsace-Lorraine. Through an impulse given by the chamber of commerce of the city of Mülhausen a conference between the representatives of the chambers of commerce of Alsace-Lorraine and the general imperial railway directory at Strassburg was held at Mülhausen on October 21, 1874. Organization, composition, and functions of the council were agreed upon during the first session. Originally its membership was confined to the chambers of commerce of Alsace-Lorraine, but later representatives of the various agricultural and industrial bodies were also admitted. All matters falling within the domain of at least 2 chambers of commerce could be brought before the council.

The proceedings of this conference made such a favorable impression upon the federal railway commissioner that he attempted, although without immediate success, to induce the other German railways, both State and private, to assist in this movement toward a closer union and a better understanding between the commercial and railway interests by instituting similar councils. The circular

¹ Increased to 37,161 km. by the close of 1900.

letter of the commissioner, addressed to the railways on January 11, 1875, is one of the most significant steps in the development of the councils.

"This arrangement," says the letter, "primarily strives to establish an intimate connection between the places intrusted with the administration of the railways and the trading classes. It will keep the representatives of the railways better informed as to the changing needs of trade and industry and maintain a continued understanding between them; and, on the other hand, it will impart to commerce, etc., a greater insight into the peculiarities of the railway business and the legitimate demands of the administration, and consequently, by means of earnest and moderate action, it will react beneficially upon both sides through an exchange of views."

This statement sounds the keynote of the whole movement. For a time the railways were not very ready to respond, and the movement made little progress until the policy of the State to purchase private railways was about to be inaugurated. The Prussian Landtag made its approval of the first bill for the nationalization of railways dependent upon certain *wirtschaftliche Garantien* (economic guarantees) which it demanded of the Government. A resolution to this effect was adopted by the Landtag in 1879. The ministry of trade and industry had already taken active steps during the previous year. In 1880 a bill embodying the motives of the resolution of the Landtag was introduced, and after having undergone various changes and modifications was approved and published as the law of June 1, 1882.

Prussia was thus the first, and, up to the present time is the only, country in which advisory bodies of this nature were placed upon a legal basis. The law is entitled *Gesetz, betreffend die Einsetzung von Bezirks-eisenbahnräthe und eines Landes-eisenbahnraths für die Staatsbahnverwaltung*. As the name indicates, it creates a class of advisory boards or councils known as *Bezirks-eisenbahnräthe* (circuit councils), and one national council, called *Landes-eisenbahnrath*. The national council is the advisory board of the central administration, and the circuit councils of the railway directories. Since the reorganization of the railway administration, April 1, 1895, 8 circuit councils have been in existence, with their seats in Bromberg, Berlin, Magdeburg, Hannover, Frankfurt a. M., Cologne, Erfurt, and Breslau. It will be remembered that there are 20 directories, so that a circuit council serves as an advisory board for more than one directory. The national council is composed of 40 members, holding office for 3 years. Of these, 10 are appointed and 30 are elected by the circuit councils from residents of the province or city, representing agriculture, forestry, manufacture, and trade, according to a scheme of representation published in a royal decree. Of the appointed members, 3 are named by the minister of agriculture, domains, and forests; 3 by the minister of trade and industry; 2 by the minister of finance; and 2 by the minister of public works. An equal number of alternates is appointed at the same time. Direct bureaucratic influence is guarded against by the exclusion from appointment of all immediate State officials. The elective members are distributed among provinces, departments, and cities, by the royal order to which reference has just been made, and both members and alternates are elected by the circuit councils. The presiding officer and his alternate or substitute are appointed by the King. In addition, the minister of public works is empowered to call in expert testimony whenever he may think it necessary. Such specialists, as well as regular members, receive for their services 15 marks (about \$3.60) per day and mileage.

The national council meets at least twice annually, and deliberates on such matters as the proposed budget, normal freight and passenger rates, classification of freight, special and differential rates, proposed changes in regulations governing the operation of railways, and allied questions. It is required by law to submit its opinion on any question brought before it by the minister of public works; or, on the other hand, it may recommend to the minister anything which it considers conducive to the utility and effectiveness of the railway service. Its proceedings are regularly submitted to the Landtag, where they are considered in connection with the budget, thus establishing "an organic connection" between the national council and the parliament. In this way the proceedings are made accessible to everyone, and an opportunity is given to approve or disapprove what the council does, through parliamentary representatives. The system is one of reciprocal questioning and answering on part of the minister of public works, the national council, and the parliament.

The circuit councils are equally important and interesting. Since January 1, 1895, 9 of these have been in existence. Their membership, which varies considerably with the different councils, was fixed by the minister of public works in December, 1894. Any subsequent modifications which may have been made

have no bearing on what we are considering here. At that time the council at Magdeburg had only 24, while that at Cologne had 75 members. The nature of their composition can best be illustrated by presenting an analysis of the membership of one such council. The council of Hannover, comprising the railway directories of Hannover and Münster-Westphalen, seems to be a fair type. In that council we find 1 representative from each of the chambers of commerce of Bielefeld, Geestemünde, Hannover, Harburg, Hildesheim, Lüneburg, Minden, Münster, Osnabrück, Ostfriesland and Papenburg, Verden and Wesel; 1 representative from each of the following corporations or societies: Society of German Foundries in Bielefeld, German Iron and Steel Industrials in Ruhrort, Craftsmen's Union of the Province of Hannover, Branch Union of German Millers in Hannover, Union of German Linen Industrialists in Bielefeld, Society for Beet Sugar Industry in Berlin, Society for the Promotion of Common Industrial Interests in the Rhine Country and Westphalen, in Düsseldorf, and the Society of German Distillers in Berlin; 4 representatives from the Royal Agricultural Society in Celle; 3 from the Provincial Agricultural Society for Westphalen, in Münster; 1 from the German Dairy Society in Schluden and Hamburg, the Society of Foresters of the Hartz, the North German Foresters in Hannover, the Union of Forest Owners of Middle Germany in Birnstein, and from the Society for the promotion of Moor Culture in the German Empire; and, lastly, 1 from the Society of German Sea Fishers in Berlin. This one illustration is probably sufficient to show the thoroughly representative character of the circuit councils. If a circuit comprises railways covering territory of other German States, the chambers of commerce, industrial, and agricultural societies of such territory may also be represented in the council. The minister of public works has power to admit other members, and frequently does so when the nature of the questions upon which the council deliberates makes it desirable. Thus, at a meeting in which the rates on coal and coke—to be noted hereafter—from the Rhenish mining districts to the seashore were to be considered, there were present an Ober-präsident, accompanied by an assessor, a deputy of a Regierungspräsident, a Landrath (these three are civil administrative officers presiding over a province, circuit, and department, respectively), a representative of the Upper Mine Office at Bonn and at Dortmund, of the Royal Mine Directory at Saarbrücken, of the Royal Railroad Directory at Hannover, of the Dortmund and Gronau and Enscheder Railroad Company (private), in addition to the regular representatives and voting members.

The circuit council, as has been indicated above, stands in a relation to the railway directory similar to that of the national council to the minister. The law makes it mandatory upon the directory to consult the circuit council on all important matters concerning the railways in that circuit. This applies especially to time-tables and rate schedules. On the other hand, the council has the right, which it freely exercises, of making recommendations to the directory. In case of emergency the directory may act according to its own judgment independently of the council, but it is required to report all such cases to the standing committee of the council and to the council itself. This provision supplies the elastic element, which enables the railways to meet momentary wants. The standing committee of the council is an important body. It meets regularly some time before the full council holds its sessions, and its proceedings form the basis of the deliberations in the council. The committee receives petitions, memorials, and other communications. The bearers of these are invited to appear before the committee and to advocate their cause. Questions are asked and answered on both sides, and after all the questions have been presented the committee votes upon the petition or request, usually in the form of a resolution adopted by majority vote, recommending the council to accept or reject the demands made in the petitions. The action of the committee is reported on each question by a member designated for that purpose to the full council at its next session. While the decision of the committee is usually accepted by the council, it in no way binds that body. Before the council meets, each member has an opportunity to examine the arguments presented before the committee, and the facts upon which its decisions are based. If the advocates of the petitions before the council present new evidence, or if the recommendations of the committee are shown to be unsound, the council simply reverses the decision of the committee. Of the nature of these petitions I shall speak later.

These advisory councils have spread into Bavaria, Saxony, Württemberg, Hesse, Oldenburg, Mecklenburg-Schwerin, Austria, Italy, Russia, Denmark, Roumania, and, in a much modified form, into France. An examination of the councils in these countries shows the same principle underlying them all—the representation

of all the different economic interests in the conduct of the railways. In composition and organization they are much alike. They owe their existence, however, except in Japan and Switzerland, not to law, but simply to administrative orders.

There are still other bodies which, although not created by law and not confined in their activity to Prussia, have long exerted a powerful influence throughout the Empire. Foremost among these stands the Generalkonferenz (general conference). Under its guidance the modern German system of rates, called Reformtarif, has been systematically developed. The general conference meets annually, and discusses matters relating to tariffs, fees, operating regulations, etc. Thus, at a recent meeting the conference disposed of no less than 53 different items, relating mostly to the classification of goods and the adjustment of rates, all of which, as in case of the circuit councils, had been previously considered in subordinate bodies whose deliberations lie at the basis of the proceedings in the general conference. It is composed of members representing all the German railways, and votes are distributed according to the number of miles of road the members each represent, and the total number of votes, increasing, of course, with the growth of the German system. At the meeting referred to, the total number of votes was 322, of which 51 were not represented. Of these 51, 28 belonged to roads having 1, 10 to those having 2, and 1 to those having 3 votes. The Prussian State railways had 139 votes, the Bavarian State railways 28, those of Saxony 16, the State roads of Alsace-Lorraine 11, the State roads of Baden 10, and so on down, the remainder representing the smaller State and private railways. These figures show the predominating influence of Prussia in the conference.

Bodies subordinate to the general conference have already been alluded to. These are the Tarif-Kommission and the Ausschuss der Verkehrsinteressenten (tariff commission and committee of those interested in transportation). The tariff commission is a standing committee whose members represent Prussian State roads, 2 Swiss roads, and 1 of the railways of Mecklenburg. It meets 3 times a year, and occupies itself with petitions and other communications from shippers. The committee of shippers (Verkehrsinteressenten) is composed of members representing agriculture, trade, and industry; and some of the matters brought before it are previously discussed by a subcommittee. Both of these bodies occupy themselves almost exclusively with freight rates and matters immediately connected with them. Out of 23 items brought before them during a 2-days' session in 1893, 22 were deliberated upon in joint session, although each body voted separately. The discussions in these sessions are so thorough that the recommendations made are, in the great majority of cases, approved by the general conference. Those conclusions of the commission which are adopted in the form of a declaratory statement become binding upon members unless protests are made. Subjects discussed in the conference and commission may, and frequently are, brought before the councils.

Among the various railway traffic and rate unions which might be mentioned none have exerted an influence on rates at all comparable to that which has been exercised by the Society of German Railway Administrations. Founded as a Prussian society in 1846, it became in quick succession a national and an international organization, embracing the railways of Germany, Austria, Hungary, Roumania, Luxemburg, Holland, Belgium, Bosnia and Russian-Poland. Both State and private railways are eligible to membership. A series of 8 standing committees covers the special branches of the service, and if extraordinary matters arise they are referred to special committees. Questions upon which the society is to act must be published at least 3 months preceding the meeting. The proceedings have long been published in an official paper, and, through custom, exert a powerful influence. The attainment of uniformity in construction and other matters has been one of its great aims. In Europe the necessity for international uniformity is much greater than with us, and in the domain of freight traffic this has been well attained by means of an international treaty, signed at Berne on October 14, 1890, by diplomatic agents from Belgium, France, Germany, Italy, Luxemburg, Holland, Austria, Hungary, Russia, and Switzerland. It is officially known as the "Convention internationale sur le transport de marchandises par chemins de fer."

The history of this international agreement dates back to 1874, the same year that Mülhausen inaugurated the movement which lead to the institution of advisory councils. In that year 2 Swiss citizens, residents of Bâle, directed to the governments of the surrounding States inquiries concerning their willingness to enter into an international freight treaty. Drafts of such a treaty were worked out in both Germany and Switzerland and discussed in a congress at Berne in 1878. This congress submitted the draft of a treaty to the different governments for examination. Many objections were raised and improvements made. Further conferences, dealing also with questions of technical uniformity,

were held in 1882 and 1886, and on October 14, 1890, the draft approved by the third congress was formally drawn up as a treaty and approved. The original treaty has been modified and supplemented in various ways, partly by agreements among all these countries and partly by agreements among several of them. Every 3 years, or sooner, if one-fourth of the treaty-making States demand it, a general congress must be called together to consider improvements in the agreement.

As its name indicates, the Bernese treaty applies only to international freight traffic. Excepting articles the transportation of which is regularly monopolized by the post-offices of the contracting States, the treaty governs all shipments of goods from or through one of the States to another. It provides for uniform through bills of lading, prescribes routes for international traffic, fixes liability in cases of delay and loss, prohibits special contracts, rebates, and reductions, except when publicly announced and available to all, and prescribes certain custom-house regulations. Not the least important feature of the treaty is the creation of a central bureau, organized and supervised by the Swiss Bundesrath, with its seat in Berne. The duties of the bureau are five:

1. To receive communications from any of the contracting States, and to transmit them to the rest of them.
2. To compile and publish information of importance for international traffic, for which purpose it may issue a journal.
3. To act as a board of arbitration on the application of the countries concerned.
4. To perform the business preliminaries connected with proposed changes in the agreement, and, under certain circumstances, to suggest the meeting of a new conference.
5. To facilitate transactions among the railways, especially to look after those which have been derelict in financial matters. After notice has been given by the bureau, the State to which the railway belongs or by whose citizens it is owned can either become responsible for the debts of the road or permit the exclusion of the road from international traffic.

The expenses of the bureau are met by contributions of the contracting States in proportion to mileage.

The original agreement provided that any of the States might withdraw at the end of 3 years, on giving 1 year's notice. No such notice has ever been given. Any violation of the treaty can be punished in the courts, and a judgment having been rendered in one country the courts of the others are bound to assist in its execution, unless the decision conflicts with their own laws. But so far as the question of fact is concerned there is no appeal, and a German court is bound to accept the findings of a court in France. Germany, Austria, Hungary, Russia, Switzerland and, to a less extent, France have embodied provisions of the international code in their internal code, thus leading to unification beyond the limits of international traffic. To what extent the Bernese treaty may influence other phases of the national and international laws of the States of central Europe can not well be foreseen. That States differing widely in forms of government, geographical position, and commercial interests have voluntarily made themselves amenable to a common code of law under these circumstances, again impresses one with the great power and many-sided influence of railways and the healthy development of closer international relations. The code is binding for a domain embracing nearly 3,000,000 square miles and 200,000,000 people. It ranks in importance with the international postal, telegraph, and copyright unions.

Proceedings of advisory councils.—The leading features of the Prussian railway administration relating to rates have now been presented. It remains to illustrate by means of a few side lights from the proceedings how a part of the machinery acts. To convey a somewhat detailed view of the workings of the administrative organs directly concerned with the operation of the railways would unduly extend this paper; besides, it would be a little technical and not essential from the economic point of view. So we shall content ourselves with a brief account of some of the deliberations of the advisory and other bodies directly occupied with questions about rates. We shall save time by first obtaining a general idea of the German system of rates, for which purpose the general plan of the German reform tariff is here given:

GERMAN TARIFF SCHEME.

1. Fast freight by the piece.
2. Fast freight by the carload.
3. Piece goods.
4. General carload class A1, in shipments of at least 5,000 kilograms.

5. General carload class B, in shipments of at least 10,000 kilograms.
6. Special tariff A2, in shipments of at least 5,000 kilograms.
7. Special tariff I, II, and III, in shipments of at least 10,000 kilograms.

The rates and what pertains to them are officially published in volumes not unlike our monthly magazines. This tariff scheme was first introduced in 1877, and through the influence mainly of the general conference it has become gradually more unified. It is obvious that the price of transportation of goods becomes less as they fall into a class farther down the list. The general carload classes include goods of higher value not enumerated in any of the special tariffs, while the special tariffs I, II, and III embrace less valuable goods—their value falling by degrees—so that, generally speaking—

Special tariff I includes manufactured goods.

Special tariff II includes intermediate products.

Special tariff III includes raw materials and bulky goods of small value, such as certain waste products of gas factories, tanneries, paper factories, slaughter-houses, etc.

Special tariff A2 is for goods belonging to special tariffs I and II in consignments below 10,000 and above 5,000 kilograms. Goods belonging to special tariff III, but weighing less than 10,000, though at least 5,000 kilograms, are transported at the rates of special tariff II. Then there are special rules and rates for such things as explosives, precious metals, vehicles, timber, fish, bees, meat, carrier doves, etc. Questions as to classification and the transference of goods from one class to another often arise. Here is a typical case:

The Chamber of Commerce of Lennep, a Rhenish city, petitioned the general conference to transfer manufactured horseshoes—"raw hoof irons," the Germans say, but which will here be designated simply as "horseshoes"—from special tariff I to special tariff II. A prominent business firm brought the question before one of the railway directories, and from there it was carried before the minister of public works. The minister consulted the permanent tariff commission and the committee of shippers, and finally the question was brought before the advisory councils.

The petitioners asserted that the manufacture of horseshoes was a new industry which, after many costly experiments, had only recently gained a firm foothold; that the trade had been gradually growing, especially with the East, and that consignments had been sent to Russia, Italy, Austria, and other countries. In domestic trade the use of these horseshoes had been promoted by military authorities and street-car companies, because it lessened cost and relieved the blacksmith of much purely mechanical work. It enabled him to do better work more cheaply and with greater uniformity. The charge that it hindered the education of skillful blacksmiths was untrue.

Extensive statistical tables were introduced to show that the life of the industry depended upon the desired change in rates. Horseshoes were subjected to the same rates as fine iron and steel goods, while they properly belonged to intermediate products in special tariff II. Many of the factories were unfavorably located, and it was one of the highest duties of the State to promote industrial activity in regions which lie away from the great channels of trade, if it could be done without too great a sacrifice on part of the public. The desired concessions on part of the railroads would do this. It was unjust for the representatives of the Saxon State railways to assert, as they had done in the tariff commission, that the change in the classification of horseshoes would benefit the Rhenish industry only. Particularistic designs should not be suspected in a movement which was deeply rooted in economic necessities. The representatives of the Bavarian railways had considered fiscal reasons only, but these alone could not be decisive. It would not be businesslike for the State, in order to gain a temporary advantage, to sacrifice the very source of this gain. The railways would fare worse with high rates and a stagnant industry than with lower rates and a prosperous industry, and it was safe to assert that the desired change would, through an increased output, ultimately yield a greater income to the railways. The established system of rates would not be prejudiced; besides, when the question of system is balanced against that of the welfare of an industry the latter should prevail. The nationalization of railways was undertaken not for fiscal, but for economic reasons.

These were the main features of the petition. The petition, together with the records of previous deliberations on the question, was brought before the standing committee of one of the circuit councils, by which the arguments were reviewed and new evidence introduced. Can these horseshoes be classed with rod iron? Are they an intermediate product? Could not plowshares and other articles

demand a like change? What is the relation of the proposed change to the competition of Swedish iron? Is it true that the manufacture of horseshoes injures the craft of blacksmiths? Will it lead to a wider use of horseshoes and consequently to an improvement of agriculture? Such were the questions which the committee considered, and in response to which evidence of individuals and of societies was presented and subjected to the most rigid examination by specialists of various classes. From the committee the question went, as all questions considered by the committee do, before the full council, by which the report of the committee was reviewed and the horseshoe problem finally disposed of.

In a similar manner both the committee and council deliberated upon a petition of the Agricultural Society of Rhenish Prussia to place street sweepings in the special class with fertilizers and to reduce rates for shorter distances, because sweepings are used only within from 10 to 20 kilometers of the cities. The sweepings, it was asserted, had considerable value for agriculture, but that the difficulty of disposing of them had led some cities, notably Hamburg, to destroy them, thus depriving agriculture of a valuable agent. The composition and value of sweepings were examined and compared with other fertilizers now available, and the probable effect on the use of these considered. At the same session of the committee the change in time-tables for the summer period was regularly considered. Twenty-eight items were presented by the 14 different members, involving the time and frequency of passenger trains. All propositions which received a majority vote in the committee were brought, of course, before the full council.

In speaking of the composition of circuit councils reference was made to the question of rates on coal and coke. One of the railway directories brought before the standing committee of the circuit council a question first submitted in a petition of the chamber of commerce of Bielefeld and subsequently indorsed, either in part or entire, by other organizations. The petition sought a temporary suspension of rates applicable to coke and coal sent from the Rhenish mining districts to the German seashore and to foreign countries. The suspension was to remain in effect until the prices in the coal market should return to a normal level.

In the consideration of this question the railway directory asked the committee and council to deliver an opinion on each of the following points: (1) Is the level of prices of coke and coal in the Rhenish-Westphalian district an abnormal one? (2) How must the prices of coke and coal be constituted in order that their level may be characterized as normal? (3) Should a permanent or temporary suspension of existing freight rates on coke and coal be recommended in order to effect a reduction of prices within the country? (4) What markets and what rates come into consideration in case of the temporary or permanent suspension of the rates in question? Shall the rates to foreign countries or also the rates to the seashore be changed? (5) What will be the probable effect of the proposed suspension of rates with reference to the sale and the price of coal and coke within the country?

In both the committee and in the council this problem was thoroughly dissected. Naturally there were differences. Abnormal prices were thought to be prices which include an element of profit out of proportion to the other constituents of price. On the one hand, a profit of 40 per cent was shown to exist, which, however, the experts present at once proved to be confined to two specially favored mines. In computations to ascertain the average selling price of coal there was a difference of several marks, which called forth the most rigid examination of the statistics and other evidence upon which the figures were based. The railway authorities showed that in 5 years the outlay for coal for locomotives had risen from 44 to 7 per cent of their total expenses, while coal was still rising, and the coal men showed that their cost of production had risen because of advances in wages and expenses connected with insurance. It was said that the present low rates for the transportation of coal had been introduced at a time when the coal industry had lain prostrate, and that now all other industries were suffering from the high price of coal, and that this advance in freight rates on coal and coke would check exportation and force down prices at home. A decrease in exportation was deplored by representatives of the German marine. In conclusion, among both the advocates and the opponents of the change, the opinion was expressed that there was reason for rejoicing in the thorough airing which this question had received; that it would lead to a better understanding of actual conditions, and that the coal industry would hereafter be more inclined to give due consideration to the condition of other German industries.

We come now to the consideration of a question which, perhaps even more forcibly than what has just been related, illustrates the comprehensiveness and fair-mindedness with which the railway authorities investigate the problems which affect wide economic interests. It is a petition submitted by the minister

of public works to the national council for an expression of opinion. The printed evidence sent to the council alone covers about 500 folio pages. The problem submitted by the minister to the national council was this: Giving due consideration to the financial condition and the financial interests of the State, is it conducive to the general economic interests of the country (1) to introduce special reduced rates for all kinds of manures and fertilizers, irrespective of their nature, and, if so, what rates? (2) to introduce special reductions, and to what extent, for the transportation of (a) potassium salts—without discrimination or only "raw salts"—and phosphate; and (b) lime, in pieces or powdered, used for fertilization?

This was submitted in October, 1893. During March of that year the Herrenhaus had passed a resolution requesting the Government to introduce reduced special rates for fertilizers, a number of which were specified in the resolution. As stated in support of the resolution, the necessity for it lay in a cheapening of elementary utilities in order to maintain and promote agriculture and to increase the receipts of the railway from the traffic with the interior. The same resolution had previously been adopted by the budget commission of the Landtag.

In response to this resolution the minister of public works sought information from the minister of agriculture, domains, and forests, and all the different agricultural experiment stations as to the occurrence and production of natural and artificial manures in different parts of the country, their price and value in use, and the nature of their application. Various commissions reported on the prices at which different fertilizers could be profitably used on different soils. The agricultural authorities showed where and to what extent these soils existed, and elaborate statistics of the railways and manufacturers told how much had actually been consumed. In this lay the vital issue—the capacity of the land to absorb profitably artificial manures, and the adaptability of the farmer to secure them. The national council said that a simple expression of its appreciation of the great economic significance of the use of both natural and artificial manures was not sufficient, but that an exact and conscientious examination of the effect of existing rates on the widest and most effective use of these was necessary. The deliberations of the committee of shippers, the tariff commission, the general conference, and the evidence submitted through the minister of public work were all thoroughly sifted by the standing committee of the national council before the case went before the full council for its final verdict.

Marbles, slates, and pencils even have been the object of the most serious deliberations of bodies so large and so dignified as the general conference and the national council. A memorial was addressed to one of the railway directories by the marbles, slate, and pencil industry of Thuringia, praying for a detariffization of these articles. The memorial gives a detailed account of the manufacture of marbles, slates, and pencils in Thuringia, and points out the places where it meets competition. It gives the cost of production, output, markets, prices, and the rates of transportation. The conditions of the laboring population are described, and the probable effect of a change in rates on their welfare is analyzed. (One may be pardoned for turning aside to state that the laborers there engaged in the manufacture of slates, although exposed to the danger of completely undermining their health, receive often no more than 12 cents for a day's work of 18 hours.) The railway directory to which the memorial was sent addressed a letter of inquiry to the manufacturer of slates and pencils in Westphalia, whose business would be affected by the competition of Thuringia, calling for information on various points relating to this industry. This reply, together with the memorial and supplementary material, was submitted, through the minister of public works, to the national council.

One can not read these documents without being impressed with the sincere desire of the railway authorities to do justice to all competitors and at the same time to make such changes as will better the conditions of people like these laborers in Thuringia. Whether or not the benefits arising from a change in rates would really accrue to these people was most carefully considered. The material submitted for consideration in deciding this question, as in case of the preceding questions, furnished evidence on every point which was raised. The moderation with which the petitions are drafted, the high plane upon which the debates are carried on, the thorough conscientious and judicial mindedness with which the arguments are balanced in reaching a decision, all manifest a tone not unlike that of the decisions of our best courts of justice.

Summary and remarks.—Prussia began with a general law. In this respect her history is the direct opposite of that of our States. Treating this general law as a nucleus, legislation, royal and ministerial orders and rescripts, and custom have developed two distinct groups of railway administrative organs, each representing distinct sets of interests, yet both working cooperatively. On the one hand

we have a group of organs which represents railway interests in particular and which takes the railway point of view. The minister of public works, the railway directories, the general conference and tariff commission, and the Society of German Railways fall into this group, although the two latter stand in a measure on the border line, and of them are none confined exclusively to railway interests. Legal responsibility is fixed in the first two. On the other hand, we have the national and circuit councils with their standing committees and the committee of shippers. These primarily take the social and economic point of view. They are not legally responsible for the conduct of the railways, but act as advisory bodies. They represent all the different interests of the nation, and through them every citizen has not only an opportunity but a right to make his wants known.

The marble and slate industry of Thuringen is relatively insignificant, yet of vital importance to the inhabitants of that section of the country. We have seen how complete an examination the petition of these people received at the hands of the highest authorities of the land. A fair and prompt hearing can be denied to no man, rich or poor. The railways are made real servants. All the administrative, legal, and advisory bodies are organically connected with one another and with the Parliament. The lines may be drawn tant from above as well as from below. The elaborate system of local offices makes the system democratic, and the cabinet office and the directories give it the necessary centralization. The system presents that unity which a great business requires, on the one hand; and, on the other, that ramification and elasticity which the diverse and manifold interests of a great nation need for their growth and expansion.

In the formation of the councils the elective and the appointive elements are so well proportioned that it is impossible to "pack" any one of them. In this respect each body is a check on the other. It is easy to reproach the system with "bureaucracy," but to give adequate support to such a stigma would be an impossible task. We need only recall the analysis of the membership of one of the councils. Farmers, dairymen, fishermen, foresters, miners, manufacturers—the long array of human professions have here their representatives. One representative may shape his views according to some particular philosophy of the State. Another will at once restore the balance by presenting the opposite. One member may make extreme statements about some branch of trade or industry. Another will furnish exact information for its refutation. I doubt whether we can find anywhere in the world deliberative or administrative bodies in which the tone and the many-sidedness of the proceedings, the amount and variety of special knowledge displayed, and the logic of the debates present more points of excellence than in these councils and other bodies.

If from the point of view of the railways nothing should come of these proceedings—a most violent assumption—the information brought together would alone make them invaluable. No investigating committee of Congress or legislature ever had a better array of talent in every field at its disposal and under its control as is found in one of these councils or commissions.

It is not my purpose here to present new schemes, or to suggest ways and means by which existing institutions of our own country might be modified to perform similar functions. But let me ask whether, if our coal and iron industry, or fruit and cattle raising, or any other industry, were to receive an examination like that given to the Rhinish coal and coke industry, many things might not be different from what they now are? Imagine a well-organized assembly whose members could speak for the railways, for wheat and cattle, for fruit and steel, for forests and for mines, and is it not probable that the effects anticipated in the circular letter of 1875 would make themselves felt also in the United States? Both our railways and the public have repeatedly gone to extremes because neither understood the other. A system like the Prussian reveals the railways to the public and the public to the railways. It tends to remove blind prejudice and violent measures on both sides. By reflecting accurately the existing conditions, these conferences lead to tolerance, forbearance, and mutual concessions. The conclusions reached often have as salutary an effect on industrial situations as suspended judgments of our courts on defendants. It would be difficult to find in Prussia to-day, among the representatives of any class or interest, objections to the entire railway system which are not relatively insignificant. Both the public and the railways have gained more and more as the system has developed.

It will doubtless have been noticed that in the discussion of the council proceedings the decisions and their effect were not stated. It was my purpose simply to show the nature of the councils, and either a negative or an affirmative vote would throw no additional light on the problem. Without a full presentation of local details it could mean little to state that the council voted to place sweepings into the special tariff with fertilizers.

PART VII.—VIEWS AND OPINIONS OF RAILWAY MEN.

Among the questions contained in letters sent out to railway presidents and other officers were the following:

"What, in your judgment, are the elements of strength and of weakness in American railway charters?"

"What provisions should a model railway charter of the future contain?"

In most instances these letters were answered by the officers addressed. In a number of cases they were referred for reply to counsellors or other officers.

The extracts given below are representative of the replies received. As a class the railways represented belong to the important systems of the continent. It is probable that nothing of vital importance touched upon in any letter received is not reflected in the expressions quoted below.

"In a general way, I should say that an important point would be gained if all railroad charters were issued under general laws instead of specific legislation for each charter, and uniformity between laws of the States be brought out as far as practicable. This would avoid the creeping in of many faults which get out under special legislation."

W. G. RAOUL,
President The Mexican Nat. R. R. Co.

* * * * *

"In my judgment, there should be some provision in each State that would make it impossible for speculative roads to be built. By speculative I mean that class of roads that are organized for the purpose of crippling an already existing road in the hope of so annoying the property already in the field that in self-defense they pay a good round price in order to get rid of a competitor when the original line is serving the public well and a parallel line would probably wreck the stronger line. I think it is the history of railroads that the weaker can pull down the stronger."

W. J. CARPENTER,
President Chicago and Eastern Illinois Railroad Company.

* * * * *

"Personally, I believe that the time has come when future railroads should be built under the supervision and control of some State board, and that the laws should be such that they could not be overcapitalized and no roads should be built to parallel another road already in existence, unless it could be proven that the business in the territory through which the new road was to run was sufficient to justify and make a paying investment on a legitimate amount of capital invested."

R. S. KAYLOR,
Commissioner of Railroads and Telegraphs, Ohio.

* * * * *

"The general incorporation laws of this State seem to be fairly well adapted to our condition and situation, and, while affording ample protection to the interests of the State, they are sufficiently liberal to encourage the organization and successful operation of railway companies.

"Under the constitutions of this State railway companies are subject to legislative control."

THOMAS BURKE,
Counsellor, Seattle, Wash.

* * * * *

"All railroads in the State are operated and controlled under the provisions of a general railroad law. No special charters have been granted railroad companies

since 1865, the constitution of the State prohibiting special legislation of any character. There are 2 or 3 charters granted prior to 1865, and which are still in existence, but the companies comply with the provisions of general law. The operation and control of railroads of this State are satisfactory, and there seems to be no good reason for changing the present status regarding these matters."

JAMES HARDING,
Commissioner of Railroads, Missouri.

* * * * *

"If it be intended to effect an improvement in the incorporation acts of the individual States, I can think of no greater improvement than a uniformity of such laws in all the States, so that a corporation would not come under different laws at the crossing of every State line."

J. B. REDFIELD,
Assistant Secretary Chicago and Northwestern Railroad Company.

* * * * *

"I am frank to say, however, that I believe the best thing possible for owners of railway enterprises—and hence for their property—as well as the best for the people at large will never have been done until all the great lines doing a through business shall have come under the control substantially of a single organization, for until then there will always be bickerings, jealousies, rate cuttings, rebates, and drawbacks of all kinds and unjust discriminations in favor of particular patrons, and a host of other evils too numerous to mention. Under one organization, which would mean one broad general policy, the charging of greater rates for a short than for a long haul would not be, as it were, a necessity of the situation, excepting perhaps where the road came into direct competition with water lines; everybody would be charged the same price for the same transportation, and the saving in the expense of management would be enormous. I believe that \$100,000,000 would hardly pay the additional expense entailed by the expenditures made in New York for railroad offices, employees, etc., which are made necessary under the present system in order to solicit and compete for business for the different railroads, involving an enormous aggregate for rebates, and an enormous loss on account of rate cutting, which does not help the public at large, but is wasted in incipient and constant warfare. As it is to-day, a man who has 10 carloads of freight to ship will be sought by probably 20 men on the average from different railroad offices, who in their scramble for the business are almost sure to cut the rate to the disadvantage and detriment of the vast body of shippers—especially the smaller ones—who should by right have precisely the same privileges and opportunities that fall to the lot of some favored man who has large enough shipments to make and to attract the cupidity of the various carriers."

C. P. HUNTINGTON,
President Southern Pacific Railway Company.

* * * * *

"Answering your letter of July 11, we have to say that railroad companies are organized in this State under the general incorporation laws of the State. No special charters are permitted by the constitution of the State. By the terms of the constitution the legislature reserves the right to regulate railway transportation and to prescribe reasonable maximum rates which transportation companies should charge for freight and passengers. The constitution also gives the legislature power to require by law that railway companies shall interchange cars and transport products in bulk from one point in the State to another point in the State. The legislature, however, has not passed any law to make this provision of the constitution effective. The only fiscal limitation on railway corporations in this State is that they should not issue bonds to more than twice their capital stock.

"Foreign corporations have the same rights in this State as local corporations, upon complying with the law which requires a foreign corporation to file its articles and appoint an agent upon whom service of process can be made. * * * We think that a defect which should be corrected in all railway law now existing is the want of uniformity. Modern railways are the means of carrying on interstate commerce, whether the physical property be located within one State or more than one. Any State legislation which assumes to affect transportation within the boundaries of a State necessarily has its effect upon interstate business. For this reason we do not think it would be any stretch of the spirit of the Constitution of the United States to place the whole transportation business of the country under a Federal law which would be uniform throughout the

country and would exclude local legislation by the several States. Such a uniform law providing for uniform regulation and control by a commission having judicial powers would in our judgment go far toward relieving transportation companies of many of their difficulties, and at the same time giving better service to the public. Under authority of such commission competition and pooling could be controlled, better service given to the public and at cheaper rates, while the stockholders would receive more regular dividends, and would be protected against wild-cat financing."

CROWLEY & GROSSCUP,
Counselors, Tacoma, Wash.

* * * * *

"Under present conditions in the United States, the issuance of charters by each State is, it seems to me, pernicious in its results. The laws of the different States vary considerably, but in the most of them a charter can be secured for a small fee. This, in my judgment, has resulted in many blackmailing schemes, and has probably resulted in more railroad bankruptcies in this country than from all other causes combined.

"In my opinion charters should only be issued by the Federal Government, except for street railways and such enterprises as are known to be absolutely local in their sphere of operations. To accomplish this result will, no doubt, be very difficult while the doctrine of State rights is so firmly held by many people.

"This, it seems to me, ought not to stand in the way of a discussion of what ought to be accomplished. My view is that a commission, the members of which are appointed on the same basis as the members of the United States court, should constitute a body before which all applications for railway charters should be laid. This commission should be nonpolitical in its character, and composed of civil engineers, lawyers, and men of business qualifications, limited to say 5 in number, and charters for railroads should only be issued on the recommendation of this commission followed by legislative enactments.

"Some new method for the issuance of charters is certainly very necessary, not only in the interests of investors, but also in the interests of the people, as the present practice has resulted in the building of many cheap and unnecessary railways, which have much increased the expense of transportation over what it would have been had the railways constructed been built on strict requirements, necessary attention having been given to securing a line of the least expense in operation, which, in most cases, has been grossly disregarded. The result is that the people have to support these railways, improperly built, and therefore incur an enormous tax which might have been avoided under judicious governmental supervision."

A. A. ROBINSON,
President Mexican Central Railway Company.

* * * * *

"I think the only addition I would make to what he (Mr. E. W. Meddough—see next quotation) suggests is that the charter should provide somewhat in detail as to the character of the road that should be built; in other words, should specify the alignment, curvature, width of embankments, maximum gradients, character of masonry, bridges, number of ties per mile, weight of rail, and character of crossings over highways, whether level, overhead or subways, and the same as to intersections of other railway lines, all of which should be in accord with the specifications prescribed by the board of railroad commissioners for the State, or other board vested with such authority. This would prevent, more than any other provision that could be enacted, the building of superfluous and unnecessary lines not demanded by public necessity, but built for purposes of speculation and blackmail—something which has in the past prevailed to a great extent and which is responsible for the competition and unremunerative rates prevailing on many of the railways of the United States."

CHARLES M. HAYES,
General Manager Grand Trunk Railroad System.

* * * * *

"The 'elements of weakness' in American railway charters are more numerous than the 'elements of strength.' Very few special charters have been granted within the last thirty years. Railway corporations which have come into being within that period have been organized under general incorporation acts, and are

subject to constitutional or statutory provisions reserving to the legislature the power to amend, alter, or repeal. This reservation deprives the corporation, in some degree, of the contract immunity from legislative interference. However, even with this reserved power, there is a limit beyond which the legislature can not go. Unreasonable rates of transportation can not be prescribed. The legislature can not interfere with or control the corporation in the management of its affairs not affecting the safety, health, or reasonable convenience of the public. Whether or not a legislatively prescribed rate is reasonable is a judicial question, and the carrier may always have recourse to the courts for its determination. But the test of reasonableness is not fully settled.

"And so it may contest the validity of any legislative act touching the management of its internal affairs. But here, too, there is uncertainty. The boundary line between matters of such public concern as to warrant legislative interference, and matters of which corporation has exclusive right of control, is not clearly defined nor easily definable.

"The almost unlimited taxing power of the States under these general acts of incorporation as respects railway property is, perhaps, the most to be feared in the future. The power has been abused in most of the States, and the manifest tendency is everywhere to impose on railroad property a gradually increasing portion of the common public burden. This policy is, of course, popular with the people, as the higher the tax on railroads the lower the tax on other property, and the legislators represent their constituents. If there exists any judicial remedy for this it is not apparent.

"Now railroad property differs from other property in that it is devoted to the service of the public. A railroad once built must remain and be operated so long as it will pay operating expenses, even though its owners never realize \$1 on their investment.

"Rates of transportation may be fixed by the legislature. These conditions would justify, if they do not in justice demand, consideration by the Government in prescribing a system of railway taxation. Under existing methods the public take toll at both ends. They get low rates of transportation and a high rate of taxation—both through legislation.

"A model railway charter would irrevocably fix the percentage on the capital investment which a railway company should receive from its earnings—thus prescribing a limit to legislative curtailment of rates. It would define, as accurately as well-chosen general language can, the boundary line between legislative right of interference with or control of the business and the corporation's right of exclusive management. Something helpful can be done in this direction, I am sure.

"It would prescribe a definite basis of taxation, having reference to the exceptional character of the property and the fact of its permanent dedication to the public use, and this basis would be irrevocable.

Finally, it would make the issuance of a free pass or the gratuitous transportation of property cause of forfeiture of the charter."

E. W. MEDDAUGH,
Solicitor Grand Trunk Railway System.

* * * * *

"But my idea of the charter for a railway would be that every point which might possibly arise in the future should be definitely determined in the charter, such as power of eminent domain, the privileges attached to the use of water from streams or artificial ponds, with condemnation of lands for such uses if necessary; also the right to use any material on the right of way at any point on the line where it might be needed, with the rates and fares for freight and passenger traffic fixed, or at least a minimum fixed, so that no future legislature or railway commission could interfere therewith. Whether such a charter as this could be obtained from any legislature in the United States I very much doubt, but a charter with such provisions would be to my mind much better than to leave the railways to the mercy of succeeding legislatures or railway commissions."

C. J. IVES,
President Burlington, Cedar Rapids and Northern Railway.

* * * * *

"In reply to your question, I would say that the elements of strength in American railroad charters rested, for many years, on the well-known Dartmouth College case, but that decision has been frittered away by the courts and belittled by Federal and State legislation to such an extent that there is little left of it, and

to-day the weakness in American railroad charters is that, as contracts, they seem to bind the corporations without binding the States which granted them.

"To my mind the ideal charter would be one which, whatever its provisions might be, should state them clearly, and forever equally bind both the State and the corporation to their fulfillment."

STUYVESANT FISH,

President Illinois Central Railroad Company.

* * * * *

"I may add that the railroads of this State, under its general railroad laws, which are subject to alteration, amendment, or repeal at any time, have received reasonably fair treatment at the hands of the legislature. While the transportation facilities, with respect to territory and population, are very extensive by rail in comparison with other places, as well as by water, the railroad transportation companies of this State have been very unprofitable investments. The ——— company, under its special charter, is practically the only railroad which has not been a losing venture. It has never defaulted, and has paid interest and small dividends upon the very reasonable amount of its bonds and capital, and by virtue of the arrangement which it has made for the operation of other lines, under the general railroad law, it has conducted their operations and unquestionably saved several of them from bankruptcy. The industries of the State have grown, and there have been but few complaints from shippers.

"With respect to the portion of the State served by this company, operating under its charter, whether by reason of the fact that it is the most fruitful and populous territory reached, or whether by reason of the facilities extended by the company, it is certain that this portion of the State has excelled the rest in the increase of population and value of property."

HENRY RUSSELL,

Counsellor, Michigan Central Railroad Company.

* * * * *

"The railroads in this Commonwealth have very little more power than ordinary business corporations, the right of eminent domain being the most important, and that exercised under very rigorous restrictions. All railroads in this State are now subject to the general laws and are under the supervision of a board of railroad commissioners, of which the power is very plenary. The general law in reference to Massachusetts railroad corporations and the powers of the railroad commissioners are set out in chapter 112 of the Massachusetts Public Statutes and the amendments thereto contained in the acts from 1882 to 1899. In addition to this chapter, railroads are subject to section 3, chapter 105 of the Public Statutes, which makes every act of incorporation subject to amendment, alteration, or repeal, at the pleasure of the general court. In view of these general laws the original charters under which these railroads are operated are of little or no material value. The incorporation, organization, laying out of route, issuing of stock, exercise of eminent domain, rates of fares, and all the smaller details of railroad operations are provided for in the general statute applicable in all cases.

"In the original charters of at least two of the railroads organized here, a right in the State to purchase the railroad at any time for the amount of investment with 10 per cent a year added was reserved. This, however, is superseded by a general right to take possession of any railroad in the State reserved to the Commonwealth in sections 7 and 8 of the aforesaid chapter 112."

LUCIUS TUTTLE,

President, Boston and Maine Railroad Company.

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APPENDIX I.

PREAMBLE AND DESCRIPTION OF A PART OF THE ROUTE FROM A NEW SOUTH WALES CHARTER.

AN ACT to authorize the construction of an extension of the railway commonly known as the Rosehill Railway, in three sections, from a point about 9 chains 75 links from the northern end of the Rosehill station platform, crossing the Parramatta River, traversing the districts of Rydalmere, Pennant Hills, Dundas, and Castle Hill, and terminating at Dural. (Assented to 13th June, 1893.)

Whereas Benjamin Crispin Simpson, of Sydney, in the Colony of New South Wales, civil engineer, being the present proprietor of the railway from Clyde station to the Parramatta River, known as the Rosehill Railway, is desirous of constructing an extension of such railway in three sections, from a point about nine chains seventy-five links from the northern end of the Rosehill station platform; then crossing the Parramatta River; then traversing the districts of Rydalmere, Pennant Hills to a point north of the Pennant Hills road, being three miles twenty-eight chains from the starting point, and being the first section of the said extension; thence traversing Dundas and Castle Hill to a point in the district of Castle Hill five miles twenty-four chains from the end of the first section, being the second section of the said extension; thence to a further point in the district of Dural three miles forty-one chains or thereabouts from the termination of the second section, being the third section of the said extension; such railway to run through certain private lands and certain streets described in the schedule annexed hereto: And whereas it is desired to construct such railway extension for the purpose of making the Rosehill Railway of greater use, and for the further purpose of opening up a most fertile and valuable district now without railway facilities, and of giving better access to the inhabitants thereof and the public generally to Sydney and surrounding country: And whereas the increased facilities of communication and traffic which would result from the construction of the said proposed railway extension would be for the public convenience and benefit, and it is desirable to authorize by legislative enactment the construction and maintenance of the said proposed railway extension subject to the provisions hereinafter contained: Be it therefore enacted by the Queen's most excellent majesty, by and with the advice and consent of the legislative council and legislative assembly of New South Wales in parliament assembled, and by the authority of the same, as follows:

DESCRIPTION OF A PART OF THE ROUTE CONTAINED IN A PRIVATE RAILWAY CHARTER OF NEW SOUTH WALES OF 1893.

The schedule.—First part.—Commencing on the Rosehill Railway at a point about nine chains seventy-five links from the northern end of the Rosehill station platform; thence in a northeasterly direction across the land enclosed for the said railway and belonging to the said Benjamin Crispin Simpson; thence bearing northeasterly through the property believed to belong to the Rosehill Racecourse Company to a road called South avenue; thence across that road bearing northeasterly to the southern boundary of land believed to belong to Septimus Alfred Stephen, and believed to be leased to Charles Edward Jeanneret for a tramway line; thence across the said leased land bearing northeasterly to a road called North avenue; thence across the said road bearing northeasterly to lands believed to belong to Robert Hudson bearing northerly to the western boundary of a reserved road; thence curving to a northeasterly direction along such road to the southwestern boundary of lands believed to belong to William L. Ferris and I. Ferris; thence in a northeasterly direction across the said lands to the southern bank of the Parramatta River; thence in a northeasterly direction across the said

Parramatta River to the southern boundary of lands believed to be dedicated by the Government for an asylum for the insane; thence across the said lands in a northeasterly direction to their eastern boundary; thence in a northeasterly direction through lands believed to belong to the trustees of Subiaco Convent to the southern boundary of a street called Victoria street; thence in a northerly direction across the said street to its northern boundary; thence in a northerly and northeasterly direction through lands believed to belong to the trustees of Subiaco Convent to the western boundary of land believed to belong to Jonathan Wooster; thence in a northeasterly direction across the said lands to the southern boundary of a road called Kissing Point road; thence in a northeasterly direction across the said road to its northern boundary; thence in a northeasterly direction across land believed to belong to Robert McCann to its eastern boundary; thence in a northeasterly direction through land believed to belong to G. McKillop to the western boundary of a reserved road; thence in a northeasterly direction across the said road to its eastern boundary; thence in a northeasterly (curving to a northerly and northwesterly) direction through lands believed to belong to Neil Harper to the western boundary of a road believed to be called Adderton road; thence in a northerly direction across the said road to its eastern boundary; thence in a northerly direction through land believed to belong to George Hodge to its eastern boundary; thence in a northerly direction through lands believed to belong to Charles R. Mobbs to the eastern side of the road; thence curving to a northeasterly direction along the said road and through land believed to belong to Neil Harper, and also through land believed to belong to Enoch Smith to the eastern boundary of the said road; thence curving to northerly and northwesterly directions through lands believed to belong to Charles W. Mills to its northern boundary; thence in a northerly and northwesterly direction through lands believed to belong to Frederick C. Cox to its eastern boundary; thence in a northeasterly direction across land believed to belong to William Cox to the southern boundary of a road called Pennant Hills road; thence in a northeasterly direction across the said road to its northern boundary; thence still in a northeasterly direction across land believed to belong to Frederick C. Cox to the southern boundary of the road; thence across the said road in a northeasterly direction to its northern boundary; thence bearing northeasterly across land believed to belong to Edwin Harris, and terminating at a point in the said land three miles twenty-eight chains distant from the point of commencement of the first section hereinbefore described.

APPENDIX II.

CONSTITUTIONAL PROVISIONS RELATING TO RAILWAYS.

ALABAMA.

ART. XIV.—*Corporations.—Private corporations.—Railroads and canals.*

SEC. 21. All railroads and canals shall be public highways, and all railroad and canal companies shall be common carriers. Any association or corporation organized for the purpose shall have the right to construct and operate a railroad between any points in this State, and to connect at the State line with railroads of other States. Every railroad shall have the right with its road to intersect, connect with, or cross any other railroad, and shall receive and transport each the other's freight, passengers, and cars, loaded or empty, without delay or discrimination."

SEC. 22. "The general assembly shall pass laws to correct abuses and prevent unjust discriminations and extortion in rates of freights and passenger tariff on railroads, canals, and rivers in this State."

SEC. 23. "No railroad or other transportation company shall grant free passes or sell tickets or passes at a discount other than as sold to the public generally, to any member of the general assembly, or to any person holding office under this State or the United States."

SEC. 25. "No railroad, canal, or other transportation company, in existence at the time of the ratification of this constitution, shall have the benefit of any future legislation by general or special laws, other than in execution of a trust created by law, or by contract, except on the condition of complete acceptance of all the provisions of this article."

ART. XI.—*Taxation.*

SEC. 6. "The property of private corporations, associations, and individuals of this State shall forever be taxed at the same rate." * * *

"Law requiring auditor to assess and collect taxes on the roadbed and rolling stock of railroads, and relieving these items from county taxation was valid."—*M. & G. R. Co. v. Peebles*, 47 Ala., 317.

ARKANSAS.

ART. XII.—*"Municipal and private corporations.*

SEC. 1. "All existing charters or grants of special or exclusive privilege under which a bona fide organization shall not have taken place and business been commenced in good faith at the time of the adoption of this constitution shall hereafter have no validity."

SEC. 2. "The general assembly shall pass no special act conferring corporate powers, except for charitable, educational, penal, or reformatory purposes, where the corporations created are to be and remain under the patronage and control of the State."

SEC. 5. "No county, city, town, or other municipal corporation shall become a stockholder in any company. * * * or obtain or appropriate money for or loan its credit to any corporation." * * *

SEC. 6. "Corporations may be formed under general laws, which laws may, from time to time, be altered or repealed. The general assembly shall have the power to alter, revoke, or annul any charter of incorporation now existing and revocable at the adoption of this constitution, or any that may hereafter be created, whenever, in their opinion, it may be injurious to the citizens of this State, in such a manner, however, that no injustice shall be done to the corporations."—(See *Ry. v. Gill*, 54-101.)

SEC. 7. "Except as herein provided, the State shall never become a stockholder in, or subscribe to, or be interested in, the stock of any corporation or association."

ART. XVII.—*Railroads, canals, and turnpikes.*

SEC. 1. Identical with section 21, Article XIV, Alabama.

SEC. 3. All individuals, associations, and corporations shall have equal right to have persons and property transported over railroads, canals, and turnpikes, and no undue or unreasonable discrimination shall be made in charges for, or in facilities for, transportation of freight or passengers within the State, or coming from or going to any other State. Persons and property transported over any railroad shall be delivered at any station at charges not exceeding the charges for transportation of persons and property of the same class in the same direction, to any more distant station. * * *

SEC. 4. The leasing, control, consolidation, or purchase of a parallel or competing line forbidden. Officer of one road can not hold office in such lines. Question as to what is competing or parallel lines to be decided by jury, as in civil cases.

SEC. 5. No officer, president, director, agent, or employee of any railroad to be interested, directly or indirectly, in furnishing materials, supplies, or business to company.

SEC. 7. The general assembly shall prevent by law the granting of free passes, by any railroad or transportation company, to any officer of this State, legislative, executive, or judicial.

SEC. 8. All charters held subject to constitution, and no amendment of charter or special law for benefit of corporation to be passed unless so held.

SEC. 9. General assembly can take property and franchises of incorporated companies and subject them to public use, the same as property of individuals.

SEC. 10. General assembly to pass laws to correct abuses and prevent unjust discriminations. Penalties and forfeitures to be provided.

SEC. 11. Rolling stock and all other movable property to be considered personal property.

SEC. 13. Annual reports to be required.

ARIZONA.

The organic code contains no provisions on railways.

CALIFORNIA.

ART. XII.—*Corporations.*

SEC. 1. "Corporations may be formed under general laws, but shall not be created by special act. All laws now in force in this State concerning corporations, and all laws that may hereafter be passed pursuant to this section may be altered from time to time or repealed."

SEC. 7. "The legislature shall not extend any franchise or charter, nor remit the forfeiture of any franchise or charter for any corporation now existing, or which shall hereafter exist under the laws of this State."

SEC. 8. State can use property of corporations for public use same as that of individuals.

SEC. 17. Same as section 21 of the constitution of Alabama, and section 1 of that of Arkansas.

SEC. 18. Same as section 5, Article XVII, of constitution of Arkansas, with the addition "except such interest in the business of transportation as lawfully flows from the transportation of stock therein."

SEC. 19. Free passes and discounted tickets forbidden. Penalty: Forfeiture of office.

SEC. 20. Pooling forbidden. If rates are reduced for purposes of competition, the same shall not be raised "without the consent of the governmental authority in which shall be vested the power to regulate fares and freights."

SEC. 21. Same as section 8, Article XII, Arkansas.

SEC. 22. State divided into three sections, according to population. One railroad commissioner for each section, elected by the people for four years. Have power to establish rates for transportation of passengers and freight. Same to be published. Examine books, records, etc.; and may issue subpoenas; hear and determine complaints; punish for contempt of orders "in the same manner and to the same

CONSTITUTIONAL PROVISIONS RELATING TO RAILWAYS. 998

extent as courts of record;" shall prescribe uniform system of accounts. Disobedience of orders of commissioner punished by fines not to exceed twenty thousand dollars. Agent or employee receiving rates in excess of those fixed fined five thousand dollars or one year in county jail. Legislature can extend power of commissioner.

SEC. 23. Divides State into districts.

COLORADO.

ART. XV.—Corporations.

SEC. 1. All special charters granted, but under which business had not begun, not valid after adoption of this constitution.

SEC. 2. No charter of incorporation shall be granted, extended, changed, or amended by special law, except for such municipal, charitable, educational, penal, or reformatory corporations as are or may be under the control of the State; but the general assembly shall provide by general laws for the organization of corporations hereafter to be created.

SEC. 3. Identical with last eleven lines of section 6, Article XII, Arkansas.

SEC. 4. Almost identical with section 21, Article XIV, Alabama, with the omission of last phrase "and transport," etc.

SEC. 5. Same as section 4, Article XVII, Arkansas, but referring to consolidation only.

SEC. 6. Identical with section 3, Article XVII, Arkansas, up to "Persons and property transported."

SEC. 7. Benefit of future legislation denied until acceptance of provisions of constitution filed, in binding form.

SEC. 8. Identical with section 9, Article XVII, Arkansas.

SEC. 15. Unlawful for any corporation "to require of its servants or employees, as a condition of their employment any contract * * * whereby such person, company * * * shall be released from liability * * * on account of injuries while in the service of such company." * * *

CONNECTICUT.

Amendments, Article XXV: "No county, city, town, borough, or other municipality, shall ever subscribe to the capital stock of any railroad corporation, or become a purchaser of the bonds, or make donations to, or loan its credit, directly or indirectly, in aid of any such corporation;" debts contracted prior to adoption of this amendment not affected.

DELAWARE.

ART. VIII.—Revenue and taxation.

SEC. 8. County or municipal aid to private corporations or persons prohibited.

ART. IX.—Corporations.

SEC. 1. No corporation shall hereafter be created, amended, renewed, or revived by special act, but only by or under general law, nor shall any existing corporate charter be amended, renewed, or revived by special act, but only by or under general law. * * * Charters forfeited for violation of law.

SEC. 2. Acceptance of constitution by corporations necessary before charter can be renewed or amended.

SEC. 6. Each shareholder entitled to one vote in elections for directors or managers.

FLORIDA.

ART. IX.—Taxation and finance.

SEC. 7. State aid by means of taxation to corporations forbidden.

SEC. 10. State credit not to be pledged or loaned to private corporations; State not to become a stockholder. City, county, borough, township, etc., also forbidden to aid such corporations.

ART. XVI.—*Miscellaneous.*

SEC. 30. "The legislature is invested with full power to pass laws for the correction of abuses and to prevent unjust discrimination and excessive charges by persons and corporations engaged as common carriers in transporting persons or property, or performing other services of a public nature, and shall provide for enforcing such laws by adequate penalties and forfeitures."

SEC. 31. Free passes and discounts of fares forbidden to members of legislature and State officers.

GEORGIA.

ART. IV.—*Section 2. Regulation of corporations.*

SEC. 1. Railroad tariffs. Assembly given right to regulate freight and passenger tariffs and to fix penalties for violations of regulations.

SEC. 2. Right of eminent domain retained over corporation property.

SEC. 3. Charters revived or amended become subject to the constitution: * * * "Provided, That this section shall not extend to any amendment for the purpose of allowing any existing road to take stock in or aid in the building of any branch road."

SEC. 4. The purchase of stock of one corporation by another for purposes of decreasing competition can not be authorized and all such contracts declared void.

SEC. 5. Rebates forbidden, directly or indirectly. Penalties may be imposed.

IDAHO.

ART. III.—*Legislative department.*

SEC. 19. Prohibits special or local laws.

ART. VIII.—*Public indebtedness and subsidies.*

Four sections, prohibiting subscription to stock and other forms of aid on part of any political unit.

ART. XI.—*Corporations.*

SEC. 1. Previously granted but inoperative special charters void.

SEC. 2. Special legislation, except for municipal, charitable, etc., purposes, prohibited.

SEC. 3. Legislature may revoke charters, but no injustice shall be done.

SEC. 4. Like section 3, Article XI, Illinois.

SEC. 5. Railways common carriers; legislature may control, regulate rates; railways may connect, intersect with one another.

SEC. 6. Undue or unreasonable discriminations forbidden; excursion and commutation tickets may be sold, provided they are the same to all persons. Long and short haul provision.

SEC. 7. Must accept constitution.

SEC. 8. Legislature may apply right of eminent domain to property of railway corporation.

SEC. 10. Appoint legal representative.

SEC. 14. Can not escape jurisdiction of State courts through consolidation.

SEC. 15. Contracts restricting liability void.

SEC. 18. Combinations to influence price prohibited.

KENTUCKY.

SEC. 59. Special legislation forbidden.

SEC. 179. City, county, etc., aid to corporations forbidden.

SEC. 190. Corporations must accept the constitution before asking for benefits of future legislation.

SEC. 191. All charters under which organization has not taken place at time of adoption of constitution void.

SEC. 192. No corporation to engage in business other than expressly named in charter; not to hold estate other than is proper and necessary for carrying on its legitimate business "for a longer period than 5 years, under penalty of escheat."

- SEC. 195. Property of corporations subject to right of eminent domain.
 SEC. 196. Unjust discrimination prohibited.
 SEC. 197. Free passes forbidden to city, town, county officers, members of assembly, or judge. Forfeiture of office the penalty.
 SEC. 198. Trusts, pools, combinations, or other organizations to "depreciate below its real value any article, or enhance the cost of any article above its real value" forbidden.
 SEC. 201. Purchase or lease or operation of competing lines or line forbidden; also pooling of earnings with *any common carrier* forbidden.
 SEC. 203. Lease or transfer of franchise to escape liability forbidden.
 SEC. 207. Identical with section 3, Article XI, Illinois.
 SEC. 209. Railroad commissioners, three in number, elected by people for same term as governor. State divided into three districts.
 SEC. 210. Common carriers forbidden to own, operate, or engage in any other business "except such as shall be necessary to carry on its business." * * *
 SEC. 212. Rolling stock subject to execution and sale. Earnings and personal property subject to process of attachment.
 SECS. 213, 215. Freight of all shippers to be transferred with equal promptness and same charges independent of destination.
 SEC. 214. Exclusive contracts with shippers forbidden.
 SEC. 216. Right of intersection guaranteed.
 SEC. 217. Fixes penalties at from \$2,000 to \$5,000 and forfeiture of franchise.
 SEC. 218. Greater charges for shorter than for longer hauls forbidden.

ILLINOIS.

ART. XI.

- SEC. 1. No corporation to be created by special laws.
 SEC. 2. All charters not in force within 10 days after the adoption of the constitution void.
 SEC. 3. "The general assembly shall provide, by law, * * * every stockholder shall have the right to vote in person or by proxy, for the number of shares of stock owned by him, for as many persons as there are directors or managers to be elected, or to cumulate such shares, and give one candidate as many votes as the number of directors multiplied by the number of his shares of stock shall equal; or to distribute them on the same principle among as many candidates as he shall think fit." * * *
 SEC. 10. Rolling stock and all other movable property considered personal property subject to execution and sale.
 SEC. 11. Consolidation of competing lines forbidden. No consolidation without 60 days' notice. Majority of directors to be citizens of State.
 SEC. 12. Railroads subject to such regulations as may be prescribed by law.
 SEC. 13. No increase of stock unless 60 days' notice of same has been given.
 SEC. 14. * * * "Property and franchises of incorporated companies already organized, and subjecting them to the public necessity the same as of individuals." * * *
 SEC. 15. "The general assembly shall pass laws to correct abuses and prevent unjust discriminations and extortion in the rates of freight and passenger tariff on the different railroads of the State, and enforce such laws by necessary penalties to the extent, if necessary for that purpose, of forfeiture of their property and franchises."

ART. XIV.

- SEC. 1. Regarding money paid into State treasury by *Illinois Central Railroad*.
 SEC. 2. County, city, town, village, etc., aid to corporations forbidden in future (i. e., after 1870, the time of the adoption of this constitution)

INDIANA.

ART. XI.—Corporations.

- SEC. 13. Corporations other than banking shall not be created by special act but may be formed under general laws.
 SEC. 14. Individual liability of incorporators.

IOWA.

ART. VIII.—Corporations.

- SEC. 1. No corporation to be hereafter created by special law.
 SEC. 2. Property of corporations subject to taxation as that of individuals.
 SEC. 3. State not to be a stockholder.
 SEC. 12. Subject to the provisions of this article, the general assembly shall have power to amend or repeal all laws for the organization or creation of corporations. * * *

KANSAS.

ART. XII.—Corporations.

- SEC. 1. Special legislation prohibited, and all general laws may be amended or repealed.
 SEC. 2. Individual liabilities in case of corporations, * * * "but such individual liabilities shall not apply to railroad corporations, not corporations for religious or charitable purposes."

LOUISIANA.

ART. 262. "The general assembly shall not remit the forfeiture of the charter of any corporation now existing, nor renew, alter, or amend the same, nor pass any general or special law for the benefit of such corporation, except upon the condition that such corporation shall thereafter hold its charter subject to the provisions of this constitution."

ART. 265. No corporation to engage in business except such as directly authorized by charter "or incidental thereto," nor hold any real estate for a longer period than 10 years.

ART. 267. Stock neither to be decreased nor increased "except in pursuance of general laws," nor without the consent of persons holding the larger amount in value of the stock. * * *

ART. 271. Identical with Article XIV, section 21, Alabama, beginning with "Any association."

ART. 272. Identical with Article XIV, section 21, Alabama, up to "Any association."

ART. 274. Consolidation upon 60 days' notice, but company always to remain in jurisdiction of the State.

ART. 275. "General laws shall be enacted providing for the creation of private corporations, and shall therein provide fully for the adequate protection of the public and of the individual stockholder."

ART. 283. "A railroad, express, telephone, telegraph, steamboat, and other water craft, and sleeping car commission is hereby created;" composed of three members, elected by districts.

ART. 284. Powers of commission: Compel attendance of witnesses and production of books and papers; adopt, change, and make just rates and regulations; prevent discriminations; hear complaints; supervise matters of bridges, depots, switches, etc., etc.; adjust rates between branch and trunk lines.

ART. 285. Appeals from decisions of commission may be taken to Supreme Court.

ART. 286. Penalties provided.

MAINE.

ART. IV.—Part third. Legislative power.

SEC. 13. "The legislature shall, from time to time, provide as far as practicable, by general laws, for all matters generally appertaining to special or private legislation."

ART. IX.—General provisions.

Credit of State not to be loaned.

MARYLAND.

ART. 3.—Legislative department.

SEC. 48. Corporations may be formed under general laws; but shall not be created by special act, except for municipal purposes, and except in cases where no general laws exist; * * * a committee of three to be appointed by governor to draft general laws.

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MASSACHUSETTS.

Contains no constitutional provisions relating to railways.

MICHIGAN.

ART. XV.—*Corporations.*

SEC. 1. Corporations to be formed under general laws only.

SEC. 7. Individual liability of stockholders.

SEC. 10. No corporation, except for municipal purposes, or for the construction of railroads, plank roads, and canals, shall be created for a longer period than 30 years.

SEC. 12. Limitation for holding real estate ten years, "excluding such as is actually occupied by such corporation in the exercise of its franchise."

MINNESOTA.

ART. IX.—*Finances of the State, banks and banking.*

SEC. 14b. Limitation of municipal aid to railways to 10 per cent of assessed valuation.

SEC. 15. Adopted November 4, 1870. Limitation at 5 per cent of taxable property.

ART. X.—*Of corporations having no banking privileges.*

SEC. 2. None, except municipal corporations, to be formed under special acts.

ART. IV.

SEC. 33. Special legislation prohibited. Also the amendment of special laws. Latter may, however, be repealed.

SEC. 34. Provision made for general laws.

Amendment to sec. 19, Art. IX, of Apr. 15, 1858.

State loans to be given only to roads in whose aid Congress has given loans to State of Minnesota. Loans in form of State bonds, bearing 7 per cent interest, payable semi-annually in New York City, to an amount not exceeding \$5,000,000. Conditions of these loans prescribed at some length.

MISSISSIPPI.

ART. VI.

SEC. 87. Special legislation forbidden.

SEC. 88. General laws for the granting of charters to be passed.

ART. VII.—*Corporations.*

SEC. 178. Corporations to be formed under general laws only. Legislature has power to change or revoke any charter (now revocable or hereafter granted) "whenever, in its opinion, it may be for the public interest to do so: Provided, however, that no injustice shall be done to the stockholders." Charters not to be granted for more than 99 years. Companies holding charters for a longer period may surrender excess. Legislature may otherwise tax the "increased value of such property and franchises arising from such longer duration of their charters."

SEC. 179. Charters to be held subject to constitution.

SEC. 180. Future charters subject to constitution; all charters under which organization not effected within one year after adoption of the constitution to be void; also all charters under which work not begun within two years after granting.

SEC. 182. Power of taxation not to be surrendered or abridged by any contract.

ART. VI.

SEC. 183. Municipal aid forbidden.

SEC. 184. Identical with section 21, Article XIV, Alabama.

SEC. 185. Rolling stock considered personal property and subject to execution and sale.

SEC. 186. Provides for regulation of rates and fixing of penalties.

SEC. 188. Free passes to "members of legislature, State, district, county, or municipal officers, except railroad commissioners," forbidden.

SEC. 190. Property and franchises of corporations may be subjected to public use.

SEC. 193. Contracts waiving right of suit for damages void.

SEC. 194. Same as section 3, Article XI, Illinois.

SEC. 197. Lease, purchase, or operation of a railroad of this State by a foreign corporation forbidden.

SEC. 198. The legislature shall enact laws to prevent all trusts, combinations, contracts, and agreements inimical to the public welfare.

ART. XIV.—*General provisions.*

SEC. 258. State aid of corporations prohibited.

MISSOURI.

ART. IV.—*Legislative department.*

SEC. 47. Municipal aid to corporations prohibited.

SEC. 53. Special legislation forbidden.

ART. X.—*Revenue and taxation.*

SEC. 5. "All railroad corporations in this State or doing business therein shall be subjected to taxation for State, county, school, municipal, and other purposes, on the real and personal property owned or used by them, and on their gross earnings, their net earnings, franchises, and their capital stock.

SEC. 21. Payment of \$50 to State treasurer for first \$50,000 of stock, and \$5 for every \$10,000 additional, required before charter granted.

ART. XII.—*Corporations.*

SEC. 4. Right of eminent domain to apply to property and franchises of corporations.

SEC. 6. Same as section 3, Article XI, Illinois.

SEC. 7. Similar to section 192, Kentucky, and article 265, Louisiana.

ART. XII.

SEC. 12. Discrimination prohibited on long and short hauls.

SEC. 13, 14. Same as section 21, Article XIV, Alabama. Unjust discriminations also prohibited, and legislature to pass laws establishing reasonable maximum rates for freight and passengers.

SEC. 16. Rolling stock and all other movable property held subject to execution.

SEC. 17. Consolidation of competing or parallel lines forbidden; also lease, purchase, etc.; also officeholding in rival company.

SEC. 18. No corporation can become a foreign company by consolidation.

SEC. 21. Benefits of future legislation denied except on condition of acceptance of constitution.

SEC. 22. No officer of railroad to be directly or indirectly interested in furnishing supplies, etc., to company.

SEC. 24. Free passes forbidden to State, county, and municipal officers, etc.

MONTANA.

ART. XV.—*Corporations other than municipal.*

SEC. 1. Charters under which organization not yet completed void.

SEC. 3. Assembly has power to alter, revoke, or annul any charter of incorporation existing, or which may hereafter be granted, when, in its opinion, it may be injurious to citizens of State.

SEC. 4. Same as section 3, Article XI, Illinois and others.

SEC. 5. Railroad common carriers; legislature has power to control and regulate all rates, all roads, the right to build, operate, and intersect other roads.

SEC. 6. Same as section 17, Article XII, Missouri and others.

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SEC. 7. Same as section 3, Article XVII, Arkansas, and discrimination among persons forbidden.

SEC. 8. Constitution to be accepted before benefit of future legislation obtained.

SEC. 9. Right of eminent domain to apply to property and franchises.

SEC. 12. "No street or other railroad shall be constructed within any city or town without the consent of the local authorities having control of the street or highway proposed to be occupied by such street or other railroad."

SEC. 15. No corporation can become a foreign corporation by consolidation.

SEC. 16. Contracts waiving right to damages void.

SEC. 20. Formation of trusts by combination within or without the State forbidden. Legislature to enact appropriate legislation.

NEBRASKA.

ART. XI.—*Corporations—Railroad corporations.*

SEC. 2. Rolling stock and all other movable property subject to execution and sale.

SEC. 3. Identical with section 11, Article XI, Illinois, omitting last sentence.

SEC. 4. All roads public highways; legislature may establish reasonable maximum rates for passengers and freight; liability of companies never to be limited.

SEC. 6. Right of eminent domain to apply.

SEC. 7. Abuses to be regulated by law; penalties to the extent of forfeiture of property and franchise may be imposed.

NEVADA.

ART. VIII.—*Municipal and other corporations.*

SEC. 1. Special legislation forbidden.

SEC. 6. State credit not to be extended to corporations.

SEC. 10. "No county, city, town, or other municipal corporation shall become a stockholder in any joint stock company, corporation, or association whatever, or loan its credit in the aid of any such company, corporation, or association, except railroad corporations, companies, or associations."

NEW HAMPSHIRE.

No constitutional provisions relating to railways.

NEW JERSEY.

ART. IV.—*Legislative.*

SEC. 11. Special legislation for corporations forbidden.

NEW MEXICO.

The organic code contains no provisions relating to railways.

NEW YORK.

ART. III.

SEC. 18. Forbids legislature to enact any special law "Granting any corporation, association, or individual the right to lay down railroad tracks."

ART. VII.

SEC. 1. State credit withheld.

ART. VIII.

SEC. 1. "Corporations may be formed under general laws, but shall not be created by general act, except for municipal purposes; and in cases where, in the judgment of the legislature, the objects of the corporation can not be attained under general laws. All general laws and special acts passed pursuant to this section may be altered from time to time or repealed."

SEC. 10. County, cities, towns, and villages not to give money or loan credit.

ART. XIII.

SEC. 3. Granting or promising to grant, or accepting passes, franking privilege, or any discrimination in rates for the benefit of any public officer prohibited.

NORTH CAROLINA.

ART. V.—*Revenue and taxation.*

SEC. 4. State credit not to be given to railroads unless they are unfinished at the time of the adoption of the constitution, or such in which the State has a pecuniary interest, unless the question be submitted to the people and approved by them.

ART. VIII.—*Corporations other than municipal.*

SEC. 1. Corporations other than municipal to be organized under general laws. All such laws and special acts may be repealed or altered.

SEC. 2. Debts to be secured.

SEC. 3. Defines corporations.

NORTH DAKOTA.

ART. 2.—*Legislative department.*

SEC. 69. Special legislation in favor of railroads forbidden.

ART. 7.—*Corporations other than municipal.*

SEC. 133. Charters held subject to constitution.

SEC. 134. Property and franchises subject to right of eminent domain.

SEC. 137. No corporation to engage in business other than that directly authorized.

SEC. 139. Consent of local authorities concerned necessary.

SEC. 141. Consolidation—same as section 6, Article XV, Montana.

SEC. 142. { Same as section 5, Article XV, Montana.

SEC. 143. {

SEC. 146. Same as section 20, Article XV, Montana.

OHIO.

ART. XII.—*Corporations.*

SEC. 1. No special laws conferring corporate powers to be passed.

OREGON.

ART. IV.—*Legislative department.*

SEC. 23. Various kinds of special legislation prohibited, but corporations not mentioned.

ART. XI.—*Corporations and internal improvements.*

SEC. 2. Organization of corporations by special act forbidden. All laws may be changed or repealed, "but not so as to destroy or impair any vested corporate rights."

SEC. 6. State not to be stockholder in any company.

SEC. 7. Credit of State not to be loaned.

SEC. 10. New county debts limited to \$3,000.

PENNSYLVANIA.

ART. IX.—*Taxation and finance.*

SEC. 6. State credit not to be pledged nor State to become a stockholder.

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ART. XVI.—*Private corporations.*

- SEC. 2. All charters to be held subject to constitution.
- SEC. 3. Right of eminent domain applicable to property and franchises.
- SEC. 6. No corporation to engage in business other than expressly authorized and not to hold real estate except such as may be necessary for carrying on its business.

ART. XVIII.—*Railroads and canals.*

- SEC. 1. Identical with section 21, Article XIV, Alabama.
- SEC. 6. No officer of corporation to be interested in the contracts for supplies and material.
- SEC. 7. Preferences as to rates and facilities forbidden.
- SEC. 8. Free passes forbidden "to any person except officers or employees of the company."

RHODE ISLAND.

Amendment to Article IX.

- SEC. 1. General assembly to provide for the creation and control of corporations by general law; but no corporation to acquire the right of eminent domain or franchise except by special act.

SOUTH CAROLINA.

ART. XII.—*Corporations.*

- SEC. 1. Corporations to be framed under general laws.
- NOTE.—All acts pledging the credit of the State for the benefit of corporate body were repealed by special "ordinance" of March 15, 1868.

SOUTH DAKOTA.

ART. XVII.—*Corporations.*

- SEC. 1. Special legislation forbidden.
- SEC. 3. Charters held subject to constitution.
- SEC. 4. Right of eminent domain to extend to property and franchises.
- SEC. 7. No corporation to engage in business not specifically named.
- SEC. 9. Legislature has power to alter, revise, or annul any charter for public good "in such manner that no injustice shall be done to the incorporators. No law hereafter enacted shall create, renew, or extend the charter of more than one corporation."
- SEC. 13. "Rolling stock and all other movable property" subject to execution and sale.
- SEC. 14. Same as section 6, Article XV, Montana, except relating to consolidation of railroads only, and omitting clause referring to office holding.
- SECS. 15, 16. Same as section 21, Article XIV, Alabama, but referring to railroads only. Legislature given right to control rates of freight and passengers.
- SEC. 17. Same as section 7, Article XI, Nebraska.
- SEC. 20. Monopolies and trusts forbidden. Adopted as an amendment at election of 1896.

TENNESSEE.

ART. II.—*Legislative.*

- SEC. 33. "No bonds of the State shall be issued by any railroad company which at the time of its application for the same shall be in default in paying interest upon the State bonds previously loaned to it or that shall hereafter and before such application sell or absolutely dispose of any State bonds loaned to it for less than par."

ART. XI.—*Miscellaneous provisions.*

- SEC. 8. All special legislation forbidden.

TEXAS.*ART. III.—Legislative department.*

- SEC. 51. State aid to individuals and corporations forbidden.
 SEC. 52. County, city, town, etc., aid also prohibited.
 SEC. 54. State liens upon railroads can not be changed.
 SEC. 56. Special legislation forbidden.

ART. X.—Railroads.

- SECS. 1, 2. Same as section 21, Article XIV, Alabama, except applying to railroads only, and also giving legislative power to correct abuses, prevent discriminations, and fix penalties.
 SEC. 4. Rolling stock and other movable property subject to execution and sale.
 SEC. 5. Consolidation with or office holding in competing or parallel lines forbidden.
 SEC. 8. Benefit of future legislation withheld until constitution subscribed to.
 SEC. 9. No railroads hereafter constructed to pass within 3 miles of a county seat without passing through same, and establish a depot, "unless prevented by natural obstacles, such as streams, hills, or mountains," provided city (or town) grants right of way and land enough for depot purposes.

ART. XIV.—Public lands and land office.

- SEC. 3. No public lands to be granted to railroads, and never more than 16 sections per mile. And no land granted until 10 miles of road in operation.

UTAH.*ART. VI.—Legislative department.*

- SEC. 26. Special legislation forbidden.
 SEC. 31. Lending of State credit or that of counties and municipalities forbidden.

ART. XII.—Corporations.

- SEC. 1. Corporations to be formed under general laws, and all such laws may be changed or repealed.
 SEC. 2. Existing corporations to accept constitution.
 SEC. 3. Legislature shall not extend or validate any franchise.
 SEC. 10. Corporations limited to authorized objects.
 SEC. 12. All railroads common carriers, and to carry freight and passengers without discrimination.
 SEC. 13. Competing roads not to be consolidated.
 SEC. 14. Rolling stock, etc., considered personal property.
 SEC. 15. Legislature to prescribe maximum rates.
 SEC. 17. Employee of a corporation can not hold municipal office in the municipality which granted the franchise.
 SEC. 20. Trusts and combinations forbidden.

VIRGINIA.*ART. X.—Taxation and finance.*

- SEC. 12. State credit can not be granted.
 SEC. 14. State can not become a stockholder.
 SEC. 15. State can not become a party to internal improvements.

WASHINGTON.*ART. I.*

- SEC. 8. No law granting irrevocably any privilege, franchise, or immunity shall be passed by the legislature.
 SEC. 28. Special legislation forbidden.
 SEC. 39. "Public officers" forbidden to use passes, etc.

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ART. VII.

SEC. 5. State credit not to be loaned.

ART. XII.

SEC. 1. Creation of corporations by special laws forbidden and all such laws may be altered or repealed.

SEC. 2. Charters or franchises not to be extended or forfeiture remitted.

SEC. 9. State can not be a stockholder.

SEC. 10. Right of eminent domain to apply.

SEC. 13. Almost identical with section 21, Article XIV, Alabama.

SEC. 14. Pooling of earnings forbidden with any *common carrier*.

SEC. 15. Discrimination in rates forbidden.

SEC. 16. Consolidation of competing lines forbidden.

SEC. 17. Rolling stock, etc., personal property.

SEC. 18. Legislature to pass laws for regulation of fares and freights.

SEC. 20. Free passes to members of legislature and public officers forbidden.

SEC. 21. No discrimination against express companies.

SEC. 22. Trusts and monopolies forbidden.

WEST VIRGINIA.

ART. XI.—*Corporations.*

SEC. 1. Corporations to be organized under general laws.

SEC. 4. Identical with section 3, Article XI, Illinois.

SEC. 8. Rolling stock, etc., considered personal property.

SEC. 9. Railroads declared public highways. Legislature to make laws establishing reasonable maximum rates and the preventing of abuses and discriminations.

SEC. 10. Legislature to require railroads running within one-half mile of a town or village to establish a depot.

SEC. 11. Consolidation with parallel or competing lines forbidden.

SEC. 12. Right of eminent domain to apply to property and franchises of railroads.

NOTE.—About half a dozen other constitutions contain provisions of a similar nature. Usually 3 miles is the distance taken, and the county seat the point concerned. They are to pass through latter in one instance “if no natural obstacle intervenes.” (See sec. 9, *Art. X, Texas*.)

OKLAHOMA.

Organic act, section 6. * * * “This further provided that the legislature shall not authorize the issuing of any bond, scrip, or evidence of debt by the Territory, or any town, city, or county therein, for the construction of any railroad.”

NOTE.—The organic codes of New Mexico and Arizona contain no mention of railroads.

WISCONSIN.

ART. XI.—*Corporations.*

SEC. 1. Corporate powers not to be granted by special act, and all general laws changed or repealed at will of legislature.

ART. IV.

SEC. 31. Special legislation forbidden for granting corporate powers, except to cities.

ART. VIII.

SEC. 3. State credit withheld.

WYOMING.

ART. I.—*Declaration of rights.*

SEC. 30. Monopolies and perpetuities.—Perpetuities and monopolies are contrary to the genius of a free state, and shall not be allowed. Corporations being creatures of the State, endowed for the public good with a portion of its sovereign powers, must be subject to its control.

ART. III.—*Legislative department.*

SEC. 27. Special and local laws prohibited. The legislature shall not pass local or special laws in any of the following enumerated cases:

A long list of subjects is here enumerated, including "the right to lay down railroad tracks, or any special privilege, immunity, or franchise whatever, or amending existing charter for such purpose." In all other cases where a general law can be made applicable no special law shall be enacted.

SEC. 39. Political units prohibited from aiding railway construction, or loaning credit or otherwise contracting an indebtedness.

ART. X.—*Corporations.*

SEC. 1. Corporations organized under general law.

SEC. 2. All franchises subject to control of legislature.

SEC. 3. All previously granted special charters, not yet in actual operation, declared void.

SEC. 4. Laws, contracts, and agreements limiting liability, illegal.

SEC. 5. Full acceptance of constitution before business can be transacted.

SEC. 6. Corporations engage in only one line of business specified in charter.

SEC. 7. Agencies of transportation and communication declared to be common carriers.

SEC. 8. Combinations to prevent competition or influence prices prohibited.

SEC. 9. Right of eminent domain and public use to apply to corporate property. In addition the constitution of Wyoming contains nine sections specially devoted to railways, as follows:

SEC. 1. Grants power to construct, operate, intersect, connect, etc., without discrimination.

SEC. 2. Railways and telegraphs declared common carriers, "and as such must be made by law to extend the same equality and impartiality to all who use them, excepting employees and their families and ministers of the Gospel, whether individuals or corporations."

SEC. 3. Shall make annual report to auditor of the State.

SEC. 4. May exercise right of eminent domain, but legislature reserves power to subject franchise and property to public use.

SEC. 5. All political units enjoined from aiding by donations, loans, credit, etc.

SEC. 6. Constitution must be accepted before business can be done.

SEC. 8. Foreign corporations must appoint legal representative in State.

SEC. 9. Depots to be established when railways run within four miles of a town. "No railroad company shall deviate from the most direct practicable line in constructing a railroad for the purpose of avoiding the provisions of this section."

TAXATION OF TRANSPORTATION COMPANIES.

A Report Prepared under the Direction of the Industrial Commission, by
ROSWELL C. McCREA.

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CHAPTER I.

DEVELOPMENT OF THE TAXATION OF TRANSPORTATION COMPANIES.

In its report, issued in 1880, the railway tax committee¹ asserted that "there is no method of taxation possible to be devised which is not at this time applied to railroad property in some part of this country." When this statement was made the States were passing through a middle experimental stage in their taxation of transportation companies; and though twenty years have since elapsed, another period of more definite experiment has only just begun. A chaos of tax systems almost, if not quite, equal to that which confronted the committee still prevails. But confused and confusing as railway tax laws have been and still are, both legislation and judicial decision give evidence of progress toward a better state of things. Even prior to 1879, the year of the activity of the committee, clearer comprehension of tax problems to be solved had already set on foot a movement for reform; and the past two decades have witnessed changes still more notably in the same direction. It is the general trend of these changes which this chapter attempts to describe.

In the developing of its transportation facilities the United States has acted as a group of communities at widely different stages of industrial development. After the East had in a measure settled the question of an adequate transporta-

¹ The report of this committee was entitled *Taxation of Railroads and Railroad Securities*. The committee, the members of which were C. F. Adams, Jr., W. B. Williams, and J. H. Oberly, was appointed at a convention of State railroad commissioners to report methods of taxation respecting railroads and railroad securities.

tion system the railway growth of the West was still in its incipient stage. Correspondingly, the East after continuous experiment was the first to devise definite methods of railroad taxation, some mistakes in the developing of which the States of the West were subsequently enabled to avoid. But in the main the general course of the development has been the same in both sections, and the same conservative attitude toward innovation is to be noted throughout.

In tracing the course of this development it will be convenient to group the successive steps within two periods. To be sure, it will not be possible to assign any definite chronological limits to these separate stages; but the distinctive features in the process of change are so prominent as to group themselves broadly within the two periods which are here adopted.

The first of these stages was characterized by the policy of subsidy and exemption from taxation and by the introduction of tax methods which were made to operate very leniently toward the railroads. This period may be said to have ended with the close of the first decade after the civil war. The second or present stage has been characterized chiefly by the adoption and extension of definite methods of railway taxation, in the main distinct from the general-property tax as ordinarily administered in the taxation of individuals.

A. FIRST PERIOD—PUBLIC AID AND TAX EXEMPTIONS.

1. *State construction of railroads.*—One reason for the slight progress which has been made in the field of railway taxation is to be found in the comparatively recent origin of the railway systems themselves. The building of railroads in the United States had scarcely begun before 1830, and, from the financial standpoint, it was not until after the period of the civil war that the ultimate success of the railroad experiment was assured. In 1830 population was sparse and the capital of the country was limited. At that time the States themselves were quite widely engaged in works of internal improvement, but with the introduction of railways the States appear to have been averse to engaging directly in this new form of enterprise, with the result that the construction of railway lines was left chiefly to individual initiative.¹

2. *State and local aid.*—Capital, however, in addition to the mere fact of its scarcity, was hard to secure for investment in an enterprise which gave no prospect of substantial or immediate returns. Under these circumstances, it was but natural that the various State legislatures should be impressed rather with the expediency of stimulating railway investments by special auxiliary enactments than of restricting their extension by the imposition of taxes. Accordingly, with a view toward encouraging the growth of a service which was seen to be of vital

¹ There are some instances of independent action on the part of States in the construction and ownership of railway lines, as well as cases where State policy looked definitely toward State ownership; but such instances are both relatively rare in number and almost entirely limited to the early period of railway construction. For instance, in Pennsylvania the canal commission was authorized in 1827 to estimate the expense of constructing a railroad from Harrisburg to Chambersburg, and in the following year the same commission was empowered to contract for the construction of a railroad from Philadelphia to Columbia. For a number of years after various appropriations for purposes of railroad construction are to be found in the State's general appropriation bills.

In Georgia during the thirties the State, through the agency of a board of State commissioners, constructed the Western and Atlantic Railroad. This road was operated by the State until 1870. It has since been operated under lease by private parties. The rental for 1900 amounted to \$420,012.

During the thirties Michigan projected an elaborate plan of railway construction under the direction of a board of internal improvement. This plan provided for the building of a northern, a central, and a southern road. The northern project was abandoned in 1841 and a wagon road constructed instead; but large sums were expended on the central and southern lines up to 1846, when they were sold to private parties and incorporated, respectively, as the Michigan Central and Michigan Southern lines. In both cases the State reserved the right to repurchase after January 1, 1867.

In Massachusetts, to illustrate further, the State took an active interest, almost akin to ownership, in the construction of the Troy and Greenfield Railroad and Hoosac Tunnel. In 1872 the legislature provided that the interest of the State in the Hoosac Tunnel should never be sold; and since that time large sums have been devoted to the improvement of that line (e.g., in 1883, \$264,652; in 1884, \$66,000).

In a number of instances early State policy in incorporating railroad companies looked toward the possibility of subsequent State ownership. For instance, during 1831 and 1833 New York, in granting the charters of the New York and Albany, the New York and Erie, the Utica and Schenectady, and other roads, reserved the right of purchase, to take effect within a period of five years, beginning ten years after incorporation. In Massachusetts charters of the early thirties the right of purchase was reserved for ten years (e.g., in the charters of the Franklin, the Boston, Providence and Taunton, the Boston and Lowell, and other roads). Similar provisions are to be found a few years later in charters granted by Kentucky and Michigan. In the latter State at least a single instance of actual purchase is to be found, namely, in 1841, when the State purchased the River Raisin and Lake Erie Railroad and joined it to the Southern State road.

A recent instance of contemplated State ownership is furnished by Arkansas where, in 1897, a State board was created to locate, establish, and operate State railroads and telegraphs.

public importance, special aids,¹ partial or even complete exemptions from taxation, and lenient tax methods were frequently made the subjects of general statute and special charter provisions.

By 1860 the practice of granting aid to railways was widely prevalent. The outbreak of the civil war put a temporary check to the practice; but in 1865, particularly in the South,² it became even more marked than before the war. By 1875, however, the practice began to fall into disfavor. In 1874, for instance, the legislature of Georgia provided that no more State aid should be given except where a road had a vested right to the same. In 1875 Alabama repealed her railroad-aid act of 1865, and Illinois in 1877 legislated that counties could not be held liable after 1880 for any aid which they had promised railroads.

In a few instances, however, the practice has persisted up to quite recent years. Such has been the case in Kansas, where, as late as 1887, the legislature empowered the counties, cities, and townships of the State to aid railways by granting them subsidies and subscribing to their stock; in Maine, as late as 1891 and 1893, when Washington County was authorized to guarantee, for thirty years, 5 per cent interest on \$650,000 bonded debt of the Maine Shore Line Railroad, as well

¹ Aid granted to railroads was of different types. The following classification, accompanied by brief illustrations, will serve to differentiate those types:

State aid.

(1) By general enactment.

(a) Grants of land.

e. g., Iowa, 1853. Railroads were empowered to occupy any State lands without the payment of damages.

(b) Grants and loans of money and security.

e. g., Alabama, 1868. The State agreed to indorse the first-mortgage bonds of railways to the extent of \$12,000 per mile for each 20 miles of road, as completed, and \$16,000 per mile for each 5 miles as completed, beyond the first 20 miles.

(2) By special enactment.

(a) Subscriptions to stock.

e. g., Massachusetts, 1836. State treasurer authorized to subscribe to 10,000 shares of stock in the Western Railroad Company.

(b) Grants of land.

e. g., Minnesota, 1862 and 1863. Numerous grants to the Minnesota and Pacific, the Root River and Southern Minnesota, the St. Paul and Pacific, and other railroad companies.

(c) Grants and loans of money and security.

e. g., Maine, 1836. The State agreed to pay the necessary incidental expenses of surveying the Belfast and Quebec Railroad; expenses not to exceed \$5,000, to be refunded the State three years after completion of road.

Massachusetts, 1837. Five million dollars loaned to the Eastern Railroad Company.

California, 1863. The State agreed to pay the Central Pacific Railroad Company, on completion of 20 miles of line, \$10,000 for each mile constructed; only \$100,000 to be paid during the first two fiscal years.

Local aid (authorized by State enactment):

(1) By general enactment.

(a) Subscriptions to stock.

e. g., Illinois, 1843. Counties and municipalities authorized to subscribe to railway stock.

(b) Grants and loans of money and security.

e. g., California, 1870. Counties authorized to issue railroad-aid bonds, not to exceed in aggregate amount 5 per cent of the taxable value of property in those counties; aid to be granted any companies after 5 miles of road have been constructed.

(2) By special enactment.

(a) Subscriptions to stock.

e. g., Kansas, 1855. Cities and counties authorized to subscribe to shares of stock in the Kansas Central Railroad Company.

(b) Grants and loans of money and security.

e. g., Alabama, 1869. City of Mobile authorized to issue bonds to aid the Mobile and Great Northern Railroad Company.
Michigan, 1864. County of Bay authorized to issue bonds to aid in the construction of a railroad from Bay City to East Saginaw.

² For instance, in Arkansas we find the following in 1867: The State promises aid to any railroad at the rate of \$1,000 per mile of line constructed up to the maximum limit of 100 miles, the State to be paid interest on the same and to be secured by a lien on the railroad; and again in 1868 authorization of aid was made to the amount of \$15,000 per mile to such roads as had not received grants of United States lands, and of \$10,000 per mile to such as had secured such grants, upon condition (1) that the total aid should not apply to more than 850 miles of road; (2) that a tax equal to the amount of interest on the State-aid bonds should be levied against the railroads until the bonds should be canceled, and (3) that five years after the completion of any road receiving such aid 2 per cent additional should be levied upon the whole amount of State aid.

To illustrate further, the legislature of Georgia in 1868 authorized the indorsement of the bonds of the Macon and Augusta Railroad Company to the amount of \$10,000 per mile of road, as well as of those of the Georgia Air Line to the amount of \$12,000 per mile of road, with an aggregate maximum of \$500,000, besides granting aid to numerous other lines.

In the North, too, the revival of the aid-granting policy is exemplified in numerous land grants, such as those in Michigan and Minnesota from 1865 to 1870, and in loans of funds, such as that by Massachusetts of \$3,000,000 to the Boston, Hartford and Erie Railroad Company, of \$2,000,000 to the Boston and Albany, and of \$300,000 to the Lee and New Haven Company in 1868.

as to subscribe to the stock of the Washington County Railroad Company, and in Iowa, where local aid has been authorized as late as 1894.¹

It would be impracticable to estimate the relative amounts of State and local aid which have been granted to the railroads of the country. It is a notorious fact that immense sums have been so granted by both classes of authorities. But surface indications point to the fact that aid from local authorities has exceeded in amount that from the State governments. A single typical instance will serve to give a notion of the extent to which possibilities of securing aid were embraced by the railways. In Illinois, as reported by the State auditor of public accounts in 1872, over \$1,900,000 had been granted under the act of 1865, and over \$1,400,000 under the act of 1869.

3. **Exemption of railroads from taxation.**—The practice of granting exemption from taxation never became so prevalent as that of direct aid. It reached its height probably during the decade or two subsequent to the civil war, when, generally in the form of specific grant, it came to be used sometimes as a supplement to, and in some cases as a substitute for, the policy of more direct aid. During the past two decades the practice has persisted where local conditions have warranted its continuance; but of recent years the tendency has been so far in the direction of its entire abolition that only a few survivals are any longer to be found. In New Hampshire, for instance, railroad lines are still exempted from taxation for a period of ten years after their construction. In New Mexico a similar provision is in force, except that the exemption is for a period of but six years. Another isolated example is to be found in Louisiana, where the Constitution of 1898 provided for the ten-years exemption of all railroad lines constructed in that State before 1904.

The whole tendency among the States of recent years has been to wipe out the last vestiges of railroad exemption privileges. Only a few instances of this tendency need be cited. In North Carolina, prior to 1891, three of the most important railways in the State were exempted from taxation. In that year, however, as the result of persistent effort on the part of State authorities, these exemptions were surrendered. In Arkansas the Cairo and Fulton Railroad (now part of the St. Louis, Iron Mountain and Southern) was exempt from taxation under its charter until it should yield a net profit of 10 per cent on its investment. The realization of this financial condition the railroad management was careful to avoid, so that the term of the exemption was indefinitely extended. A few years ago, however, the company reorganized. The State was not slow to realize its opportunity, and after a suit at law the company lost its exemption.

In Michigan, to illustrate further, the legislature of 1891 passed a law promising ten years exemption from taxation to all railway lines which should be constructed in that State north of the forty-fourth parallel of latitude. In 1897 the legislature repealed this law, and the State authorities proceeded to levy a tax on all of those roads which had already been built in that section of the State. The companies affected contested this action in the courts, but the procedure of the State was sustained on the ground that the exemption was a mere gratuity repealable at will. This doctrine had already been laid down in the courts of the United States, where it was held that a State legislative act, exempting the property of railroads from taxation, is not, when a mere gratuity on the part of a State, a contract to continue the exemption.² In Michigan, too, those railroads which had formerly been taxed under special charter privileges were, by legislative enactment, in 1891 brought under the general railroad tax laws, though the provisions of this act were not carried into effect until 1898.

The courts of the States and of the United States have been one in their endeavors to bring all railroads under the provisions of general railroad tax laws. Exemptions from taxation constituting a contract on the part of a State not to tax, are held never to arise by implication, and are construed narrowly in favor of the State.³ It has been laid down, moreover, that immunity from taxation is not transferable, with the result that the reorganization of a railroad company or the sale of a railroad property effects the wiping out of an exemption.⁴ Furthermore, consolidation of lines, except where express provision has been made to the contrary, results in the loss of exemption.⁴

¹ Arkansas, as late as 1897, granted lands to the Mississippi, Hamburg and Western Railroad and the Springfield, Little Rock and Gulf Railroad.

² See *Tucker v. Ferguson* (22 Wall., 527) and *West Wisconsin Railroad v. Supervisors* (93 U. S., 586).

³ *Railroad Co. v. Commissioners* (103 U. S., 1). For full list of cases, see Taylor, *The Law of Stock Corporations*, sec. 499 and note.

⁴ *Maine Central R. R. Co. v. Maine* (96 U. S., 499). For full list of cases, see Pierce, *The Law of Railroads*, pp. 486-7.

With State policy and legal tendency, therefore, not only opposed to the extension of exemption, but even operating toward its complete abolition, the practice has come to be of but slight significance.

4. Low taxation of railroads.—The practice of leniently taxing railroads was an important one until the close of the civil war period. It originated in the same conditions which gave rise to those two means of stimulating internal improvement which have just been outlined. Instances of the practice are too numerous to mention; but it may be said in passing that they generally took the form of taxes at a low rate (upon the bases of earnings, capital stock, and transportation property), in effect amounting to partial exemptions from taxation. A hasty survey of a few typical developments of the tendency to tax less and less leniently as time went on will serve to bring the early policy into clearer relief.

The early history of railway taxation in Georgia reveals a variety of methods applied at different times to various companies. Prior to 1850 exemption from taxes was the rule. At that time the Memphis Branch Railroad, the Central Railroad, and the Georgia Railroad (which will serve as types) were required by the State to pay taxes, respectively, of 3½ cents on each \$100 of capital stock paid in, 1½ per cent on net income, and 1½ per cent on net income in addition to 3½ cents on each \$100 increase of capital stock. In 1854 all railroads except those exempted by their charters, were required by legislative enactment to pay annual taxes on their capital stock and assets. In 1858 a tax of 1½ per cent on net income was added to the tax on capital stock, besides, in 1863, a graduated tax ranging from 5 per cent to 25 per cent upon all net income in excess of 8 per cent on the capital stock. In 1866 the rate of the tax on capital stock was fixed at one-half of 1 per cent. In 1868 certain roads were exempted from the payment of this tax; but all were still required to pay the tax on net earnings. In 1874 a tax on property values was provided for in addition to the net earnings tax, and in 1888 a definite property tax on the lines of the present day method was adopted.

In New Jersey, likewise, the early railroad taxes were levied on a variety of principles in accord with special charter provisions.¹ Justice Parker, in the case of *State Board of Assessors v. Central Railroad Company*,² outlines with clearness the course of railroad taxation in New Jersey:

"In the infancy of this class of corporations, when struggling for existence, the amount of tax they were required to pay into the State treasury was small. The State favored them by limiting the annual tax to be paid by such corporations to the one-half of 1 per cent on the cost of their respective roads. This tax was for State purposes, and they were not assessed for local taxes. The wise and liberal policy adopted by the State was founded in part on the fact that the enterprises in which such companies were engaged were at that time of doubtful success, and in part on the belief that if successful they would contribute vastly to the public good. As time progressed, these corporations extended their business operations and acquired additional property, often of great value, until in some sections of the State, especially in the cities, the exemptions from local taxation became so great as to encumber the property of citizens liable to be taxed with a heavy burden. To prevent injustice arising from the inequality of taxation, and to equalize as far as possible the public burdens, the legislature, on the 2d day of April, 1873, passed an act the avowed object of which was to establish just rules for the taxation of railroad property. This act made a radical change in the system. * * * The act of 1876, providing for State taxes on railroads, was passed after the adoption of the constitutional amendment. This act is almost identical with the act of 1873. The chief object of the act of 1876 seems to have been to make the system of railroad taxation conform to the constitutional amendment that took effect in 1875, which prescribed that the assessment should be on true value instead of cost. Where the acts of 1873 and 1876 did not conflict, the former stood, and under those two acts, both the State and local taxes on railroad property in this State were assessed and collected up to the enactment of the law of 1884."

The act of 1884 established the present system of New Jersey.

In Wisconsin the act of 1854 provided for a uniform tax of 1 per cent on the gross earnings of all railroads. In 1860 all railroad property requisite to purposes of operation was declared exempt from taxation. In 1862 the license tax on gross earnings was raised from 1 to 3 per cent. In 1874 it was raised to 4 per cent, where it remained until 1876, when a graduated tax was provided for upon lines which have been followed in modeling the present system.

¹ e. g., The charter of the Somerville and Eastern Railroad (1854) provided for a tax of one-half of 1 per cent on the cost of the road; that of the Northern Railroad Company (1864), for the payment of the sum of 4 cents for each passenger, and of 8 cents for each ton of merchandise carried across the State.

² 19 Vroom, 294.

B. SECOND PERIOD.—INCREASING AND MORE UNIFORM TAXATION.

This stage in the development of railroad tax systems is characterized chiefly by the decadence of the policies of subsidy and exemption from taxation, and by the application of general regulations to the taxation of all railways upon lines increasingly stringent and uniform. As has already been intimated, early railroad tax methods were in many instances made the subjects of special charter provisions. But in probably the majority of cases, the States recurred, very naturally, to methods already employed in the taxation of individuals, and taxed railroads under the provisions of the general property tax.

With but slight exception (as in the case of Pennsylvania,¹ which from the outset avoided the general property tax in this respect), the early practice of the States was the assessment of all real and personal property by local officials, in the same manner as with the similar property of individuals. The adoption of this plan was not altogether unwarranted by the conditions of the time. Up to 1850, the corporations of the country were nearly all of a purely local character. At that time none of the great trunk lines had been formed. But changed conditions soon began to appear. In 1851, for instance, various lines were brought together to form the New York Central Railroad; and in the few years following, the Baltimore and Ohio, Pennsylvania, and Erie lines were formed. As the result of changed conditions brought about by consolidations such as these, new tax requirements arose. Inadequate as had been the general property tax under local authorities, even under earlier conditions, it was now very soon shown to be entirely ill-adapted to this new office. Utter lack of uniformity in the operation of the system resulting from its local administration, facility of evasion, and failure of levies to measure even roughly the taxpaying ability of the different companies, among other difficulties, necessitated from time to time the adoption of modifications and substitutions, which have at length resulted in present systems.

In the course of this process, certain changes of quite general prevalence among the States have been effected. In the first place, there has been widely evidenced a tendency to tax transportation companies upon a different basis, or, to say the least, in a different manner from that which has been followed in the taxation of individuals. Thirty years ago the local general property tax was the main method applied to railroad taxation. Twenty years ago changes had already been so far effected that railroads were taxed on their property upon the basis of varied local assessments in less than one-fourth of the States. And more recently the application of the early method has been so far abridged that it is now to be found in its original form in but four States and one Territory. These which still cling to the primitive method are Louisiana, New Mexico, Oregon, Rhode Island, and Texas, and in the case of Texas there is a supplementary tax based on a different principle.

There is still prevalent in many sections of the country, however, an attitude favorable to the taxation of individuals and of corporations upon the same principle and in the same manner. Such, for instance, is the notion which pervaded the deliberations of the extra session of the Michigan legislature in 1898, convened to consider the subject of railroad taxation. Such, likewise, is the express requirement in a number of State constitutions. But the preponderance of practice is in the other direction; even in the cases of those constitutional requirements which have just been mentioned their practical force has been, in large measure, destroyed by the decisions of the Federal Supreme Court in a series of cases which hold that State constitutional provisions declaring that a certain large class of persons and corporations shall be taxed by general laws, uniform as to the class upon which they operate, allow a rule for railroads different from that which applies in the taxation of individuals.²

By way of explanation, however, it must be stated that in the majority of those cases where changes have been effected, the property tax has not been abandoned, but modified. There has been embodied in this growth simply an attempt to adapt the property tax to the most obvious requirements of a system of railroad taxation. The result of this process of adaptation has been the establishment of methods for railroad taxation which differ essentially both in their operation and in their administration from those employed in the taxation of individuals, and even of other corporations; railroad property is made a special class for purposes of taxation in that it is subject to assessment by State, not local, authorities.

¹ Pennsylvania, at first, like many other States, employed special railway taxes. For instance, in the charter of the Pennsylvania Railroad Company, incorporated in 1846, a tax of 5 mills per ton-mile upon all merchandise transported, except the ordinary baggage of passengers, was provided for.

² See State Railroad Tax Cases (92 U. S., 575).

The New Jersey tax commission of 1897, in its report, very well points out the distinct character of the two systems in a statement which is generally applicable:

"It will be readily seen that these two systems, thus described and contrasted, are not coordinate; there is no tribunal in the State clothed with powers in which the values of the one class can be contrasted with the values of the other; they run in parallel lines, so to speak, being two separate, independent systems."¹

In fact, the incorporation of the feature of assessing the value of the railroad franchises, in addition to that of visible property, in the systems of many of the States, has so far obscured, or at least modified, the workings of the original property tax as to effect by existing methods a substantial divorce from the methods applied in the taxation of individuals.

As an offshoot of this tendency toward railway tax systems, distinct from those employed in the taxation of individuals, has come a process of change in the direction of a growing degree of centralization in railroad tax administrative machinery. With the widening scope of railway consolidation effective local administration of railway taxation has come more and more to be a matter of practical impossibility. Experience has shown that the problem is by so much further toward solution as the progressive steps toward the formulation of a tax system tend to broaden the field of the application of that system; legislative practice has of necessity followed these lines.

In the legislation of many of the States one of the accompaniments of the centralizing tendency which is becoming more and more noticeable is the practice of authorizing certain State officials to examine the books and papers of transportation companies for information in the making of assessments. There seems to be a growing desire to reach by taxation every company's full earning capacity, and the adoption and extension of this device of examining railroad accounts is an attempt toward the attainment of that end. Whether its workings are effectual as at present applied is questionable. The commissioner of railroads of Michigan, for instance, asserts that "that provision of the statute which gives the commissioner the right to examine books and papers is a humbug. It takes six months to examine a little broken bank in Lansing. How long would it take to examine the affairs of a great railroad?"² But aside from any consideration of the inefficient character of the regulation, the fact of its increasing prevalence is evidenced in State legislation. The growing advocacy of a uniform system of railway accounting deserves to be noted as tending in the same direction. Possibilities of railroad regulation, beyond the mere matter of taxation, are involved in these plans.

C. SPECIAL LINES OF DEVELOPMENT.

We must now consider a little more closely certain special features of the changes which have been brought about in the formulation of distinct systems for the taxation of transportation companies, namely, those changes which, developing from cruder methods, have resulted in transportation taxes upon the bases of property, capitalization, and business receipts, the latter two, broadly speaking, characterizing the States east of the Mississippi and north of the Ohio, and the first the remaining sections of the country. There are differences of opinion as to the relative advantages of the different methods. Thus, some writers and public men, approaching the question from the standpoint of justice in tax distribution among the various companies, look upon earnings taxes as the most desirable; others, impressed with the difficulties which appear to lie in the way of successfully administering taxes on earnings, favor taxes based on capitalization, and still others, who think that corporations ought to be taxed upon the same basis as individuals, favor the property tax. These differences of opinion will come out from time to time in what follows.

1. Taxes on property modified.—In the majority of the States, as we have already indicated, departures from early tax methods took the form of a modification of the original property tax as employed in the taxation of individuals. Systems based on cash valuation of property or of property and franchise by State officials came into use. In 1880 the general property tax, although lying at the bottom of the systems employed in most of the States, was, in its primitive form of local assessment, the exception rather than the rule, and during the two decades which have since elapsed the system of cash valuation by State boards or officials has made still further inroads into those States where the local property tax was formerly in vogue. Such, for instance, has been the case in Arkansas, in Iowa, and in other States where the demand for greater uniformity in administration has necessitated this change.

To be sure, the origin of this method in the general property tax and its subsequent development along the lines of that system do not warrant the expectation

¹ Report of the New Jersey tax commission of 1897, p. 10.

² Supplement to the Michigan Senate Journal, extra session of 1898, p. 11.

of close approach toward correctness of principle in its formulation or of high degree of efficiency in the details of its operation. It is not surprising, when we consider the rapid growth of the country's external and internal traffic, that tax legislation has failed to adapt itself completely to the new requirements which have arisen because of this speedy growth. American legislative activity, particularly in the field of taxation, has always been conservative, and it is but a natural consequence of the conservative tendency to regard the tax on property values as the "measure of justice and equality" that the old principle has been embodied in the railway tax systems of most of the States.

The system of railroad taxation based on cash valuation of property or of property and franchise is rather complex in its administration. As regards details, its operations are not identical in any two of the States, but its main features are everywhere the same.¹

In about a third of the States the process of departure from early methods took the form of a series of substitutions for, rather than modifications of, the general property tax.

2. Taxes on capitalization.—In a number of States systems based on the various forms of capitalization were adopted. Prior to 1880 considerable progress had already been made in this direction.² In Connecticut, for instance, a tax based on valuation of corporate capital and floating and funded indebtedness came to be employed; in Maine, one based on market valuation of capital stock was adopted, and in New York, one providing railroad taxation in common with corporations generally, upon the basis of capital stock according to dividends, was established. Since 1880, as regards railroad taxation, but little advance has been made in the introduction of these methods into new States. Their most significant extension has been in the cases of the various other classes of transportation companies; but these will be mentioned later.

One of the most serious obstacles to which taxes based on capitalization have been exposed in the past has been the restriction which has been put upon the taxation of corporate bonded debt by decisions of the United States Supreme Court. In 1872 that body decided, in effect, that a State tax on that portion of a company's bonded debt which is held by nonresidents of that State is unconstitutional.³ It is a well-known fact that the bonded capitalization of the railroads of the country is nearly equal in amount to their capital stock, and that, therefore, a tax which rests in its immediate incidence merely upon the capital stock of a railway corporation, reaches only a portion of the real investment. To this fact may probably be traced the origin of an influence which has acted as a deterrent to the wider adoption of taxes based on capitalization.

In a comparatively recent Oregon case, however, the Supreme Court arrived at the decision that a tax levied within a State upon a foreign held mortgage, which is secured by real estate situated within that State, is constitutional.⁴ Should this doctrine be held to apply to corporate forms of mortgage indebtedness, a noteworthy change in the status of the tax on corporate capitalization would be effected. Such, at any rate, has been taken to be the implication of the decision by the committee of the New York legislature of 1899, which drafted a bill providing for the taxation of debts and obligations secured by mortgage of real estate situated within the State.⁵

3. Taxes on receipts.—Another method of railroad taxation which was formulated in the place of the general property tax, was that of the tax on business receipts. Prior to 1880 taxes based on this principle had already been established in a number of States. Thus, Michigan, Minnesota, and Wisconsin had graduated gross receipts taxes.⁶ In Pennsylvania, too, a tax on gross receipts, in addition to the earlier general corporation tax on capital stock, was established; and

¹ For outline of this method, see p. 14.

² Numerous precedents had already been set in the taxation of corporations other than railroads. For instance, Georgia, in 1805, and Massachusetts, in 1812, passed acts imposing taxes on the capital stock of banks. A number of States, too, had already applied this method in the early taxation of railroads. Such was the case in Kentucky, where, for instance, the Licking and Lexington, the Louisville and Frankfort, and other railroads incorporated in 1847 and thereabouts were required by charter provision to pay taxes based on their capital stock. Such also was the case in Georgia, as we have already seen, as well as in Massachusetts, Maine, Michigan, and other States, where special provision was made with a view toward dealing leniently with roads which were in a struggling condition.

³ Case of State tax on foreign held bonds (15 Wall., 300).

⁴ Savings Society v. Multnomah County (169 U.S., 421).

⁵ Report of joint committee on taxation of the New York legislature of 1899, p. 12.

⁶ Here again precedents had been set in the taxation of corporations other than railroads. Such were the early taxes on the premiums of insurance companies (generally gross premiums or gross receipts); e.g., the New York tax of 1829, of 10 per cent on the premiums of foreign fire insurance companies, and the similar taxes of 1825 in Vermont, of 1832 in Massachusetts, of 1839 in Maryland and of subsequent years in other States. From 1840 to 1880, gross receipts taxes on railways were employed in a number of States, but were subsequently abandoned. Such were the Alabama tax of 1865 and the Iowa taxes of 1868 and 1870.

in Delaware and Virginia, net earnings taxes were adopted to supplement the existing taxes of those States. Since 1880 the gross receipts tax has been still further extended. For example, in 1881 Maine abandoned the tax on capital for one based on gross receipts; in the same year New York supplemented its existing system by a gross receipts tax; and in 1882 Vermont, like Maine, provided for a tax on gross receipts. But in Vermont, as the result of constitutional exigencies, this tax has since been made alternative with one based on property valuation. The former method, however, still prevails in practice. Since 1880 several other States, following the example set by Pennsylvania and New York, have adopted gross receipts taxes supplementary to previously existing systems.

But those cases in which taxes on receipts or earnings have been openly introduced into State tax systems are not the only ones in which these methods are applied. In States where the property valuation prevails the State boards whose duty it is to determine valuations very often have considerable discretionary power. The tax laws which apply in these cases frequently provide that the assessment boards shall value railroad property with a due regard to its earning capacity. In such instances, the possibility of arriving at a valuation which will bear an approximately constant relation to earning capacity, though only infrequently realized, still exists. And still further, in those States where the franchise is valued in addition to property, both earnings and capital are often considered in arriving at a valuation. The application and extension of methods such as these are to be regarded as at least an indication of a drift of sentiment toward tax methods based on railway earning capacity. That clause in the constitution of North Dakota which explicitly recognizes the tax on gross receipts as one suited to railway taxation must also be regarded as indicative of possibilities in this connection.

The stand which has been taken by the Supreme Court of the United States in the matter of the taxation of receipts from interstate traffic, however, has probably placed a serious impediment in the way of a much wider extension of the railway gross receipts tax than at present exists. In a series of litigations, the Supreme Court held that a State tax on gross receipts resulting from interstate traffic, except when levied as a franchise tax, is an interference with interstate commerce, and is therefore unconstitutional.¹

Owing largely to the influence of these decisions, as well as to causes of a local nature, there appears to have set in within the past five years a tendency away from the gross receipts tax in two States which have in the past been its main strongholds. In Wisconsin, and to a greater degree in Michigan, the existing systems have been subject to opposition.

In the case of Wisconsin, the feeling in the matter is well voiced in the report of the Wisconsin tax commission of 1898. They say:

"Most of the forms of tangible property are already taxed in full proportion to their value. In the case of banks, manufacturing, and trading corporations, corporate property appears to be as highly taxed as that of private individuals; but we do not think that this is true of any class of corporations taxed on the basis of earnings or on the mileage basis."²

There is at least a single reason why taxes on earnings are apt to be at a relatively lower rate as measured by property than direct property taxes. Under the general property tax, as it is commonly administered, assessed valuations are generally only fractions (varying often from one-half to three-fourths) of the true value of the properties subject to assessment. Upon the surface of things, therefore, the rate of tax on property appears relatively higher than it really is.

In Michigan the agitation against the existing tax on gross receipts has been very spirited.³ In 1897, and again in 1898, the railroad commissioner of the State in his reports arraigned the State system as unjust and ineffective; he recommended in its stead the adoption of a tax based on property valuation. The governor of the State and other prominent men have been untiring in their efforts to bring about such a change. As a result during the legislative session of 1897, the "Atkinson bill" was introduced. It failed to pass at that session, and was made the issue for a special session. After various experiences it was passed by the legislature of 1899. This bill, which was largely modeled after the Indiana law, provided for a railway-tax system based on cash valuation of property and franchise, upon general lines similar to those which characterize that system wherever it prevails. The law, however, was very short lived; for not long afterward the supreme court of the State in two test cases⁴ declared it unconstitutional.

¹ Compare *Fargo v. Michigan* (121 U. S., 230), and *Philadelphia and Southern Steamship Company* (122 U. S., 326), with *Maine v. Grand Trunk Railway Company*, 142 U. S., 217.

² Report of Wisconsin Tax Commission of 1898, p. 157.

³ See p. 19.

⁴ 78 Northwest Reporter, 125.

How much this agitation is the result of merely transitory political influences, and how far it is the outcome of strictly economic causes, it would be difficult to determine. Whatever may be the verdict on that question, it is evident that the political struggle against the existing system has not yet spent its force; and in view of the fact that the people of the State, in the fall election of 1900, voted in favor of a constitutional amendment rendering property taxation possible, it ought not to be a matter of surprise if a measure substantially the same as the Atkinson bill were yet to find its way into the statute books of Michigan.

The experience of Maryland has been quite the opposite of that in Michigan and Wisconsin; for under the law of 1896 the gross-receipts tax on railroads was noticeably expanded.

4. Apportionment of taxes between States.—In connection with the taxation of transportation companies upon all of the bases which have been mentioned above, there has been rapidly spreading an administrative device for the prorating, according to mileage, of taxable elements of an interstate character. In the case of the tax on cash valuation of property the necessity for the adoption of this plan arises, of course, only in the taxation of rolling stock. The plan generally followed in such cases is to tax rolling stock upon that portion of its value which is represented by the proportion of mileage traversed within a State to the total mileage covered.

Under the tax on capital, in the case of foreign corporations, the legal requirement that only such portion of the capital stock of any company as is employed within a State shall be taxed by that State has resulted in the general adoption of the plan. The taxation of sleeping-car companies in Pennsylvania furnishes a good example of this practice. In that State the capital stock of every such company is assessed by a State official, taking as the basis of assessment such proportion of the capital stock as the number of miles of railroad over which the cars of the company are run in Pennsylvania bears to the mileage in that and other States over which its cars are run. The legality of this method has been repeatedly affirmed by the United States courts.¹ In the case of domestic corporations, although the practice of prorating is not necessitated by legal decisions, recognition of the practical justice attainable under the method has led to its general adoption.

Under the gross receipts tax, so far as concerns foreign corporations, any attempt by a State to tax receipts other than those resulting from purely intrastate traffic encounters a direct prohibition in the decision of the United States Supreme Court. In the case of domestic corporations the right of any State to measure the value of a franchise which it has granted by total receipts, even including those from interstate traffic, has been upheld by the courts.² But the plan generally followed in such a case has been that of taxing only a mileage proportion of the gross receipts. Such, for example, is the method followed in Maine, where receipts from business of an interstate character are prorated according to the ratio which mileage traversed in doing business within the State bears to total mileage covered both within and outside of the State.

There appear to be no cases where companies doing an interstate business are taxed on their entire gross receipts. Where the prorating method is not expressly provided for statutes usually declare that the tax shall apply to "receipts from business done within this State." In practice there appear to be two ways of carrying this out, either by taxing all companies (both foreign and domestic) upon their receipts from business done wholly within the State, or by taxing all companies by the prorating method, foreign companies not caring to appeal to the courts to avoid the resulting addition to their taxes.

D. MISCELLANEOUS TRANSPORTATION AND TRANSMISSION COMPANIES.

One of the practices which is constantly becoming more and more prominent in the enacting of State tax laws is that of making specific provision for the taxation of transportation and transmission companies other than railroads. Of recent years this has been particularly the case with those companies which do a business upon the various railway lines of the country, complementary and subsidiary to the railway business. In legislating for the taxation of these companies the States have very noticeably avoided the property tax. It appears to have been quite generally recognized that a tax on the mere value of the property of these companies would be entirely ineffective in reaching their true taxable capacity. That this evil does actually arise under the property tax is amply affirmed in the experience of those States which still cling to that tax. But changes are con-

¹ See *Pullman Car Company v. Pennsylvania* (141 U. S., 18).

² *State tax on railway gross receipts* (16 Wall., 289); *Maine v. Grand Trunk R. R. Co.* (142 U. S., 217).

stantly being effected, and the general practice of recent years has been manifestly pointing to the abandonment of old methods and tending toward the adoption of others, which have already proved tolerably efficient in a number of the States.

1. Express companies.—In the case of express companies the need for specific tax provision has been very marked. Under the local general property tax these companies have almost entirely escaped taxation. The attorney-general of Montana not long ago made a statement bearing on this point, which is typical of the operation of this method wherever it is employed. He says:

"Take, for instance, one of the principal express companies operating in this State (Montana); in one county it undoubtedly does a business of several hundred thousand dollars, and the property owned by it in the county subject to taxation will not aggregate in value \$5,000. The system now prevalent, which ignores the franchise and simply assesses the tangible property, is practically a farce."

Many States have sought to remedy this state of things by specific legislation on the subject, and in most cases where this has been done the gross receipts tax has been adopted. Of quite recent years, however, the legislative trend appears to be toward a form of tax based on capital stock. Indiana adopted such a tax in 1893; Wisconsin pursued a similar plan in 1899, and Iowa in 1900. Ohio several years ago changed over from a gross receipts tax to one nominally based on cash valuation of property, but in reality fixed very largely on the basis of net earnings. The practical difficulty of making adequate provision for the taxation of these companies, at least in the light of various legislative efforts in the matter, is not a slight one. It will be interesting to note the experience of Texas, which is not far from typical in this respect.

The first law in that State upon the subject, enacted in 1879, in line with Southern tendencies, provided for a specific annual tax of \$700, to be paid by every company doing business within the State. In 1883 the amount of the tax was reduced to \$500. This law continued in force for seven years, when the amount of the tax was raised to \$1,000. This act was, in turn, repealed in 1895, when the present law, taxing these companies on the basis of their gross receipts, was enacted. The workings of this law appear thus far to have been attended with satisfactory results.

2. Palace-car companies.—The taxation of sleeping, palace, and dining car companies has claimed considerable attention during the past twenty years. In a number of States taxes based on cash valuation of rolling stock have been adopted. But in the majority of cases where the taxation of these companies has been the subject of legislation the gross receipts tax has been adopted. The tax on capital has also gained ground, as is shown by the enactment of the Indiana law of 1893 and the Wisconsin law of 1899. The experience of Texas in this matter, as in the case of express companies, is an interesting one. The first law on the subject, passed in April, 1879, provided for an annual tax of \$3 per mile of road in the State over which cars were hauled. Three months later the system was changed to one of a tax of one-half of one per cent on the value of cars used in the State. In 1881 this law was repealed, and the law levying \$2 per mile was reenacted. A year later the tax was reduced to 50 cents per mile. All of these laws having proved unsatisfactory the present law was passed in 1893. This, with the supplementary law of 1897, provides for a tax of one-fourth of one per cent on the annual value of the gross receipts of the companies concerned, in addition to a tax of 25 cents on each one hundred dollars' valuation of the capital stock employed within the State.

3. Fast-freight lines.—The problem of the taxation of fast freight and car lines has of recent years received a considerable share of attention. In the framing of laws for their taxation the tax on capital appears to have been the prevailing model. Such was the case with the Wisconsin law of 1899, as well as with the law passed in Minnesota in 1897, where all other transportation companies are taxed on the basis of gross receipts.

4. Summary.—Upon the whole, the most marked tendency to be noted of recent years in the legislation for the taxation of express companies, sleeping-car companies, and freight-line companies has been one which points to the increasing adoption of taxes on capital. The Maryland law of 1893, which already had noteworthy precedents in the general corporation tax systems of Pennsylvania and New York, appears to have set an example which has been followed quite widely in the States northwest of the Ohio River. The gross receipts tax, largely as the outcome of the intervention of the Federal judiciary, has of late been but little adopted.

The most notable practice among the States in the taxation of telegraph companies has been that of taxing them on a valuation of telegraph lines, determined on the principle of a fixed sum per mile of wire. This plan and that of the tax on gross receipts constitute the two methods which prevail in the majority of the States. With telegraph companies, as with railroads, the decisions of the United States Supreme Court have been unfavorable to the taxation of interstate receipts.¹

Legislation for the taxation of telephone companies has been upon much the same lines as with telegraph companies, except that not infrequently as regards the former, instead of the method of levy at a specific sum per mile of wire, the plan of a fixed tax per instrument in use has been followed.² In a number of States, moreover, telephone companies have been made subject to taxes on gross receipts, where telegraph companies have been taxed on some other basis.³ This has been due, at least in part, to the fact that the telephone business is still mainly of a local character, with the result that a tax on the gross receipts of a telephone company, which are predominantly of an intrastate character, does not, as in the case of telegraph companies, encounter the limitations which have been imposed by Federal court decision.

E. OTHER EXPANDING PRACTICES.

1. Taxation of foreign corporations.—There yet remain to be noted several changes in the practice of taxing transportation companies, which are coming more and more to characterize the taxation of corporations generally. Chief of these is the growing practice of treating domestic and foreign corporations upon the same general footing. This has come to be the case almost universally with the tax on cash valuation of property. In the case of the tax on capital, State policy and practice are tending in the same direction; and even where the gross receipts tax prevails, although exceptions in practice still exist, State authorities are more and more striving to conform to this rule. The State courts are being instrumental in bringing about the same result. For example, in New Jersey the supreme court has decided that it is not competent for the State to lay a tax upon a foreign corporation in a mode which differs in principle from that which it applies to the taxation of its own corporations.⁴ In California it has been held by the court that in case a corporation does an interstate business, such that the State has no power to keep it out, the assumption is that the State must apply to it the same principle of taxation as is applied to domestic corporations.⁵ Further, the Louisiana constitution of 1898 provides that foreign corporations may be taxed in a different mode from domestic corporations, but that the principle which is applied must be the same in both cases.

With regard to those laws which have been enacted in many States, under a variety of names, for the levying of a fee upon corporate charters, similar facts are to be noted. In New York, for instance, according to the decision of the courts, the State tax on organization applies to foreign corporations beginning to do business within a State, as well as to those of domestic origin. The Vermont laws of 1890 and 1894 make provision to the same effect, as do, also, the more recent laws of Texas and Washington.

2. Taxes on incorporation.—Another practice which is of growing significance is that of levying taxes upon the incorporation and organization of corporations and joint-stock companies. Fifty years ago legislation of this character was far from general. At present laws of this type are to be found in nearly two-thirds of the States. The same, in the main, holds with regard to the levying of many of the so-called "license taxes" on corporations, and also, since 1878, with respect to the introduction of the franchise feature into the systems of many States.

3. Taxes on securities.—Finally, that change of attitude which is resulting in the abandoning of the tax on security holders must be noted. Not many years have passed since the practice of attempting to collect a tax from the holders of corporate securities was almost universal. Of recent years, particularly in the case of railroad securities, a large proportion of the States have given up the attempt, and, instead, have sought to tax the corporations directly to the full

¹ *Telegraph Company v. Texas* (105 U. S., 460), and *Ratterman v. Western Union Telegraph Company* (127 U. S., 411).

² *E. g.*, Connecticut, Mississippi (according to number of subscribers), and Tennessee.

³ *E. g.*, in Alabama, Kentucky, North Carolina, Vermont, and Wisconsin.

⁴ *Erie Railway Company v. State* (31 N. J., 531, 543).

⁵ *San Francisco v. Liverpool Insurance Company* (74 Cal., 113).

extent of their apparent taxable capacity. The laws of California and of Arizona, for instance, have gone so far as to forbid explicitly the taxation of both corporation and security holder, the law in the latter State asserting that "shares of stock in a corporation possess no intrinsic value over and above the actual value of the property of the corporation for which they stand." The increasing prevalence of this attitude, in addition to the fact of the practical impossibility of collecting a tax from the holders of securities, are both indicative of the abandonment of the practice.

CHAPTER II.

ANALYSIS OF PRESENT METHODS OF TAXING TRANSPORTATION COMPANIES.

State practice in taxing transportation companies is a varied one. There seem, however, to be three principles upon which the different State systems have been based—the property-tax principle, the income-tax principle, and the fee principle.

The essence of the property-tax principle is that all property shall be taxed at its true cash value—i. e., the price it would bring upon sale in the open market. The essence of the income-tax principle is that taxes shall be levied in proportion to income. Both property and income taxes are compulsory payments for the support of Government, and with both the aim is to adapt, as far as possible, the amount of levy to the taxable capacity of the various taxable subjects. The fee principle is different. The fee is a payment for benefit received. It may or may not bear a constant relation to taxable ability, and it may be either recurring in its levy or levied once for all. It may equal the full amount of benefit received or it may be less than the amount of benefit.

A. THE PROPERTY-TAX PRINCIPLE.

The property-tax principle underlies the systems of most of the States. It is embodied in two distinct forms. The predominant type is found in the property tax pure and simple, where direct assessment of property, as in the case of individuals, is the rule. Less prevalent, but no less significant, is the form exemplified in the various taxes on capitalization, based on indirect or inferred valuations of corporate property.

1. **The property tax.**—This is the most common method of taxing transportation companies. In a few cases it is subject to purely local administration, but in most of the States valuations are made by State boards or officials. The workings of the latter method, though not in detail identical in any two of the States, coincide in some such general characteristics as the following: Certain designated officials of the various railroad companies are required to return sworn statements or schedules to State officials, setting forth in detail the length of line with all its tracks, and the proportion thereof in each tax district of the State, all personal property of every kind, all rolling stock, and often a detailed description of the construction of track and roadbed, the time spent in that construction, and the value of materials employed. There is also required a full statement of all real estate owned or used in each tax district; of all stations, houses, or other buildings, and all equipment connected therewith; of the amount of capital stock, including its market value, or if there is no market value, the actual value of the shares, in some cases including a list of the shareholders and their places of residence, in addition to a statement of the total amount of all indebtedness, generally excluding current expenses. In some States the schedule must contain a statement of the respective companies' entire gross receipts, entire operating expenses, and entire net earnings, with a supplementary statement of the amount of such receipts, expenses, and earnings resulting from business done exclusively within the State. Neglect to furnish these sworn schedules is generally attended with heavy penalties, and false statements are punishable as perjury. Furthermore, in many cases, the State officials, to whom these reports are made, are empowered to require additional statements when necessary, and even, as provided in a number of States, to summon witnesses, to examine them under oath, and to compel the production of corporation books and papers. The work of assessment on the basis of these returns is generally intrusted to a specially con-

stituted State board, by whom the valuation is determined and in most cases* apportioned among the local taxing districts for the computation and collection of the tax. Railroad real estate not directly employed in traffic operations is generally both assessed and taxed by local officials.

The chief advantages of this general method may be summed up as follows: The duties of assessment are in the main performed by experienced and competent officials, thus minimizing the liability to unequal assessments, as between localities and between companies, under a property tax; the popular demand that corporations be taxed upon the same basis as individuals is realized; the method is in accord with both State and Federal constitutional provisions, besides being both reasonably productive and constant in its yield from year to year.

The reports of special State tax commissions in the main say little about the property tax except by way of condemnation, upon both practical and theoretical grounds; but the general attitude of State administrations and legislators toward the possibility of devising better methods appears to be much the same as that of the controller of Florida, when he says:

"The law provides for a uniform and equal rate of taxation, and that all property shall be assessed at its 'full cash value,' but it seems to be almost impossible to devise laws, however plain and explicit, that will result in an equal distribution of the burdens of government according to the value of the property owned and the ability of the person taxed to meet the obligation."¹

The chief defects of the method may be summed up by saying that it is cumbersome in its administration and not proportional to the earning power of the different companies taxed. The latter is its main failing. To illustrate: In Illinois, where the system of valuation is as exacting in its provisions and probably as thorough in its execution as in any other State, equality in distribution has not been reached. The following table² will verify this statement:

Railroad.	Assessed valuation.	Net earnings.	Ratio of net earnings to assessed valuation.	Index number.
			<i>Per cent.</i>	
Chicago and Alton.....	\$5,511,641	\$6,022,315	109.27	98.4
Chicago, Burlington and Quincy.....	7,865,938	8,724,997	110.92	100.0
Rock Island and Peoria.....	893,752	669,068	74.86	67.5
Lake Shore and Michigan Southern.....	660,706	461,690	69.87	62.9
St. Louis, Indiana and Eastern.....	101,707	65,563	64.48	58.1

It is interesting to note that with the above roads, which have been chosen indiscriminately, the tax varied inversely with the amount of earnings. Further investigation along the same line developed the fact that, though exceptions are too important to establish a general rule, the general trend was in this direction.

Similar facts are to be noted in Kansas, although in that State, owing largely to more fluctuating business conditions, the property tax approaches even less than in Illinois the attainment of equality. A few instances are given in the following table:³

Railroad.	Amount of taxes.	Net earnings.	Ratio of net earnings to taxes.	Index number.
			<i>Per cent.</i>	
Atchison, Topeka and Santa Fe.....	\$646,113	\$3,958,008	614	73.3
Chicago, Rock Island and Pacific.....	277,566	1,683,540	606	72.4
Missouri Pacific.....	395,371	1,065,353	269	82.1
Kansas City, Fort Scott and Memphis.....	88,125	564,678	641	76.6
St. Joseph and Grand Island.....	45,258	878,606	837	100.0
St. Louis and San Francisco.....	77,265	82,395	107	12.8

¹ Report of the controller of Florida for 1898, p. 10.

² Figures are for the year ending June 30, 1898, and are compiled in the case of Illinois from the reports of the Illinois State board of equalization, and of the railroad and warehouse commission, for 1898; and in the case of Kansas from the reports of the State auditor and of the State board of railroad commissioners for 1898. Net earnings here, as elsewhere, are taken to represent gross receipts less expenses of operation.

"The following table shows the percentage of taxes paid in Ohio to net income arising in Ohio in the year 1892 by a number of railway companies which are believed to be representative ones:"

	Percentage
Lake Shore and Michigan Southern Railway Company	11.22
Cleveland, Columbus, Cincinnati and St. Louis	10.62
Pennsylvania System	6.90
The Valley Railway	8.83
Cleveland and Canton	7.05
Cleveland, Lorain and Wheeling	6.39
Cleveland and Pittsburgh	8.48
Toledo and Ohio Central	6.54
Columbus, Hocking Valley and Toledo	5.16
Cleveland and Marietta	8.25
Cincinnati, Portsmouth and Virginia	17.94
Baltimore and Ohio Southwestern	6.57
New York, Chicago, and St. Louis	11.99
Wheeling and Lake Erie	7.99
Cincinnati, Hamilton and Dayton	9.35

Over periods of time the property tax is likewise ineffective as a measure of tax-paying capacity. It is inelastic in that it fails to adapt itself even to measurably permanent changes in the profitableness of the railway business. The Ohio tax commission of 1893 in its report brings out certain facts which bear directly on this point:

"The valuation of the Lake Shore and Michigan Southern Railroad Company in the year 1878 was \$12,996,609; in the year 1892 it was \$12,457,745. In the year 1878 the gross earnings of the whole Lake Shore System were \$13,505,159, whereas in the year 1892 the gross earnings were \$22,415,382 and the net earnings were \$6,612,192, as against \$5,493,165 in 1878.

"The comparison for the same respective years of the valuations of the Cleveland and Pittsburgh Railway Company is equally striking. In 1878 the whole valuation was \$5,731,000; in 1892 it was \$4,495,000. On the other hand, the company did 50 per cent more business in 1892 than in 1878, its gross receipts being \$2,372,166 in 1878 and \$3,429,278 in 1892.

"The Pittsburgh, Fort Wayne and Chicago Railway Company was assessed in Ohio in 1878 at \$10,732,001, and in 1892 at \$10,525,948, while the gross receipts in 1878 were \$7,830,000 and \$11,659,142 in 1892."

These illustrations have been chosen in instances where identity in point of mileage of line from 1878 to 1892 was substantially preserved. The year 1878 was selected because it differed in point of valuation in no material way from other years of that period. The real value of the property of these lines, if determined on the basis of earnings, undoubtedly increased during this period; and had account of this increase been taken the valuation would unquestionably have more nearly approximated a constant relation to earnings. Other States show results fully as bad.

In the administration of the tax on the cash valuation of property the method of arriving at a valuation by capitalizing earnings at a certain percentage must not be confused with the property-valuation method. Such a method practically amounts to a tax on earnings, and in its effect avoids some of the objectionable features of the property tax. Such a method has already been followed in New York and has been pronounced legal by the courts of that State. In Ohio it has had a limited application, and in a few other States it is occasionally employed in measuring the value of franchises for taxation, but instances are so isolated as to be of but slight importance.

The general property tax as locally administered is peculiarly liable to facility of evasion and lack of uniformity in its operation. The latter failing is typically illustrated by an instance cited in the report of the New York railway tax commission of 1879, where it is stated that in two adjoining counties of the State (New York) the valuation of the same railroad, as determined by the assessors of the two counties, varied \$24,000 per mile. Other counties varied as much as \$20,000 per mile.

2. Taxes on capitalization.—(a) *Tax on capital stock at par.*—This tax is, of slight significance from the standpoint either of present or of probable future State practice.

(b) *Tax on capital stock at actual or market value, and on capital stock plus bonded debt.*—In those States where these methods have been followed results have been reasonably satisfactory.

The Massachusetts tax commission of 1897, commenting on the system of that State, remarks that "little complaint is heard regarding those taxes—a signal

¹ Report of the Ohio tax commission of 1893, p. 58.

² *Ibid.*, p. 52.

proof that the taxpayers accommodate themselves, if not with ease, at least without serious complaint, to burdens which are steady, regular, predictable, and for which, in consequence, they are able to make calculations and adjust their affairs.

"The corporation tax is particularly simple, and is assessed with unerring exactness in the case of large and well-known corporations, whose shares are regularly dealt in, and consequently have a publicly recorded value. Railways, banks, the larger manufacturing corporations, and others whose stocks are frequently quoted, are taxed without a word of inquiry and without a possibility of escape."¹

Moreover the tax is economical in its administration and tolerably constant in its yield. Applied to railroads, the Massachusetts tax, like the corporation taxes of Pennsylvania and New York, has fairly well kept pace with increasing railway earnings.

In some cases State law requires that capital stock shall be valued at its actual value. This is the law in Pennsylvania as well as in New York. Actual value must be distinguished from market value, although in practice the two are likely to be the same where market values are easily ascertainable. The New York courts have emphasized the importance of observing the distinction. Judge Comstock says:

"There is no property so liable to speculation as stock in corporations. * * * Stocks may be and frequently are inflated or depressed by those who wish to sell or buy. They are subject, moreover, to all the vicissitudes of the money market. * * * Actual value is the result to be arrived at, for such are the words of the statute, and the inquiry, therefore, must have a primary regard to the property and estate which alone impart such value."²

Where, as in Pennsylvania, bonded debt is taxed, difficulties arise because of the restriction of the tax to resident bondholders.³ The extent of the injustice arising from this cause may be inferred from the following table⁴, prepared by the Committee on Railroad Taxation of the Pennsylvania Tax Conference.

Bonds and stocks of certain railroads of Pennsylvania and the amount of bonds held in Pennsylvania.

	Total bond issue.	Amount held in Pennsylvania.	Appraised value of stock.	Per cent of railroad in Pennsylvania.
(1)	\$450,000	\$116,000	\$450,000	All.
(2)	352,000	63,000	1,400,000	All.
(3)	72,800	2,700	383	All.
(4)	230,000	.....	384	All.
(5)	240,000	8,000	48,000	All.
(6)	2,900,000	.....	127,000	0.50
(7)	2,280,000	2,100,000	2,900,000	All.
(8)	200,000	200,000	80,000	All.
(9)	1,800,000	1,800,000	600,000	All.
(10)	275,000	.....	.....	All.
(11)	3,400,000	6,000	2,000,000	All.

"A moment's inspection of the above table—and a great many more examples might have been given—will show that it is impossible that the system of taxing railroads in Pennsylvania could act equitably as between these roads. Take the fourth example: This is a road with \$230,000 of bonds, not one of which is held in the State, and capital stock of the appraised value of \$384. The State taxes on this road outside of the tax on gross earnings were, in 1893, 5 mills on \$384, or \$1.92. The eighth road does not differ much in its character from the fourth, and is worth about the same. This road has \$200,000 of bonds, all held in the State, and \$80,000 capital stock. Its State taxes outside of the tax on gross earnings were \$1,200. The last road but one paid no State taxes on capital stock or bonds, as all of its bonds were held by nonresidents and its stock was worthless. The road with \$2,900,000 of bonds, 50 per cent of whose mileage is in the State, would pay nothing on bonds and the capital-stock tax on but \$62,350. This is certainly not equitable taxation."⁵

¹ Report of Massachusetts tax commission of 1897, p. 69.

² *People v. Commissioners of Taxes and Assessments* (23 N. Y., 192).

³ *Railroad company v. Pennsylvania* (15 Wall., 300).

⁴ This is a portion of a table on p. 16 of the Report of the Committee on Railroad Taxation, Pennsylvania Tax Conference.

⁵ Report of Committee on Railroad Taxation, Tax Conference of Pennsylvania Interests, p. 16.

Compared with other classes of property in the State, the Committee on Railroad Taxation concluded that in 1892 the railroads paid less and in 1893 fully as much as other property. The general opinion of the committee as regards railway taxation in the State was as follows:

"There are glaring inequalities in the taxation of Pennsylvania railroads, some paying on a fair valuation very much more than the average, others less. * * * This inequality grows out of the complex system of taxation of railroads in vogue in Pennsylvania."¹

The Connecticut system, levying a tax on capital stock and total indebtedness, as a "tax on property," avoids the difficulty which arises in taxing nonresident bondholders. The tax conference of Pennsylvania interests proposed a bill on the lines of the Connecticut system as a substitute for the present Pennsylvania system. The auditor's department has since looked into the effect of such a move upon the taxation of corporations from the standpoint of productivity. A summary of the results of that investigation, so far as it applied to railroad taxation (187 railroads reporting), is as follows:

Year.	Taxes under present law.				Under conference bill.	Increase.
	On stocks.	On loans.	On gross receipts.	Total.		
1895	\$1,122,868	\$170,039	\$382,772	\$1,975,669	\$2,097,238	\$121,569
1896	1,037,490	441,517	339,755	1,818,763	1,867,229	48,466

The decision of the United States Supreme Court in the Multnomah County case must not be forgotten as suggesting possibilities in the way of greater uniformity in the State taxation of corporate bonded debt.

In New York the joint committee on taxation, reporting a bill on January 15, 1900, for the taxation of mortgage debts, made the following statement in this connection:

"Can corporate bonds and other mortgage debts, when owned by nonresidents, be taxed by this State? The owners are beyond our territorial jurisdiction, and of course no personal liability for a tax can be imposed upon them. But the debts themselves are within our power if we can reach the debtor or the security. This is shown by the familiar practice of attaching or garnisheeing debts owed to residents of other States or countries in judicial proceedings. The Supreme Court of the United States has held that an attachment in Iowa of a debt owed by a citizen of Iowa to a citizen of Kansas was valid (although personal jurisdiction of the Kansas person was not obtained), and that payment of the debt under the order of the Iowa court was made binding by the Constitution of the United States upon the courts of Kansas. (*Chicago, etc., Railway Co. v. Sturm*, 174 U.S., 710.) It is said that the situs of intangible property is at the domicile of the owner, and for some purposes the statement is correct. The rule, however, belongs to the common law. It does not possess constitutional authority. The legislature is competent to change it. The Supreme Court of the United States has sustained against nonresidents a statute of Oregon imposing taxes on mortgages. (*Savings Society v. Multnomah County*, 169 U.S., p. 421.)"²

B. THE INCOME TAX PRINCIPLE.

The income tax principle lies at the bottom of the transportation tax systems of a number of the States, where various taxes on receipts and earnings have been established.

1. Tax on gross receipts.—This is the tax on transportation companies recommended by the railway tax committee in 1880, as well as by the Maryland tax commission of 1896 and the Maine tax commission of 1899. The New York committee remarks that "the requisite of a correct system of railroad, as of other taxation, is that it should, in so far as it is possible, be simple, fixed, proportionate, easily ascertainable, and susceptible of ready levy." The committee recommends the tax on gross receipts as "perfectly simple, * * * thoroughly proportionate, * * * and can by no possibility be evaded." A little farther on in the report the systems of Michigan and Wisconsin were characterized as "most intelligent and in conformity with correct principles." The Maine tax commission likewise recommends the tax on gross receipts as a method "doubtless as

¹ *Ibid*, p. 18.

² Report of the Joint Committee on Taxation, N. Y. legislature of 1900, p. 12.

fair as any, for by that method the levy is graduated to the amount of business the road is doing."

The report of the Maryland tax commission of 1886 concerned itself largely with railroad taxation. The commission recommended a graded license fee on gross earnings. In a supplementary minority report the following remarks were made:

"The plan recommended by the other members of the commission is, perhaps, as good as any, which is in entire harmony with our existing system of taxation, and deserves the careful consideration of the legislature. If it is decided, however, to inaugurate a new system, experience points to the Wisconsin method as preferable. The roads are thereby exempt from local taxation, and a license fee for the operation is charged, varying according to the gross earnings per mile. The license fees are expected to defray the entire expenses of the State government, and this plan is being followed elsewhere and everywhere with the same satisfactory results. It is simpler than the assessment by local authorities as well as State authorities, and the railroads are almost too powerful to be handled by the local authorities, who are likely to be worsted in their contests with vast corporations."

But, of recent years the opposition which has developed in Michigan and Wisconsin against their systems of gross receipts taxation has been considerable. This agitation, to which we referred above, has arisen largely out of a comparison of the results of the gross receipts tax in those States with the apparently more successful results of the method of cash valuation in several adjoining States.

A quotation from the message of the governor of Michigan to the fortieth legislature of the State well presents the attitude of the opposition in Michigan:

"The method is unjust. The tax upon earnings or income operates in favor of the railroad companies. When the times are hard and the earnings smaller, the tax is less. In the meantime the State's burdens are no less, and may, perhaps, have increased, and the relief accorded to the railroad companies during those hard times and depression must be borne by the property owners generally. Thus, during times of depression, when the people are less able to pay, their burdens are increased, and just to the extent that the railroad companies' burdens are diminished.

"What would be the result if the State attempted to collect the entire burden of a tax upon earnings or income? How much would the farmer or merchant have contributed from 1893 to 1897? The result would have been that the State would have received but little, if any, income and would have been bankrupt and unable to meet its obligations."

The report of the Michigan railroad commissioner for 1897 states the same position a little differently:¹

"It is apparent that the present system of taxing railroads is unjust.

"First. Because it is inequitable as compared with the tax upon other property and because it is unjust to tax one kind of property upon its earning capacity and refuse the same privilege to other property.

"Second. Because the State, under the present law, is powerless to determine whether the earnings reported by the companies are accurate or not, the whole machinery for determining or reporting the same being practically within the control of the railroad companies.

"Third. Because a partial control thereof by the State is inadequate to protect it.

"Fourth. Because the system as applied to roads doing an interstate business is a usurpation of the power of Congress to regulate commerce between the States, and to that extent is void."

The Wisconsin tax commission of 1898 had the following to say about the system of that State:²

"Our work has led us to the conclusion that all the corporations which are taxed on the basis of earnings or on a mileage basis pay relatively less taxes than other persons and less than they would pay on the basis of value. * * * (But) we are now prepared either to recommend that the system of taxation be changed to the method of assessment by a State board or the specific rates of taxation which should be fixed if the present method should be continued. * * *

"We recommend that if the present mode of taxing railroads be continued a new and closer classification of rates be fixed for the purpose of preventing the inequalities which arise under the system now in force (as well as) that the present plan of taxing railroads on the basis of mileage be discontinued."

¹ Report of the Railroad Commissioner of Michigan for 1897, p. xli.

² Report of the Wisconsin Tax Commission of 1898, p. 188.

The systems of both Michigan and Wisconsin provide for taxes graduated according to receipts per mile of line. That this method results in many inequalities will be seen from the following extract from the report of the Wisconsin tax commission of 1898:¹

"So long as the system of taxing on the basis of gross earnings exists it is evident that careful attention should be given to the subject of classification.

"There are several instances which illustrate that the existing classification sometimes leads to singular results which would seem to call for some correction.

"The taxes paid by the Green Bay and Western Railroad in 1897 were \$3,745, and its gross earnings were reported at \$442,319, or \$1,965.86 per mile. Under the existing law, if the road had earned \$35 more per mile it would have paid a tax of \$13,500 instead of \$3,745. That is, a difference of less than \$8,000 of gross earnings by this road made a difference in its taxes of nearly \$10,000.

"As a further illustration, the taxes paid by the Kewaunee, Green Bay and Western road were \$609.33, and its gross earnings \$72,083, or \$1,964.12 per mile. If the road had earned \$36 more per mile it would have paid a tax of \$2,202 instead of \$609.33. That is, a difference of about \$1,300 on its gross earnings made a difference in its taxes of nearly \$1,600."

Apart from practical considerations of this nature, it is to be doubted whether the method attains its object. This practice may in part be based upon those grounds which are commonly urged in favor of progressive taxation, but its chief justification is to be found in the notion, mistaken or otherwise, that the larger, relatively, the gross earnings of a company are per mile, the larger is the proportion attributable to net earnings, and as a consequence, the greater its taxable capacity. That the truth of this notion is not verified by the statistics of the larger railroads operating through several States of the country may be seen from the following table:²

Railroads.	Mileage.	Earnings from operation.	Operating expenses.	Net earnings.
Pennsylvania.....	2,817.61	\$61,043,133	\$41,512,615	\$19,630,418
New York Central and Hudson River.....	2,409.88	43,577,927	27,573,281	16,104,646
Erie.....	1,855.36	29,051,011	20,241,353	8,769,658
Cleveland, Cincinnati, Chicago and St. Louis.....	1,893.62	13,117,111	9,481,876	3,625,235
Louisville and Nashville.....	3,147.25	20,692,656	14,077,777	6,614,879
Wabash.....	1,979.60	11,608,830	8,396,329	3,212,501
Atcheson, Topeka and Santa Fe.....	4,542.76	22,338,141	16,255,055	6,083,086
Chicago, Rock Island and Pacific.....	3,571.41	16,728,685	10,999,360	5,729,325
Chicago, Burlington and Quincy.....	5,859.70	26,633,741	15,761,488	10,869,253
Southern.....	4,827.22	19,050,096	12,568,161	6,481,935

Railroads	Gross earnings per mile.	Net earnings per mile.	Ratio of net to gross earnings per mile.	Index numbers—	
				For gross earnings per mile.	For ratio of net to gross earnings per mile.
			<i>Per cent.</i>		
Pennsylvania.....	\$21,342	\$6,966	32.6	100.0	79.9
New York Central and Hudson River.....	18,123	6,682	36.8	84.9	90.2
Erie.....	15,607	4,727	30.3	73.1	74.2
Cleveland, Cincinnati, Chicago and St. Louis.....	6,926	1,914	27.6	32.4	67.6
Louisville and Nashville.....	6,575	2,102	31.9	30.8	75.5
Wabash.....	5,863	1,622	27.7	27.5	67.9
Atcheson, Topeka and Santa Fe.....	4,917	1,339	27.2	23.0	66.7
Chicago, Rock Island and Pacific.....	4,684	1,604	34.2	21.9	83.5
Chicago, Burlington and Quincy.....	4,565	1,855	40.8	21.3	100.0
Southern.....	3,947	1,343	34.0	18.5	83.3

Since, however, the matter of a graduated tax is essentially a State problem, which involves both large and small roads, a different result might be expected from an examination of the figures of lines or portions of lines operating in single States. But the following table³ shows that the evidence is almost as contradictory here as in the case of entire railway systems.

¹ Report of Wisconsin tax commission of 1898, p. 182.

² Figures are compiled from the Statistical Report of the Interstate Commerce Commission for 1897, and cover the fiscal year ending June 30, 1897.

³ Figures for Wisconsin are compiled from the statistical report of the Interstate Commerce Commission for 1897; those for Illinois from the report of the Illinois railroad and warehouse commission for 1896.

Railroads.	Mileage.	Earnings from operation.	Operating expenses.	Net earnings.
<i>Wisconsin.</i>				
Wisconsin Central Railroad Company	673.81	\$2,089,782	\$1,358,104	\$731,678
Milwaukee and Superior	16.20	32,931	17,978	14,953
Kewaunee, Green Bay and Western	36.70	36,414	34,401	2,013
Green Bay and Western	225.00	419,759	311,814	77,945
Abbotsford and Northwestern	15.16	15,360	8,107	7,253
Drummond and Southwestern	18.47	13,438	8,912	4,511
Annappe and Western	34.00	23,602	14,613	8,989
<i>Illinois.</i>				
Chicago, Lake Shore and Eastern ¹ .	115.42	1,610,230	758,299	851,931
Chicago and Alton	39.71	5,783,696	3,611,807	2,171,889
Chicago and Eastern Illinois	382.91	2,833,809	1,629,321	1,204,475
Chicago, Burlington and Quincy	1,308.09	8,140,801	4,909,355	3,231,446
Chicago, Peoria and St. Louis	166.68	818,221	602,110	155,811
Toledo, Peoria and Western	230.70	882,650	709,531	173,119
Wabash, Chester and Western	64.83	90,218	62,632	27,616

Railroads	Gross earnings per mile.	Net earnings per mile.	Ratio of net to gross earnings per mile.	Index numbers—	
				For gross earnings per mile.	For ratio of net to gross earnings per mile.
Wisconsin					
Wisconsin Central Railroad Company	\$3,647	\$1,277	<i>Per cent.</i>	100.0	65.8
Milwaukee and Superior	2,033	923	35.0	55.7	85.3
Keweenaw, Green Bay and Western	2,007	1,069	53.2	55.0	100.0
Green Bay and Western	1,866	347	18.7	61.2	35.1
Abbotsford and Northwestern	1,013	478	47.3	27.8	88.9
Drummond and Southwestern	727	211	33.5	19.9	62.0
Ahumpee and Western	691	264	38.0	19.0	71.4
Illinois					
Chicago, Lake Shore and Eastern	14,002	7,138	50.6	100.0	100.0
Chicago and Alton	9,953	3,738	37.5	71.1	74.1
Chicago and Eastern Illinois	7,363	3,217	43.7	62.6	86.3
Chicago, Burlington and Quincy	6,224	2,470	39.7	44.4	78.4
Chicago, Peoria and St. Louis	4,899	959	19.1	34.9	39.3
Toledo, Peoria and Western	4,254	1,182	28.0	30.3	54.9
Wabash, Chester and Western	1,388	425	30.6	9.9	60.5

¹ Freight service only on this road

It is often urged (as in the message of the governor of Michigan, cited above) that the gross-receipts tax furnishes a source of revenue which fluctuates violently from year to year. The following table, setting forth the amounts of railway taxes and their proportions to total State revenues in Michigan and Wisconsin for six consecutive years, will throw some light on this point.

Year.	Michigan. ¹					Wisconsin. ²				
	Railroad taxes.	Index No.	Total State receipts.	Index No.	Ratio of railroad taxes to total.	Railroad taxes.	Index No.	Total State receipts.	Index No.	Ratio of railroad taxes to total.
1891	\$778, 43	82	\$3, 181, 308	60	24. 47	\$1, 140, 046	79	\$5, 563, 267	81	31. 99
1892	742, 271	79	3, 210, 832	61	23. 12	1, 220, 674	85	3, 232, 283	73	37. 20
1893	849, 696	90	2, 775, 991	53	30. 61	1, 166, 260	80	3, 567, 873	81	32. 45
1894	943, 697	100	3, 643, 619	69	26. 90	1, 435, 377	100	4, 392, 708	100	32. 75
1895	836, 039	88	3, 704, 198	70	22. 58	1, 174, 792	82	4, 351, 959	78	34. 04
1896	735, 040	78	5, 256, 098	100	13. 98	1, 172, 742	82	4, 217, 282	96	27. 81

¹ Figures are compiled from reports of State treasurers, and cover years ending June 30.

² Figures are compiled from reports of State treasurers, and cover years ending September 30.

The degree of fluctuation here is not so great as in the case of total State revenues.

The question of the degree to which a gross receipts tax approaches a perfect measure of net earning capacity is an important one from the standpoint of justice in tax distribution. The following table will illustrate this point. The figures are compiled from the statistical report of the Interstate Commerce Commission for 1897. The figures for net earnings are assumed to represent the relative tax-paying ability of the different groups of companies, and are determined by deducting from gross receipts all the expenses of conducting transportation (not including interest payments and taxes). The territorial groups are those employed by the Interstate Commerce Commission in their annual statistical reports, and cover the whole country. Group I comprehends the New England States; Group II, the Middle States (excepting the northwestern section of Pennsylvania, the dividing line running through Pittsburg), Maryland, and the northern section of West Virginia; Group III, Ohio, Indiana, and the southern peninsula of Michigan (the dividing line running through Pittsburg and Chicago, the northwestern section of Pennsylvania being included); Group IV, South Carolina, North Carolina, Virginia, and the major part of West Virginia; Group V, the remaining Southern States east of the Mississippi; Group VI, the States and portions of States east of the Missouri River and west of the eastern border of Illinois and the Great Lakes; Group VII, Montana, Wyoming, Nebraska, the northern third of Colorado, and the portion of the Dakotas west of the Missouri River; Group VIII, Kansas, Arkansas, Oklahoma and Indian Territories, Missouri (south of the Missouri River), the southern two-thirds of Colorado, the extreme northern corner of Texas, and New Mexico (north and northeast of Santa Fe); Group IX, Louisiana, Texas, and New Mexico (southeast of Santa Fe); Group X, the remainder of the country.

Group	Net earnings.	Gross receipts.	Ratio of net to gross receipts	Index number.
			<i>Per cent.</i>	
Group I	\$28,812,276	\$95,237,489	30.24	77.4
Group II	107,610,565	332,677,113	32.34	82.8
Group III	49,670,562	175,821,656	28.19	72.2
Group IV	16,112,926	49,075,806	32.83	84.1
Group V	29,357,134	91,673,137	31.01	79.4
Group VI	91,023,164	236,169,682	38.54	98.7
Group VII	16,847,451	43,153,626	39.01	100.0
Group VIII	31,563,285	98,017,221	32.19	82.4
Group IX	11,804,146	46,429,510	25.42	65.1
Group X	24,939,600	75,894,483	32.86	84.2

A comparison for four successive years is as follows:

Year.	Net earnings	Gross receipts.	Ratio of net to gross receipts.	Index number.
			<i>Per cent.</i>	
1894	\$385,929,977	\$1,216,178,602	31.73	97.2
1895	387,168,919	1,207,803,595	32.06	98.2
1896	412,687,278	1,279,191,107	32.26	98.8
1897	406,611,109	1,247,179,783	32.65	100.0

The objection may be raised that these illustrations are far from revealing the justice or injustice of the gross receipts tax as between individual roads. The objection is a valid one. They do, however, strike an average figure for groups of roads situated in different sections of the country, in which varying economic conditions predominate. By this means a general survey of the workings of a general gross receipts tax as regards tax distribution may be obtained. If individual roads were chosen the apparent injustice of the tax would be even greater, for there are roads which have large gross receipts and no net income—taxes and operating expenses swallowing up all of the earnings. Others are operated for varying percentages of the gross earnings, leaving a varying remainder for net income. In such cases gross receipts would furnish a very inconstant index of tax-paying ability.

2. Tax on net earnings or income.—From the standpoint of actual practice this tax is of but slight significance, but it has often been so strongly urged that a brief consideration will not be amiss.

First, with regard to what elements should enter into net income as a basis for taxation, Professor Seligman makes the following statement:¹

"Gross receipts consist of all earnings from transportation of freight and passengers, receipts from bonds and stocks owned, rents of property, and all miscellaneous receipts from ancillary business enterprises or otherwise. From these aggregate gross receipts we should deduct what are classified by the Interstate Commerce Commission as operating expenses; that is, expenses for conducting transportation, for maintenance of roadway, structures, and equipment, and for general expenses of management. No deduction should be made for fixed charges, i. e., for taxes or for interest on the debt, or for the amount used in new construction, in betterments, in investments, in new equipment, or for any of the expenditures that find their way into profit and loss account."

A tax on this basis Professor Seligman regards as the "most logical form of corporate taxation." The Ohio tax commission of 1893 likewise decided with regard to a franchise tax on corporations that "from the economic standpoint and from the standpoint of exact justice, the best method is to obtain the net earnings."²

A tax on the net income of transportation companies would undoubtedly have a number of considerations in its favor. For instance, compared with the tax on gross receipts, it would avoid the possibility of acting as a check on expenditure for improvement of service, particularly in the maintenance and repair of equipment. Then, too, in the event of the adoption of a uniform and correct system of railway accounting its administration would be very simple; but chief of all, as the Ohio tax commission claim, it would, if rightly administered, be proportional in its effect upon the different companies taxed, i. e., it would effect an equitable tax distribution.

Out of the inference that in the railway business as traffic increases net income bears a ratio to expenditure which in the long run constantly grows proportionately larger, it has already been claimed that a tax on net income would be a better revenue yielder than the tax on gross receipts. The following table does not bear out this view:

Gross and net receipts of railways of England and Wales.³

Year.	Gross receipts	Net receipts, ^a	Ratio of net to gross receipts	Index number.	Year	Gross receipts	Net receipts, ^b	Ratio of net to gross receipts.	Index number.
			<i>Percent</i>					<i>Percent.</i>	
1860	£23,472,946	£12,981,454	55.3	98.4	1880	£55,795,186	£28,569,192	51.2	91.1
1861	24,021,928	13,006,901	54.1	96.3	1881	56,642,574	28,633,152	50.6	90.0
1862	24,529,062	13,325,189	54.3	96.7	1882	59,092,802	29,702,307	50.3	89.5
1863	26,212,822	14,116,158	53.1	98.0	1883	60,521,538	30,300,780	50.0	88.9
1864	28,667,649	16,057,914	56.0	99.7	1884	60,099,011	30,037,185	49.9	88.8
1865	30,166,311	16,473,172	54.6	97.1	1885	59,320,905	29,580,664	49.9	88.8
1866	32,274,809	17,117,639	53.1	97.1	1886	59,277,628	29,850,692	50.3	89.5
1867	33,398,222	17,798,997	53.3	94.8	1887	60,502,925	30,591,406	50.5	89.9
1868	35,226,886	19,308,679	54.8	97.5	1888	62,005,633	31,512,233	50.8	90.4
1869	36,105,122	19,842,267	54.9	97.7	1889	65,675,969	33,255,620	50.6	90.0
1870	38,122,161	21,124,538	55.4	98.6	1890	68,272,908	33,265,428	48.7	86.6
1871	41,383,065	23,274,516	56.2	100.0	1891	69,836,382	33,048,818	47.3	84.1
1872	45,039,155	24,310,301	53.9	95.9	1892	69,852,358	32,679,349	46.8	83.3
1873	48,857,278	24,410,569	49.9	88.8	1893	68,252,504	31,334,743	45.9	81.7
1874	50,210,136	24,219,219	48.2	86.8	1894	71,934,167	33,780,690	46.9	83.4
1875	51,726,416	25,229,806	48.8	86.8	1895	72,791,758	34,354,883	47.2	84.0
1876	52,476,319	25,775,824	49.1	87.4	1896	76,584,956	36,270,812	47.4	84.3
1879	52,479,379	26,672,709	50.8	90.4					

^a Taxes are not deducted here in arriving at net receipts.

^b Prior to and including this date, steamboat, canal, and harbor expenses were not deducted from gross receipts in arriving at net receipts.

Objections⁴ to the tax on net income have arisen chiefly from the administrative standpoint. Chief among these has been the contention that receipts might be largely exhausted in the payment of large salaries, thus effecting a distribution of corporate income and avoiding the payment of a large portion of corporate taxes. This might readily happen with small corporations, where the managers are the chief holders of the corporate stock; but in the case of railways this need

¹ Seligman, *Essays in Taxation*, p. 201.

² Report of Ohio Tax Commission of 1893, p. 51.

³ Figures are compiled from the British "blue books."

⁴ Seligman, *Essays in Taxation*, pp. 199, 200.

scarcely be apprehended. The numerous holders of corporate securities would most certainly object to the curtailing of their dividends which would result from such a practice.

The practice of the more advanced European nations is in line with this form of corporate taxation. In England corporations are taxed under the provisions of the general income tax law (Schedule D), on their "net profits," determined substantially on the lines of the definition of net income laid down above. Railroads in addition to this tax pay a "corporation duty," corresponding to the "death duties" on individuals, in addition to a duty of 5 per cent on receipts from passenger traffic.

In France corporations in general pay a tax of 3 per cent on "les intérêts, dividendes, revenus et tous autres produits des actions de toute nature," besides the usual real estate and license-taxes. Railroads in addition pay a "public conveyance" tax on passenger and express traffic. This does not, however, operate as a direct tax on the corporation, for the tax is added to the price paid for passenger tickets and to the amount of express charges. Corporations generally commute for the payment of the usual stamp tax and the tax on the transfer of securities by the payment of an annual tax on the amount of their capital stock.

Most of the States of Germany tax corporations on income. Prussia for more than 45 years has followed the plan of a tax on net income with its railroads.

Italy, like England, taxes corporations on net income under the same law which applies the system to the taxation of individuals. All interest and dividends are included in the assessment.

In the United States the possibility of applying such a method would depend to a degree on the attitude of the United States Supreme Court. The question arises whether or not this form of taxation, so far as it applied to income from interstate traffic, would encounter the same objections as the tax on gross receipts.

In the case of State Tax on Railway Gross Receipts¹ the court said: "It is not denied that net earnings of such corporations are taxable by State authority without any inquiry after their sources." * * * If this statement is to be taken as an accurate index of the tendency of the court in the matter, it would be needless to inquire further. The decision in this case has, however, since been largely discredited; and even though the validity of this particular statement has not been called into question, it would not be well to base any general conclusion upon it alone.

The only other case which sheds any light on the question is that of Philadelphia and Southern Steamship Company v. Pennsylvania.² In this case, which had to do with the Pennsylvania tax on gross receipts, the court say:

"As a tax on transportation * * * it can not be supported where that transportation is an ingredient of interstate or foreign commerce, even though the law imposing the tax be expressed in such general terms as to include receipts from transportation which are properly taxable. *It is unnecessary, therefore, to discuss the question which would arise if the tax were properly a tax on income. It is clearly not such, but a tax on transportation only.*"

The most that can be said, therefore, is that a tax on the net income of transportation companies would probably not be regarded as an interference with interstate commerce, even though such income were in part the product of interstate traffic.

C. THE FEE OR BENEFIT PRINCIPLE.

Besides the various taxes proper which are levied upon corporations, there are certain impositions in the nature of fees—payments for special benefits rendered by the State. Payments of this latter character are rendered to Government in return for the right to become a corporation and the right to do business in a corporate capacity.

The fee principle lies at the root of a variety of impositions levied under a variety of names; and in some cases it is almost impossible to distinguish that part of a levy which is imposed under the fee principle from that which is levied under the tax principle. In such cases the payment for benefit received is involved in the total tax payment, and is the justification for a departure from the test of tax-paying ability in tax distribution. The most important of these levies is the franchise tax.

"The right or privilege given by the State to two or more persons of being a corporation—that is, of doing business in a corporate capacity"³—constitutes a

¹ 15 Wall., 284.

² 122 U. S., 326.

³ E. g., see Home Insurance Company v. New York (434 U. S., 594.)

franchise. The franchise tax is levied with a view to securing for the State some return from the valuable privilege which it has granted.

The California constitution of 1879 first brought franchise taxation prominently into notice. Since that time the method has been incorporated into the tax systems of a majority of the States, and its legality has been confirmed by the decisions of the United States courts.¹

The right to tax a franchise is limited to the State granting it, for the corporate franchise as such may not be taxed except under the law of the State which created it. But State practice generally applies the same methods to both domestic and foreign corporations by imposing taxes, as in New York, on "the corporate franchise or business."

The franchises of corporations granted by the United States Government are not taxable by the States. The State taxation of franchisees, moreover, must not interfere with interstate commerce. Aside from these limitations the power of the States to tax franchises is practically unrestricted. As a consequence different bases of measuring the value of the franchise have been applied at the same time in different States, and at different times in the same State. Gross receipts, dividends, profits, indebtedness, capital stock, capital stock minus value of property, capital stock minus value of realty, etc., have all been employed for this purpose.

In Illinois the value of the franchise and capital stock subject to taxation is declared to be the capital stock and debt in excess of the value of the tangible property which is otherwise taxed. In practice, however, in the case of railroads, the valuation of the tangible property has been such as to leave no excess to be taxed as the value of capital stock.

In New Jersey the method followed is not substantially different from the Illinois method, although it is subject to variation from time to time.

The California method provides for the taxation of the excess of capital stock over value of property. In Massachusetts "a fair cash valuation" of the corporate capital stock is taken as the "true value of its corporate franchise." In Kentucky capital stock less the assessed value of tangible property in the State measures the value of the franchise. The Mississippi law vaguely declares that the State railroad assessors in appraising the value of the corporate property shall "take into consideration the value of the franchise" and "the capital stock engaged in business in this State." The provision in the Vermont law is equally vague, although in that State transportation companies generally have paid a tax on gross receipts in lieu of the tax on "rights, corporate franchise, and property." In Kansas, Tennessee, and in other States, earnings, capital stock, and debt are all taken into consideration in valuing the corporate property and franchise for taxation.

It will thus be seen that the "franchise tax" does not stand for any definite method of levy. From the legal standpoint, however, it has a high importance from the service which it renders in avoiding certain restrictions which, without it, would arise in the administration of the ordinary methods of corporate taxation.

Thus, the constitutions of a number of States require that taxes on property shall be uniform. It is often desirable in the taxation of corporations to have recourse to methods which if applied to property as property taxes would be held unconstitutional owing to lack of uniformity in their operation. The legal fiction of the "franchise tax" obviates this difficulty. Then, too, as we have already indicated, State taxes on property the subject of interstate traffic or on receipts the product of interstate business are unconstitutional, but when such a tax is levied as a franchise tax its validity is indisputable.

Furthermore, if a tax is a franchise tax, exemptions for certain otherwise exempt or extraterritorial property can not be claimed as under the property tax.

Lastly, if a tax is a franchise tax certain objections to double taxation are removed. For instance, under the property tax the capital stock of a corporation may be taxed only on that portion employed in carrying on its business within the State in which the tax is levied. Under the franchise tax the entire capital stock is liable even if in part invested in property situated within another State and taxed by that State.

The so-called "license" and "privilege" taxes closely resemble the franchise tax. Examples of this are the New Jersey "license tax on the corporate franchises" of telegraph, telephone, express, and parlor car companies, the Wisconsin "license tax" on the gross earnings of railroads, the Mississippi "privilege tax" on railroad and car companies, and the Tennessee "privilege tax" on railroad, express, telegraph, and telephone companies.

¹E. g., see *Home Insurance Company v. New York* (434 U. S. 594).

D. LOCAL TAXATION.

There are four main plans followed in adjusting the relations of local taxing jurisdictions to transportation companies: (1) That of locally taxing all transportation property. (2) That of taxing locally only such property as is not directly employed in conducting transportation. (3) That of no local tax, but a distribution locally of a portion of the proceeds of State taxes, and (4) that of no local tax and no local distribution.

A variety of opinion exists with regard to the desirability of these different methods. The advisability of separating the objects of State and local taxation has been widely emphasized. The Pennsylvania tax conference, for instance, reported on this point substantially as follows:

"In many States the State government gets its revenue from a State tax on county valuations. This was originally the case in Pennsylvania; but a 'series of amendments and judicial decisions—partly by accident and partly by design'—resulted in the separation of State and local sources of revenue. A system of ad valorem State taxation, under which each county's quota is made to depend on the valuation of property in each county, renders a proclivity to low valuations irresistible. In neighboring States the assessed value of taxable property has reached a very low ratio, and 'it requires constant contention on the part of the taxing officers in those States to prevent it from getting still lower.' The following are the aggregate values of real estate in the States named for 1890 or 1891:

New York: Controller's Report, 1890, page 106.....	\$3,272,423,743
Ohio: Auditor's Report, 1891, page 198.....	1,151,038,031
Indiana: Auditor's Report, 1891, page 215.....	735,118,117
Illinois: Proceedings of Board of Equalization, 1891, page 35.....	375,291,398
Iowa: Auditor's Report, 1891, page 79.....	376,181,276
Kentucky: Auditor's Report, 1891, page 249.....	236,233,808
West Virginia: Auditor's Report, 1891, page 48.....	121,202,365

"There is also a complaint against the undervaluation of taxable property in Pennsylvania, but it must be conceded that our total aggregate valuation of \$2,002,942,127, as shown by the report of the secretary of internal affairs for 1891, bears a far higher ratio to the actual selling value of our real estate than is shown by the reports of the other States named."

In the same report figures are given for State and local taxes in Pennsylvania in 1892, which may be grouped together as follows:

	State, county, and local.	County and local	Per cent, county and local.
Total taxes.....	\$47,328,842	\$35,995,616	76.05
Railroad taxes.....	2,666,331	834,905	31.31

Upon the question of local assessment the conference committee conclude:

"While a difference of opinion exists as to whether taxation should be levied upon such property by the State or by the local boards, it seems to us manifest that it should be assessed and valued by officers whose jurisdiction extends over the entire State. Each railroad, canal, telegraph, or pipe line should be valued as a whole, and if any apportionment is made it should be an apportionment of the average valuation per mile, or of the avails of taxation. This plan has been adopted by a large majority of our sister States."

In New York the joint committee on taxation of the legislature of 1890 looked with favor upon the abolition of the local property tax on railroads, but found it impracticable to recommend its abolition. The committee said:

"We believe, as a fundamental principle of government, that a political entity, in this case the State, should have an independent jurisdiction, into which it alone may go, and from which it may realize sufficient revenue for its own support. Another result of the separation of the State from local taxation would be the strict accountability to which local officials would be held in raising and disbursing moneys used for the support of local government."

"The committee, therefore, has sought for subjects of taxation which, together with the indirect revenue now collected by the State, will be sufficient for the support of State government."

"It was believed at the outset that this purpose might be accomplished by withdrawing from local taxation steam and surface railroads, telegraph, telephone, electric light and power companies, gas, water, and pipe-line companies, and banks and

trust companies, and by levying upon such corporations a definite rate of taxation for State purposes. In order to determine the feasibility of such a plan it became necessary to ascertain what proportion of the total tax raised by the political divisions of the State upon the property of such corporations was paid by them, and the committee with very great labor caused to be gathered the entire sums paid by the corporations named in three of the counties of the State, to wit: Oswego, Cattaraugus, and Chenango. The result was indeed startling in many of its aspects. It was found that in the county of Oswego, in the year 1897, the sum of \$627,759.82 was raised by taxation for all purposes, and that of this sum the steam railroads alone paid 9.03 per cent, and that in the county of Cattaraugus, in the year 1898, \$484,358.22 was raised by taxation for all purposes, and of this sum the steam railroads alone paid 11.89 per cent, and that in the county of Chenango, in the year 1897, \$317,837.69 was raised by taxation for all purposes, and that of this sum the steam railroads alone paid 7.97 per cent. In some school districts in the counties named the steam railroads alone paid 50 per cent of the taxes. While the labor involved in the exact ascertainment of the taxes paid by the corporations named was so great that more counties could not be analyzed, it is safe to say that these three counties furnish a criterion for the rest of the State."

The following table will summarize the committee's investigation on this point. It must be borne in mind that the figures will have to do only with such taxes as are locally assessed;

County.	Total tax levied	State tax	Local tax <i>a</i>	Per cent State to total.	Ratio of local to total tax.
Oswego <i>b</i>	\$627,759.82	\$65,397.85	\$562,361.97	10.42	<i>Per cent.</i> 89.58
Chenango <i>b</i>	317,837.69	40,713.68	277,094.01	12.82	87.18
Cattaraugus <i>c</i>	484,358.22	49,038.99	435,319.23	10.13	89.87
Total	1,429,955.73	155,150.52	1,274,775.21	10.85	89.15

Taxes on real and personal property of—				
County.	Railroads	Proportion of total paid by railroads.	All corporations <i>d</i>	Proportion of total paid by all corporations.
		<i>Per cent.</i>		<i>Per cent.</i>
Oswego <i>b</i>	\$56,689.23	9.03	\$85,193.31	13.57
Chenango <i>b</i>	25,311.67	7.97	44,482.80	13.99
Cattaraugus <i>c</i>	57,506.43	11.89	97,804.49	20.19
Total	139,506.33	9.76	227,480.63	15.90

a County, city, town, village, local school, and highway taxes.

b Figures for 1897

c Figures for 1898

d Steam railroad, street railroad, telegraph, telephone, electric light, power, gas, water, pipe line, and trust companies, and banks.

The Maine tax commission viewed with disfavor the separation of State and local taxation. They say:

"It is believed by many that it may be possible to assess upon corporations an amount sufficient for State expenses, and thus the necessity for a property tax for State purposes be avoided. If this were possible within the limit of just taxation of corporations, it would, to a considerable extent, relieve the general tax burden of the people. But there are other questions besides that of a slight decrease of taxation to be considered in this connection. Would it be a wise and salutary thing to sever the financial ligament which now closely unites the State government with the town, and, in fact, with every individual? Would it be beneficial to the people at large to have the power and influence of corporations so immensely extended as they would be in case the State were dependent alone on them for its revenues?

"It appears to us that such a policy would not be wise, and that to resort to it would be to sacrifice an important principle, a paternal and unifying element of State government, at a very cheap price."¹

¹ Report of Maine Tax Commission of 1889, p. 56.

Upon the matter of a distribution of a portion of the proceeds of State taxation among the local districts, the Pennsylvania tax conference said:

"In this State we are drifting into a practice of collecting revenue into the State treasury far in excess of the needs of the State government, with the purpose of distributing the surplus among the townships and municipalities in aid of local taxation. The wisdom of such a policy is questionable. It is an unnecessary circumlocution, and exposes the public revenues to additional dangers of waste and misappropriation. There will be an irresistible tendency in the legislature year by year to increase the appropriations in aid of local charities and other objects whose benefits are not evenly diffused, thus decreasing the amount available each year for schools and roads. The honest and economical administration of public affairs can be better promoted, and the self-reliance of the people better preserved, by remanding the whole process of collecting and disbursing local public revenues to the local authorities as far as possible. To centralize the fiscal department of all branches of civil administration at the capital, making the local authorities dependent on the legislature for the means to defray their necessary expenses, is a vital thrust at the doctrine of local self-government.

In New Jersey the act of 1884, among other things, provided for the taxation of "main stem" or "first-class property," and for property other than main stem or "second-class property," by State authorities, with a subsequent distribution of the tax on "second-class property" among the local districts. "This system of taxing property, used for railroad and canal purposes, may be described in a sentence as a property tax by the State, through State assessors or officers, in its entirety as a unit, for the use of the State, with a distribution of a part of the tax by the State to the local taxing districts for the support and maintenance of the local or municipal governments."¹

The New Jersey tax commission of 1897, whose report deals largely with local taxation, concludes that the method of distribution works injustice in that State. The commission says: "Assuming as a fact that the property used for railroad and canal purposes does pay as much tax, that is, as many dollars, relatively to a like amount of property owned by individuals and other corporations, it does not follow as a logical sequence that the distribution by the State to the local taxing districts is just or fair. On the contrary, it has been shown by evidence and facts before us that the act of 1884 in its practical operation works some injustice to the local districts of the State, not only in the relative amount of land withdrawn completely from the local or municipal tax comprised in the 'main stems' commonly known as first-class property, but also in the amount of tax which the local taxing districts receive from the land commonly designated as second-class property."²

And further: "A study of local or municipal taxation in the United States will show that land is the chief source, the principal object of local taxation. * * *

"Whenever this principle is violated in a system of taxation, it throws the local or municipal governments out of joint. In the city of Washington, where the land occupied by the buildings of the National Government was exempt from taxation, the burden became so onerous on the individual owners of land that at one time it threatened financial disaster to the District of Columbia, until the Federal Government assumed part of the expenses of the local government, or contributed to such expenses in lieu of the land which was held by the Federal and foreign governments exempt from local or municipal taxation. The lands used for railroad purposes in the principal terminal cities of the United States, such as New York, Boston, Buffalo, Chicago, Philadelphia, and Pittsburg, are taxed locally for the use of the local governments."³

* * * "When it is shown that * * * the geographical position of some of the local taxing districts in the State is such that in those taxing districts it is necessary, for the proper and legitimate development and operation of the railroad companies, to acquire and hold, in addition to their main stem, large tracts or blocks of land, there is no reason in good morals or sound principles of taxation why the State should deprive the local municipalities of the taxes derived from tracts or blocks of land held and used for railroad purposes, in addition to the main stems, and known as second-class property under the act of 1884. It is the illogical result of an otherwise logical system."⁴

¹ Report of the New Jersey tax commission of 1897, p. 9.

² *Ibid.*, p. 13.

³ *Ibid.*, p. 18.

⁴ Report of the New Jersey tax commission of 1897, p. 20.

In Massachusetts the method of distribution followed by that State was regarded with disfavor by the tax commission of 1897.¹ The commission says:

"There are, however, some questions as to the present mode of distributing the proceeds of the taxes on corporate excess to which we think it necessary to call the attention of the general court. They are distributed, it will be remembered, among the several cities and towns according to the ownership of shares by their inhabitants. We have already referred to some anomalous results of this method of distribution. It causes disproportionately large sums to be turned over to a few towns much resorted to by people of means. But, even apart from these difficulties, there are others which make it doubtful whether under any circumstances corporate excess should be made a direct source of revenue to the towns and cities.

"With many corporations there is a very large corporate excess. All railways, by an old decision of the courts, are exempt from local taxation on their right of way; and, in any case, the value of their real estate and machinery, taxable locally, is not a great proportion of their total valuation. This is even more strikingly true in the case of street railways. The cities and towns where the shareholders happen to reside, perhaps distant from the places where the enterprises are carried on, get the main benefit of the taxes."²

In West Virginia the railroad taxes are paid into the State treasury, and a portion locally distributed upon the basis of the situs of the railroad property taxed. The New Hampshire method is a cross between the Massachusetts and West Virginia methods. In that State the tax on the general property of railroads (excepting real estate not in the right of way, which is locally assessed and taxed) is paid to State officials, who subsequently distribute among the towns one-fourth of the proceeds of the tax according to the value of railroad property in those towns, and of the residue, to each town such proportion as the number of shares held by its residents bears to the total capital stock of the various railroad companies.³

In Wisconsin State court decisions have been adverse to the taxation of railroad property, whether by State or local authorities,⁴ and a similar state of affairs now exists in Minnesota.⁵

E. UNIFORMITY IN RAILWAY TAXATION AMONG THE STATES.

The table which follows will throw some light upon the question of the extent to which current State tax methods approach uniformity in their treatment of the individual railway systems of the country. Three of the trunk lines have

¹ The following table, taken from page 67 of the report of the Massachusetts tax commission of 1897, will show the effect of the distribution carried out in that State

	Population, 1885.	Tax distrib- uted, 1896.	Tax dis- tributed per capita.
State	2,500,183	\$2,585,795.63	\$1.03
Thirty-two cities	1,635,767	1,778,359.23	1.08
All towns	864,416	807,436.40	.93
Eighteen towns	62,529	332,310.77	5.31
Three hundred and three towns	801,887	475,125.63	.59

The 18 selected towns get five times as much as the average for the State, per head of population, of the proceeds of the tax on corporate excess. As compared with the remaining towns, less fortunate in the ownership of securities by their inhabitants, these few towns get nearly ten times as much per head of population.

² Report of Massachusetts tax commission of 1897, p. 70.

³ The following table will illustrate the working of the New Hampshire method of distribution. The figures for population are compiled from the census returns of 1900; those for the amounts of the tax distributed, from the New Hampshire treasurer's report, June 1, 1900:

	Population, 1900.	Tax distrib- uted, 1899.	Tax dis- tributed per capita.
All cities and towns in State	411,598	\$210,105.94	\$0.51
Fifty-eight towns and cities	114,558	13,296.66	.11
Twenty-seven towns and cities	153,882	84,921.96	.55
Six towns and cities	43,139	90,278.09	2.09

⁴ For a history of this question see *Wisconsin Central Railroad Co. v. Taylor County* (52 Wis., 37).

⁵ *Stearns v. Minnesota*, decided in the United States Supreme Court, December 3, 1900.

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been chosen as typical of what is probably the state of affairs throughout the country.

Railway system.	Total earnings from operation. ¹	Operating expenses. ²	Net earnings. ¹	Taxes. ³	Ratio of taxes to net earnings.
					<i>Per cent.</i>
Erie:					9.01
Group II.....	\$75,158,880	\$52,120,853	\$23,038,027	\$2,076,911	11.57
Group III.....	29,453,793	22,304,853	7,148,940	827,725	
Total.....	104,612,673	74,425,706	30,186,967	\$2,904,636	9.62
New York Central: ⁴					12.62
Group II.....	113,378,974	90,420,837	52,958,137	6,685,576	10.21
Group III.....	137,648,247	95,359,669	42,288,578	4,320,727	
Total.....	251,027,221	185,780,506	95,246,715	\$11,006,303	11.55
Pennsylvania:					7.55
Group II.....	263,422,867	180,297,889	83,124,978	6,277,178	13.10
Group III.....	122,407,996	81,636,802	40,771,194	5,343,189	
Total.....	385,830,863	261,924,691	123,906,172	\$11,620,367	9.38

¹ Aggregate figures for 1897, 1898, and 1899, compiled from the statistical reports of the Interstate Commerce Commission, territorial Groups II and III.

² The bulk of taxes on Erie lines is paid in New Jersey, New York, Pennsylvania, Ohio, and Indiana.

³ Including the New York Central and Hudson River, Lake Shore and Michigan Southern, and Michigan Central lines, the Michigan Central including 380.04 miles not in the United States.

⁴ The bulk of taxes on New York Central lines is paid in New York, Ohio, Indiana, and Michigan.

⁵ The bulk of taxes on Pennsylvania lines is paid in New Jersey, Pennsylvania, Delaware, Maryland, Ohio, and Indiana.

The following table¹ will show the effect of existing tax methods upon roads situated in different sections of the country, as grouped in the statistical report of the Interstate Commerce Commission:

Group.	Earnings from operation	Operating expenses.	Net earnings.	Taxes	Ratio of taxes to net earnings.	Index number.
					<i>Per cent.</i>	
Group I.....	\$88,590,118	\$61,025,257	\$27,564,861	\$4,690,567	17.01	100.0
Group II.....	315,653,188	206,144,643	109,508,545	9,254,382	8.45	49.7
Group III.....	189,018,091	133,306,711	55,711,377	7,073,560	12.69	74.6
Group IV.....	52,562,801	33,784,443	18,778,358	1,693,866	8.96	52.7
Group V.....	100,295,955	68,149,233	32,146,722	3,556,144	11.06	65.0
Group VI.....	267,340,002	163,560,566	103,779,436	9,629,652	9.28	54.5
Group VII.....	51,869,427	29,221,577	22,647,850	1,888,053	8.33	40.9
Group VIII.....	113,419,414	74,331,815	39,087,599	4,545,117	11.63	68.3
Group IX.....	53,048,923	37,147,422	15,901,501	1,338,714	8.41	49.4
Group X.....	81,812,169	50,297,299	31,514,870	2,677,577	8.41	49.4
Total.....	1,313,610,118	856,968,999	456,641,119	46,337,632	10.01	58.8

¹ Figures compiled from the statistical report of the Interstate Commerce Commission, covering the year ending June 30, 1899, the territory covered by the different groups is outlined on page 36.

CHAPTER III.

DOUBLE TAXATION.

The problems arising out of double taxation are essentially the product of the complex industrial system of the present day. New complications in property rights have arisen, which, under the continued application of the principles of the property tax, have resulted in much injustice and confusion.

Double taxation arises from two sources—either from the repeated taxation of the same class of subjects by the same governmental authority, or from the taxa-

tion of the same class of subjects by competing authorities. The latter is the outcome of the modern mobility of capital and labor; the former results largely from the fact that property and certificates of ownership in property in their various forms have both become the objects of taxation.

It might be well to remark at this point that double taxation is not necessarily unjust taxation. This fact is often overlooked in the use of a "phrase which is itself brimful of duplicity and highly convenient for sophistical reasoners."¹

A. DOUBLE TAXATION BY THE SAME JURISDICTION.

1. Double taxation of property and indebtedness.—It is almost superfluous to state that this question arises only under the property tax. One of its phases is the taxation of corporate property and corporate indebtedness.

In the taxation of individuals it is not an unusual practice in the assessment of property either to deduct indebtedness from the final valuation or to exempt indebtedness from taxation when the total property is taxed. This is done, for instance, in the case of mortgages on real estate in several States, to avoid what might otherwise be unjust double taxation. The analogy, however, must not be carried over into the taxation of the capital stock and indebtedness of a corporation; a distinction between corporate and individual indebtedness must not be overlooked. In the case of individuals it would generally be unjust to tax both property and mortgage debt, because the real taxable property, when the mortgage is taxed, is only the surplus above indebtedness. Corporate bonded debt is a portion of the corporate capital. To tax indebtedness of this character in addition to the capital stock is not double taxation, for the capital stock is representative of only a portion of the corporate property. To tax corporate property as well as indebtedness, however, is another question, which gives rise to considerations very similar to those involved in the taxation of both property and capital stock. This will come up later.

It is not uncommonly the practice among the States to forbid the exemption of funded debt when capital stock is taxed. A number of States, notably California, Connecticut, Illinois, and Maryland, permit individuals to deduct indebtedness, but forbid the same practice on the part of corporations. This policy was upheld in the California courts in a decision which pointed out clearly the distinction between individual and corporate indebtedness.² The Utah statute which forbids the deduction of bonds in the listing of credits illustrates an analogous practice.

There is really no injustice in such a policy. Injustice, in fact, in most cases arises from the opposite practice. As an illustration of this fact may be cited the case of "a company which never paid a dollar of State tax upon capital stock prior to 1895. The New York, Pennsylvania and Ohio Railroad Company, with a capital stock of \$41,999,350 and \$129,853,080 bonded and other indebtedness outstanding, the cost of the road and equipment being \$170,987,500, was the owner of 429.59 miles of railroad, extending from Salamanca, N. Y., to Dayton, Ohio, it being the connecting link between the east and the west of the Erie Railway system and competing with the Lake Shore, Baltimore and Ohio, and Pennsylvania railroads. Of the total mileage, 126.18 were within the State of Pennsylvania. As stated before, this company had never paid to the State a tax on capital stock or bonds, because it was claimed that this property was 'bonded' far beyond its actual value, and therefore the capital stock was worthless. The bonds were owned by nonresidents of the State, and therefore not taxable. * * * This case is given as an example, showing how many corporations have heretofore escaped taxation by reason of a funded debt, which is capital invited by the stockholders with the hope that they will derive additional benefit from such added capital."³

In New York, as concerns the local taxation of capital stock, it has been held by the courts that in estimating the value of the capital stock of a corporation its indebtedness is to be considered; but the valuation having been fixed, only the value of the real estate and not the amount of indebtedness is to be deducted therefrom.⁴ Where, however, the "capital stock is of no actual value" because of indebtedness exceeding assets, it must not be assessed.⁵ This is applicable only to domestic corporations.

¹ Report of the Joint Committee on Taxation, New York legislature, 1900, p. 10.

² Central Pacific Railroad Co. v. Board of Equalization, 60 Cal., 35.

³ Report of the Auditor General of Pennsylvania for 1897, p. vi.

⁴ People, ex rel. Broadway and C. R. R. Co., v. Commissioners of Taxes (1 Thomp. & C. 635).

⁵ People, ex rel. West Side and Yonkers Railway Co., v. Commissioners of Taxes (31 Hun., 32).

The taxation of the interest on bonds involves the same principle as the taxation of the bonds themselves. Interest on bonded debt as fully as dividends on stock constitute an integral part of the corporate income and are, as much as the latter, a product of the corporate investment.

2. Double taxation of property and stock.—A second phase of the double taxation of the same class of subjects by the same jurisdiction is the double taxation of property and of capital stock. To tax a corporation on its property and at the same time to levy a tax on its securities, as if they were substantive and independent property, is in effect unjust double taxation. It can not be denied that corporate property and capital stock are not identical. As brought out in *Commonwealth v. Hamilton Manufacturing Co.*,¹ "the market value of the shares of a corporation * * * does not necessarily indicate the actual value or amount of property which a corporation may own. The price for which all shares would sell may greatly exceed the aggregate of the corporate property, or it may fall very far short of it. Undoubtedly the amount of property belonging to a corporation is one of the considerations which enter into the market value of its shares, but such market value also embraces other essential elements. * * * It is the estimate put on the potentiality of a corporation, on its capacity to avail itself profitably of the franchise, and on the mode in which it uses its privileges as a corporate body, which materially influences and often controls its market value."

While this is true, it will readily be granted that the value of the property is bound up in the value of the capital stock, i. e., that the property is at least a part, if not the whole, of the corporate investment which capital stock is supposed to represent. So far as the two are representative of the same taxable capacity, therefore, the taxation of both by the same authority would be unjust double taxation.

In general, the legislation and legal decisions of the various States have been adverse to double taxation of this character. The courts of Maryland have from the beginning followed the principle that a tax on capital stock covers a tax on property, and that, therefore, the taxation of both at the same time is unjust. In a number of States (e. g., Alabama, Illinois, Indiana, and Vermont) this principle is recognized and only the excess of capital stock over property is taxed. A recent law in Wyoming provides that the property of domestic corporations shall be assessed and taxed in the same manner as the property of individuals; "but the capital stock of such corporations, representing, as it does, simply the interests of the owner thereof in the property of such corporation, shall not be taxed." In California the taxation of both property and capital stock has been declared by statute to be double taxation, so that neither the corporation nor the shareholder is taxed on capital stock or shares. Colorado follows the dictum that the taxation of tangible property and of shares of stock is not double taxation. The opposite is the practice in Illinois, as well as in Florida and Idaho, where it has been declared that, when corporations are taxed on their property, shares of stock in those corporations shall not be taxed. In Kansas, shares of stock are taxable to holders after property deductions have been made. In New Jersey, shares of stock are not assessed against holders when the corporation is taxed on its property and franchise. In New Mexico, statute provision declares that when a corporation is taxed, either on its property or on its capital stock, shareholders are not to be taxed on their shares. The same provision is made in South Carolina, Tennessee, Utah, Washington, West Virginia, and a few other States; though in Tennessee a legal decision² arrives at the conclusion that the State may lay such a tax, notwithstanding the statute to the contrary. In all of these cases, however, a distinction must be drawn between capital stock and shares in the hands of holders. This will be brought up again later.

Early legal opinion in Pennsylvania was not adverse to a tax on both corporate property and capital stock. In *Pittsburg, etc., R. R. Co. v. Pennsylvania*,³ the court delivered the opinion that "the power of the legislature is as ample to tax twice as to tax once, and it is done daily, as all experience shows. Equality of taxation is not required by the constitution." But the general trend of subsequent decisions has been in the opposite direction. For instance, it has been held⁴ that the capital stock of corporations representing tangible property outside of Pennsylvania is not taxable in Pennsylvania; and further,⁵ that "capital stock represents the franchises as well as the property of the company," affirming several previous

¹ 12 Allen, 303.

² 3 Pickle, 406.

³ 66 Pa., 77.

⁴ *Commonwealth v. Standard Oil Co.* (101 Pa., 119) and *Commonwealth v. American Dredging Co.* (122 Pa., 387).

⁵ *Commonwealth v. Delaware, Susquehanna and Schuylkill R. R. Co.* (165 Pa., 44).

decisions to the effect that the property of a corporation essential to the carrying on of its business is included in its capital stock and must not, therefore, be separately taxed.

Those State methods which tax capital stock after making deductions for the value of property locally taxed (as in Massachusetts), act as a discrimination against individuals, which is not necessary as a guard against double taxation. Individuals are taxed on their property by both State and local authorities. The analogous practice in the case of corporations would be local taxation on its present basis, and State taxation of capital without property deduction. The decision in *Commonwealth v. Cemetery Co.*¹ very well expresses this view: "A tax on capital stock is a tax for State purposes only, so that local taxation upon the property in which the capital stock of a company is invested is not double taxation."

B. DOUBLE TAXATION BY COMPETING JURISDICTIONS.

This problem is one in which possible complications are numerous. It is one which may arise in its different forms between foreign States, separate commonwealths, or separate local districts. In the present instance those questions which come up among the several States are the important ones.

A variety of practice has sprung up in this respect, and a practical solution of the difficulties of the situation is by no means simple. Professor Seligman believes that the easiest way out of the confusion would be that of levying the tax in those districts where economic interest is involved. Such a plan would necessitate a division of the tax between the place of domicile of a corporation and the place or places in which business is done and earnings derived. With transportation companies such a plan might be followed out somewhat in the following manner: Regarding the domicile of the company as the place of its incorporation, let the incorporation tax—possibly an annual sum—represent that portion which should go to the State of domicile of the corporation; then let the main tax, or tax proper, be paid to the State or States in which the corporate business is carried on. Such a plan could be completely realized only after substantial interstate agreements have been reached or the National Government has taken a hand in the matter. There is thus far no complete uniformity in the practice of the States on any of the various phases of the question.

1. Interstate taxation of corporate property.—The first phase of the problem arises in the interstate taxation of corporate property. As concerns real estate the interstate feature of the problem is a simple one, the universal rule being that such property shall be taxed where situated. An early New York decision² to the effect that real estate is not to be assessed at a company's principal place of business, but where it lies, shows the general attitude on this question. The difficulty arises in the taxation of personal property. Here the practice varies between the taxation of this class of property according to its actual situation, as well as according to the residence or domicile of its owner; i. e., in legal terminology, according to the principle of *situs* or that of *mobilia personam sequuntur*.

In New York, property located out of the State can not be made the subject of taxation by its power; and, conversely, the personal property of a nonresident, situated within the State, may be taxed by it, except as modified by statute provision.³ It has been further held, however, that to exempt the personal property of a corporation because it is outside of the State, the change of location must be permanent and unequivocal.⁴ A similar decision has been reached in Illinois.⁵ In Missouri, likewise, "the actual situs of personal property, and not the domicile of the owner, determines under the law where it shall be taxed."⁶

In Pennsylvania the same principle has been recognized in the taxation of capital stock. The court has decided that capital stock invested in real estate and in other railroads outside of the State, as well as in vessels, barges, etc., wholly used outside of the State, is not subject to taxation in Pennsylvania, but in the State where it exists and is used.⁷ In Maryland, Kansas, Michigan, South Carolina, and other States the principle of *situs* is likewise applied. As stated in a prominent

¹ 170 Pa., 227.

² *Hudson River Bridge Co. v. Patterson* (11 Hun., 527).

³ *People ex rel. Hoyt v. Commissioners of Taxes* (23 N. Y., 224). It would appear from the decision that ships at sea, registered at a port within the State, and consequently having no situs elsewhere, are justly taxable to the resident owner.

⁴ *People ex rel. Pacific Mail Steamship Co.* (64 U. S., 541).

⁵ *Supervisors, etc., v. Davenport* (40 Ill., 197).

⁶ *St. Louis v. Taylor's Admrs.* (47 Mo., 594).

⁷ *Commonwealth v. Delaware, Lackawanna and Western R. R. Co.* (145 Pa., 96).

legal treatise,¹ "Personal property, permanently remaining in a State, has a situs therein for the purposes of taxation although belonging to a foreign corporation."

In other States, however, the practice of taxing domestic companies on their entire property, regardless of its location, is in some cases applied, so that the same property is taxed twice by different States. With railroads the difficulty is no longer of particular significance so far as concerns tangible personality subject to measurably permanent location, but with rolling stock the question is more complicated. The difference between the two kinds of property is recognized in the Tennessee law taxing railroad companies. Real estate and personality having stable location are taxed as "localized property," and assessed in the locality where situated; property having no actual situs—i. e., rolling stock—is known as "distributable property," and is assessed against the company employing it on a pro rata mileage basis. In those States where rolling stock is assessed as part of a general railroad-property valuation, the same method is generally employed.

In *Marye v. Baltimore and Ohio Railroad Co.*,² it was decided that the situs of rolling stock may be fixed in whatever locality such property may be brought and used by its owner by the law of the place where it is found. In this particular case the right of Virginia to tax the rolling stock of the Baltimore and Ohio Railroad Company was not allowed on the ground that the Virginia law had application only to domestic corporations. But in respect to the general right of a State to tax the rolling stock of foreign corporations employed within its limits, the court said that "it would certainly be competent and legitimate for the State to impose upon such property, thus used and employed, its fair share of the burdens of taxation imposed upon other similar property used in the like way by its own citizens."

In the State railroad freight tax cases,³ the court, referring to the principle of *mobilia personam sequuntur*, says that "it may be doubted very reasonably whether such a rule can be applied to a railroad corporation as between the different localities embraced by its line of road; * * * the rule is merely the law of the State which recognizes it * * * [and] therefore, subject to legislative repeal." In *Baltimore and Ohio Railroad Co. v. Allen*,⁴ it was held that in the case of a leased line, rolling stock used thereon has its situs there. In *Pullman Palace Car Co. v. Twombly*,⁵ it was decided that cars used on a railroad, and owned by a nonresident of any State in which they are employed, are not exempt from taxation in that State by reason of their being instrumentalities used exclusively for interstate commerce.

From these decisions it will be seen that the power of the States to tax rolling stock used at all within their borders is not subject to narrow restrictions. The right to do this upon a pro rata mileage basis in the case of companies engaged in interstate commerce is undisputed; and State practice, as already indicated, is following this plan.

The rule as to vessels engaged in foreign or interstate commerce is, that their situs for purposes of taxation is their home port of registry, or if unregistered, the residence of their owner.⁶ Somewhat analogous is the Pennsylvania decision⁷ that corporate property like barges, dredges etc., without permanent location in any place, is taxable only in the State of the corporation's domicile.

2. Interstate taxation of corporate securities.—The second phase of the double taxation of the same class of subjects by competing authorities is the interstate taxation of corporate securities. The evils resulting from double taxation of this character have been so generally recognized as to call for express legislation on the subject in a number of instances. In New York the law of 1880 (chap. 42) provided for the taxation of corporations on their entire capital stock. In 1885 this was so amended as to extend only to that portion of the capital stock employed in business within the State. A court decision⁸ in 1887, however, on the basis of the law of 1880, held that the entire capital stock, and not the portion of it employed within the State, was the legal measure of business done within the State. Subsequent legislation came around to the principle of the law of 1885 for both foreign and domestic corporations.

In Pennsylvania the practice has uniformly been that of taxing only that portion of the capital stock represented by business done in the State. This was given judicial sanction in *Commonwealth v. Standard Oil Co.*, where it was held

¹ *Pierce on Railroads*.

² 127 U. S., 117.

³ 92 U. S., 607.

⁴ 22 Fed. Rep., 376.

⁵ 23 Fed. Rep., 658.

⁶ *Hays v. Pacific Mail Steamship Co.* (17 Howard, 596).

⁷ *Commonwealth v. American Dredging Co.* (122 Pa., 386).

⁸ *People v. Horn Silver Mining Co.* (105 N. Y., 76).

that the "power of taxation is limited to subjects within the jurisdiction of the State," and that the laws of the State were not intended to tax the entire capital stock of a foreign corporation, "but to tax the property of such company, that is, its capital stock, to the extent that it brings such property within the State in the transaction of its business." In the case of transportation companies this has generally been determined upon a mileage basis. The validity of this method as applied in Pennsylvania was affirmed in *Erie Railway Co. v. Pa.*¹ and again in *Pullman Palace Car Co.*,² where it was held that the capital stock of a transportation company, represented by its equipment used interchangeably within and without a State, is taxable upon a pro-rata mileage basis.

The same conclusion had already been reached at a much earlier date in *Minot v. P. W. & B. R. R. Co.*,³ where it was held that the taxation of capital stock on the pro-rata mileage basis is "a rule which, though an arbitrary one, is approximately just, at any rate is one which the legislature of Delaware was at liberty to adopt."

In Connecticut, where both capital stock and indebtedness are taxable, transportation companies are assessed upon the proportional mileage basis; and in Massachusetts, where the corporation tax law generally applies to entire capital stock, transportation companies are assessed on only a mileage proportion.

The application of this method in the taxation of telegraph companies has been upheld in the United States Supreme Court⁴ as analogous to its use in the case of railroads. Upon the whole, the method has been quite satisfactory in avoiding interstate complications, though from the standpoint of justice in apportionment a ton-mileage basis might prove preferable in the case of railroads. Administrative difficulties might, however, counterbalance any advantages from this source. In the case of telephone companies, the number of instruments in use has already been adopted in certain cases, as not only the more just method, but the most practicable from the administrative standpoint.

Just at present the practical usefulness of the method in its application to the taxation of express companies, as provided for in the laws of several States, is being threatened in a contention which is now pending in the Federal court in Indianapolis, and which is likely to reach the United States Supreme Court for final determination. One of the express companies operating in Indiana claims that under the Indiana law of 1893, providing for the taxation of these companies, the State board of tax commissioners, in arriving at the value of capital stock subject to taxation, shall take into consideration "its entire mileage—ocean, lake, and river, foreign and domestic," and that this valuation shall be that proportion of the aggregate value which the length of its lines and routes within the State of Indiana bears to the whole length of the lines and routes of the company—ocean, lake, and river, foreign and domestic.⁵ Should this contention be upheld by the courts, the taxable value would be so materially reduced as to afford a very insignificant revenue. A more explicit statement in the law, as to what is meant by "such lines or routes as are outside the State of Indiana," might have avoided this difficulty.

In certain States, as in Illinois, the endeavor to avoid the repeated State taxation of capital stock has resulted in the exemption of the capital stock of foreign corporations on the presumption that they have already been taxed on their capital stock in the State of their domicile. In other States, as in Rhode Island, shares of stock in a corporation are not taxable when the corporation is liable to taxation in another State; in Vermont the law goes even further and provides that shares in a corporation shall not be taxed when either that corporation or the holders of shares in that corporation are taxed in another State.

One of the phases of the interstate taxation of corporate capital, which was referred to in an earlier chapter, is the question of the taxation by a State of that portion of a corporation's capital stock and bonded debt which is held by nonresidents of that State. On this question the Supreme Court of the United States has made a distinction between bonds and shares of stock which has been fruitful of many difficulties in the State taxation of corporate bonded debt.

So far as concerns the taxation of capital stock or of shares of the same, the United States courts have uniformly maintained, in line with the decision in the Delaware Railroad tax case, that a State tax on shares of stock, even though

¹ 21 Wall., 492.

² 141 U. S., 18.

³ 18 Wall., 492.

⁴ *Western Union Telegraph Co. v. Mass.* (125 U. S., 580).

⁵ Biennial Report of State Board of Tax Commissioners of Indiana, 1899. A recent letter (Feb. 1, 1901) from the auditor of State gives the information that the case has made very slow progress. He states that it is the intention of the State to contest for its rights, even if it is necessary to go to the United States Supreme Court.

held by nonresidents of a State, is a tax on the corporation and not on the stockholder, and is therefore valid. In *New Orleans v. Houston*¹ it was further held that the assessment of a tax upon the shares of holders appearing on the books of a company, which the company is required to pay irrespective of any dividends or profits payable to the shareholder out of which it might repay itself, is substantially a tax upon the corporation itself. In *United States v. Railroad Company*,² however, the court held that a tax on dividends or interest paid by a corporation is a tax on the income of the stockholder or the bondholder and not on the income of the corporation. The state of the law in the taxation of capital stock (or of the shares constituting that capital stock), therefore, is that capital stock may be taxed by a State regardless of the residence of the holders of shares.

The legal status of a tax on bonded debt (or, as the courts would say, on the bonds which constitute it) has been quite different. Here it has been held that a State can not tax the bonds of a corporation held by nonresidents, on the ground that bonds are debts owed by a corporation, the property of its creditors, and therefore taxable only in the State of the domicile of those creditors.³ In *Bells Gap Railroad Company v. Commonwealth*,⁴ as distinguished from the decision in *New Orleans v. Houston*, the court decided that a tax on bonds, though paid by the corporation, "is a tax on the bondholder and not on the corporation," in which the matter of collection was simply a matter of convenience.

It is difficult to see, from the economic standpoint, why bonds should be treated differently from stocks in the matter of taxation. From this point of view the early Pennsylvania decision in *Maltby v. Reading and Columbus Railroad Company*⁵ would seem to have the sounder basis. In this case the court says: "Corporate stocks are property here though owned beyond our jurisdiction. * * * But loans are not stocks, and yet the loans and stock of a railroad company resemble each other in many respects. Both are subscribed under the authority of a special law, and both are so far capital that they are employed for the same general purpose. The certificate of stock * * * is mere paper evidence of property existing here. * * * Is the bond * * * anything more? * * * It is founded upon and derives its value from a mortgage, but that mortgage is here, and the franchises and properties which the mortgage binds are here within our jurisdiction. * * * Now, although loans and stocks are distinguishable for many purposes, yet the legislature created no very great solecism in treating loans as taxable property within our jurisdiction. * * * Corporate loans, though in some sense mere debts, are like moneys at interest, taxable as property."

If, however, the decision of the United States Supreme Court in *Savings Society v. Multnomah County*⁶ should be held to apply to corporate bonds as well as to individual mortgages, the former attitude of the court will have been reversed.⁷

But leaving the Multnomah County case out of consideration, the course of the Supreme Court has not been entirely consistent. In *Railroad Company v. Collector*,⁸ a case which arose over the Federal revenue law of 1864 taxing dividends, coupons, etc., the court held that the law was not invalid because under its provisions the tax was withheld from the dividends and interest of stockholders and bondholders not residing in this country. The same decision was reached in *U. S. v. Erie Railway Co.*⁹ In this case Justice Field points out in a dissenting opinion the conflicting nature of the above two decisions with that in *U. S. v. Railroad Co.*,¹⁰ where it was held that such a tax was a tax on the creditor and not on the corporation, making the tax under the law in question, according to the opinion arrived at in the case before the court, a tax on nonresident aliens.

As matters stand, leaving the Multnomah County case still in doubt, the States may tax only that portion of a corporation's bonded debt which is held by residents. Under the Pennsylvania law, as laid down by the courts,¹¹ the burden of proof as to the residence of its bondholders rests with the corporation—i. e., corporate loans in the operation of the law are assumed to be held by residents in the

¹ 119 U. S., 265.

² 17 Wall., 332.

³ *Railroad Co. v. Pa.* (15 Wall., 300).

⁴ 134 U. S., 239.

⁵ 52 Pa., 140.

⁶ 169 U. S., 121.

⁷ See p. —.

⁸ 100 U. S., 595.

⁹ 106 U. S., 327.

¹⁰ 17 Wall., 322. The same general doctrine is to be found in *Haight v. R. R. Co.* (6 Wall., 15), and in *R. R. Co. v. Jackson* (7 Wall., 262).

¹¹ *Commonwealth v. Lehigh Valley R. R. Co.* (129 Pa., 429).

absence of proof to the contrary. This advantage is more than counterbalanced, however, by the disadvantage under which the State is placed in the collection of the tax on resident holders of bonds in a foreign corporation; for the courts of the State have held that a State can not, consistently with the Constitution of the United States, impose upon a foreign corporation, when paying the interest on its bonds in another State, the duty of deducting from the interest paid out, the amount assessed upon that portion of the bonded capital held by residents of the first-mentioned State.¹

Should future developments along the line of the *Multnomah County* case fail to solve these difficulties, there still remains a way of partially avoiding them by adopting the practice of Connecticut in the matter. There transportation companies are taxed on a valuation equal to such portion of the market value of the capital stock and debt as is, in the economic sense, employed in business within the State. In the case of railroads this is determined upon a pro rata mileage basis.

3. Interstate taxation of receipts.—The interstate taxation of corporate receipts, earnings, or income is another phase of the double taxation of the same class of subjects by competing authorities. This question has received considerable attention at the hands of the United States courts. The first case of importance arose in 1873 over the Pennsylvania law laying a tax on merchandise according to tonnage. In this case² it was decided that any State tax upon freight taken up in one State to be carried into another State is an interference with interstate commerce, and is therefore unconstitutional. In the same year it was decided in another case³ that a State tax on the gross receipts of a railway is not unconstitutional, even though those receipts accrue in part from freights for transportation from State to State. Although the company which was thus taxed was a domestic corporation, it does not appear on the face of the decision that the court was desirous of making any express distinction between domestic and foreign corporations. The court says: "While it must be conceded that a tax upon interstate transportation is invalid, there seems to be no stronger reason for denying the power of a State to tax the fruits of such transportation after they have become intermingled with the general property of the carrier than there is for denying her power to tax goods which have been imported after their original package has been broken and after they have been mixed with the mass of personal property in the country." In the present case "the tax is laid upon the gross receipts of the company; laid upon a fund which has become the property of the company, and possibly expended in improvements or put out at interest."

Had the decision reached in this case, at least in its probable implication, been followed in subsequent cases the present difficulties which are constantly arising when a State seeks to lay a tax upon the gross receipts of a foreign corporation from business other than that transacted wholly within that State would have been avoided; but a narrower interpretation has since been put upon this decision by the Supreme Court. In a later case⁴ it was held that a tax on the gross receipts of a foreign corporation is unconstitutional if those receipts are in part the proceeds of interstate traffic. In the decision it was stated that in the earlier case the tax was upheld because the company in the controversy was a domestic corporation, and that, therefore, the tax was a franchise tax. In *Philadelphia and Southern Steamship Company*⁵ the same ground was taken; but it was further held that the decision in the *Railway Gross Receipts Tax Case* was legally unsound in so far as it was based on the analogy of goods removed from the original package (as held in *Brown v. Maryland*, 12 Wheat., 419). Other later decisions take the same ground.

In a more recent case,⁶ decided in 1891, the Maine tax was upheld on the old ground that the tax was a franchise tax, the real party in the litigation being a domestic corporation.⁷ It was implied in the decision, however, that the distinction between domestic and foreign corporations is not an absolutely necessary one. Judge Field, in delivering the opinion of the court, said:

"The privilege of exercising the franchises of a corporation within a State is generally one of value, and often of great value, and the subject of earnest contention. It is natural, therefore, that the corporation should be made to pay some proportion of the burdens of the government. As the granting of the privilege rests entirely within the discretion of the State, whether the corporation be of

¹ *New York, Lake Erie & Western R. R. Co. v. Pa.* (153 Pa., 628).

² *State Freight Tax* (15 Wall., 232).

³ *State Tax on Railway Gross Receipts* (15 Wall., 284).

⁴ *Fargo v. Michigan* (121 U. S., 230).

⁵ 122 U. S., 326.

⁶ *Maine v. Grand Trunk Railway Company* (142 U. S., 217).

⁷ *The Atlantic and St. Lawrence Railroad Company*.

domestic or foreign origin, it may be conferred upon such conditions, pecuniary or otherwise, as the State in its judgment may deem most conducive to its interest or policy. It may require the payment into its treasury each year of a specific sum, or may apportion the amount exacted according to the value of the business permitted, as disclosed by its gains or receipts of the present or past years. The character of the tax or its validity is not determined by the mode adopted in fixing its amount for any specific period or the times of its payment. The whole field of inquiry into the extent of revenue from sources at the command of the corporation is open to the consideration of the State in determining what may be justly exacted for the privilege. The rule of apportioning the charge to the receipts of the business would seem to be eminently reasonable, and likely to produce the most satisfactory results both to the State and the corporation taxed."

Whether telegraphic messages may be considered the subjects of interstate commerce might at first be questioned. Such, however, is in effect the burden of the decisions of the United States Supreme Court. These companies are in respect to the taxation of their receipts subject to substantially the same provisions as railroads. According to the decision in *Telegraph Company v. Texas*,¹ any telegraph company accepting the provisions of Title 65, United States Revised Statutes, becomes an agent of the United States as regards Government business; and any State law imposing a tax on messages is void, both as to Government messages and to messages sent out of the State. In *Ratterman v. Western Union Telegraph Company*,² a decision of general application to transportation companies was reached, to the effect that though a tax on gross receipts from both intrastate and interstate commerce is invalid, the tax is valid so far as it applies to the intrastate portion of those receipts.

To sum up, the legal status of the gross-receipts tax is substantially as follows: Domestic corporations may be taxed on their gross receipts regardless of the source of those receipts, provided they are not entirely the proceeds of interstate commerce. Foreign corporations may be taxed only on the intrastate portion of their receipts. The distinction from the legal standpoint arises out of the fact that in the former case the tax is a tax on franchise, and in the latter case a tax on business—i. e., a tax on interstate traffic—which is in violation of the interstate commerce clause in the Federal Constitution.

The receipts of the large transportation companies are to a large extent the proceeds of interstate traffic. Any transportation tax system which confines the incidence of a tax to purely intrastate receipts is in the main an inadequate one. As we have just seen, however, such is the necessary practice in the taxation of foreign corporations. As concerns the taxation of net income, it is probable that the question of the validity of such a tax would be determined upon different grounds.

C. DOUBLE TAXATION OF CORPORATION AND SECURITY HOLDER.

The simultaneous taxation of both corporation and security holder is one which may arise under competing authorities as well as under the same jurisdiction. It is a problem which may not be viewed from the standpoint of single groups of corporations (e. g., transportation companies, manufacturing corporations, etc.); from any ultimate point of view it must comprehend the entire field of investments. To tax both corporation and security holder, when a tax on investments is general, is clearly double taxation; but when a tax applies only to a special class of investments, the question can not be decided without examining into the incidence of the tax. Professor Seligman says on this point:

"If only one class of corporations is taxed, the purchaser of these corporate securities will escape taxation, because the amount of the tax is discounted in the depreciation of the security. For, let us suppose that a corporation previously untaxed has been paying 5 per cent dividends on its stock quoted at par. If a special tax of 10 per cent be imposed on these dividends, the stockholders will get only 4½ per cent. But since by the supposition other classes of corporations, or at all events other noncorporate investments, are not taxed, the price of the stock will fall to 90. People who can get 5 per cent on their capital will not ordinarily consent to take 4½ per cent. The original holders of the stock will indeed lose, but the new purchasers will not be affected, because the tax is capitalized and leads to a depreciation of the capital value of the stock. A dividend of \$4.50 on stock costing \$90 is as good as one of \$5 on stock costing \$100. A tax levied only on corporate profits, or only on some special classes of corporations, does not affect any one but those who become stockholders before the imposition of the tax. To

¹105 U. S., 460.

²127 U. S., 411.

tax the new purchaser on his security would not in such a case involve unjust double taxation.

"There is one other condition under which the simultaneous taxation of the corporation and the security holder is not unjust. In the case of a stockholder we have seen that if the tax is general, it is unjust to tax both the corporation and the stockholder. In the case of a bondholder this would ordinarily be true, when the income tax on the corporation is, for instance, deducted from the interest of the bondholder as well as from the dividends of the stockholder. In some cases, however, it happens that the corporation is willing to assume the tax as a whole, and to count the tax among its fixed charges, declaring the coupons free from tax. In such a case it is really the stockholders who pay; for the interest on the bonds is fixed, and what is not deducted from the interest must be paid out of the surplus earnings, which would otherwise ultimately go to the stockholders. The bondholders are not reached at all by such a tax, except in the very indirect way that they may be exposed to an ultimate diminution in the security of their lien. But the tax as such does not strike them at all; their property or income in the corporate bonds goes scot free. An additional tax upon the bondholder would thus really not involve any injustice to them. Here, as well as in the preceding case, a study of the real incidence of the tax becomes important. What is apparently double taxation may turn out not to be such."¹

Where, however, the practice of taxing all forms of business enterprises up to the limits set by their earning capacity prevails, an additional tax upon security holders would be unjust, upon the ground that the direct taxation of the total investment had already reached the taxable capacity of the individual sharers in that investment.

To the tax administrator, however, the fact which has greatest weight against the taxation of securities is the practical impossibility of reaching those securities for purposes of taxation. It would be needless to dilate upon the causes or character of this difficulty. It will be sufficient to state that the most prominent of the obstacles which arise in the administration of the general property tax spring from this source. The experience of all the States has made it clear that "property of this character will go into hiding, and that no penalties will prove sufficient to bring it out."

In State practice the status of the taxation of corporation and security holder is a variable one. In Arizona and California, statute provision expressly declares this to be double taxation and forbids the practice; and in many other States the practice has been guarded against either by statute or by judicial interpretation. In Pennsylvania the attitude of the courts has changed since the earliest decisions on the subject were arrived at. In *Lycoming County v. Gamble*,² it was held that "shares of stock and the capital stock of a corporation are distinct and different things," and that, therefore, both were taxable. In *Whitesell v. Northampton County*,³ it was decided that "the corporation, as an artificial person, is taxable, and * * * the stockholders are also taxable personally for the shares of stock individually held by them." In *Pittsburg, Fort Wayne and Chicago Railway v. Commonwealth*⁴ it was held that "double taxation is not unlawful in Pennsylvania." But the tendency of the court on the question has changed. In *Commonwealth v. Fall Brook Coal Company*,⁵ for instance, the court held that "a tax upon the capital stock in the hands of a corporation and a tax upon the owners of the parts or shares into which the capital stock is divided, upon their respective holdings, is double taxation, and will not be supported except by express enactment." And further, "where a railroad company has paid a tax upon its capital stock under the acts of 1889 and 1891, its shares are not taxable in the hands of their holders. Pennsylvania practice is now in line with this decision. In the early practice of Tennessee, as laid down in *Memphis v. Easley*,⁶ a tax on the corporation did not preclude the taxation of the security holder also. The courts subsequently abandoned that position. The same change, either through statute provision or judicial decision, has taken place in a number of other States; as, for instance, in Indiana and in Illinois (State banks excepted.)

In some States, on the other hand, double taxation of this type is still sanctioned. Iowa and Missouri, for instance, follow this plan, though making an

¹ Seligman, *Essays in Taxation*, p. 105. For a full discussion of the question, see the same author's work on *The Shifting and Incidence of Taxation*.

² 147 Penna., 106.

³ 49 Penna., 525.

⁴ 66 Penna., 73.

⁵ 156 Penna., 488.

⁶ 6 Baxter, 553.

exception of manufacturing corporations, as do Louisiana, Maine, North Carolina, Wyoming, and other States with corporations generally.

Some States apply different rules to different corporations. Vermont, for instance, expressly exempts railroad stocks, and Kentucky stocks in telegraph, telephone, and express companies. Then, too, in some States (e. g., Louisiana, Maine, Minnesota, Kansas, and Rhode Island) certain property deductions are made in determining the taxable value of shares.

In Massachusetts a distinction is made between domestic and foreign corporations. The former pay a tax on capital stock as a whole, and shareholders are exempt. Resident shareholders in the latter are, as far as possible, assessed and taxed by the local tax officers. The Massachusetts tax commission of 1897 made the following comment on this system.

* * * "If all the States followed the Massachusetts method in taxing corporations and securities, it is evident that throughout the country all shares owned by persons living outside the State where the corporation was chartered would be doubly taxed; taxed first to the corporation in the State where organized, taxed second to every owner who lived outside that State. The Commonwealth by its own corporation tax has estopped itself from denying that its system of taxing shares involves double taxation.¹

The courts of the United States were at first very leniently inclined in their decisions toward the double taxation of corporation and security holder; but that ground has since been abandoned. In *Tennessee v. Whitworth*,² the Supreme Court held that double taxation is not to be presumed in the absence of special statutory provision to that effect. In *New Orleans v. Houston*,³ the court held that a tax on the holdings of shareholders paid by a corporation, irrespective of the dividends payable to the shareholders, is substantially a tax upon the corporation itself; and again, in the same case. "It is well settled by the decisions of this court, that the property of shareholders in their shares, and the property of the corporation in its capital stock, are distinct property interests;" but the right to tax both is not to be presumed unless such "is the legislative intent, clearly expressed."

As regards the simultaneous taxation of bonds and of bonded debt, the United States Supreme Court, it will be remembered, has uniformly held (at least up to the *Multnomah County* case) that a tax on bonds, even when paid by the corporation, is a tax on the bondholder and not on the corporation. This principle is followed in the laws of Maryland and Pennsylvania. In Connecticut, on the other hand, where the tax is levied against the corporation on a valuation equal to the value of the capital stock and indebtedness, a tax on bonds, assessed against bondholders, has been declared not to involve double taxation.

The solution of the problem of how to tax securities is as involved as it is important. Upon the surface, the most practicable plan should appear to be the abandonment of the attempt to tax property of this type, and in its stead the following out of a plan to tax the corporation directly to the full extent of its taxable capacity.⁴

¹ Report of Massachusetts tax commission of 1897, p. 79.

² 117 U. S., 136.

³ 119 U. S., 265.

⁴ The discussion of this question by the Massachusetts Tax Commission of 1897, is eminently sane. Among other things, the Commission says: "It is a large and difficult question of public policy and public expediency. It arises not only as to shares, but as to bonds, as to loans on the pledge of property outside the State, as to securities of various sorts. In our great federal union, with a Government partly national, partly State, we find vast masses of property owned wholly or in part, directly or indirectly, by persons living outside the State where the property is situated. In justice to individuals, in comity toward sister States, in the practical administration of the tax system, what should be our general position as to such property? * * *

"We are not prepared to recommend the entire exemption from all taxation of foreign stocks and other securities, but we are unhesitatingly of opinion that the present method of taxing them is bad in principle as well as ineffective in practice. * * *

"We believe that the proposed system of rigid enforcement by State assessment would not accomplish its object, and that, quite apart from the desirability of the end proposed, the result would be fruitless and disappointing. * * *

"We can not conceive a system more demoralizing to the taxpayers, than that for collecting on securities, by rigid sworn returns, taxes of the present sort at the present rate. * * *

"The problem is, how to discover methods which are not punitive and of double effect in their mode of levy, which are practicable and smooth-working in their administration, and which shall secure as near an approach to justice as is attainable in view of the complex ownership of property in modern times." (Report of Massachusetts Tax Commission of 1897, p. 80, et seq.)

CHAPTER IV.

SUMMARY OF EXISTING LEGISLATION.

A. RAILROAD COMPANIES.

Of the 48 States and Territories; the tax systems of which have been outlined in the foregoing statements, 34 levy taxes on the basis of a cash valuation¹ of property, or of property and franchise, as determined by a State board of assessment. In three cases (Ohio, Mississippi, and Virginia) this tax is supplemented by taxes on receipts, and in one case (Vermont) it is alternative with a tax on receipts.

Twelve States levy taxes determined on the basis of gross receipts.² In six³ of these States this tax is only supplementary to a tax levied on some other basis, and in one (Vermont) it is alternative with a tax on the cash valuation of property and franchise. In the remaining five States the tax on gross receipts is the main feature of the system. It might be added that in Vermont, where this tax is alternative with another system, railroad companies actually pay the tax on the basis of gross receipts.

New York levies a tax on capital stock according to dividends, supplemented by a tax on gross receipts.

Massachusetts levies a tax on capital stock at its market value, with deductions for property locally taxed.

Pennsylvania levies a tax on capital stock and bonded debt, supplemented by a tax on gross receipts.

Connecticut levies a tax on capital stock and total indebtedness.

Delaware levies a tax on capital stock, supplemented by a net earnings tax, a tax on passengers, and a specific tax on cars and locomotives.

The net earnings tax, as applied to railroads, is to be found in but a single State (Delaware), and there only as a feature of a wider system.

Three States and one Territory (Oregon, Rhode Island, Texas, and New Mexico) still cling to the primitive system of the general property tax, as applied to the taxation of individuals. In Texas, however, there is an additional State tax on gross receipts.

In those cases where franchises are taxed, capital stock, earnings, and indebtedness are considered, in different States according to different rules, in arriving at a cash valuation upon which to assess the tax.

All of the more progressive States have abandoned mere property valuation as the basis for the taxation of their transportation companies.

Generally, railroad property not used for railroad purposes or not situated on the main stem is locally taxed in the same manner and at the same rate as the property of individuals.

Where railroad property is equalized or assessed by State officials and the tax is computed and collected locally, the average value per mile of road is determined for each company. The value of the railroad property in any particular tax district is then determined on a pro rata mileage basis, and the tax is levied at the usual rate for State and local purposes.

Where taxes are levied on capital stock, debt, earnings, or rolling stock, and usually where levied on cash valuation of property, railroads partly within and partly outside of a State are assessed on the portion determined by the ratio of mileage of line within the State to total mileage of line.

B. TELEGRAPH COMPANIES.

Of those States where express provision is made for the taxation of these companies by State authorities, 27 levy a tax on cash valuation of line. Of these, California, Connecticut, Delaware, North Dakota, and Wisconsin arrive at this valuation on the basis of a certain fixed value per mile of wire; Idaho, Kansas, Louisiana, Michigan, Nebraska, New Hampshire, North Carolina, Oklahoma, South Carolina, South Dakota, Washington, and Virginia levy the tax on property

¹ Alabama, Arizona, Arkansas, California, Colorado, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Utah, Vermont, Virginia, Washington, West Virginia, and Wyoming.

² Maine, Maryland, Michigan, Minnesota, Mississippi, New York, Ohio, Pennsylvania, Texas, Vermont, Virginia, and Wisconsin.

³ Mississippi, New York, Ohio, Pennsylvania, Texas, and Virginia.

valuation, generally determined on the mileage basis; Colorado, Florida, Iowa, Mississippi, Missouri, Tennessee, Utah, Vermont, and Wyoming levy the tax on a valuation of property and franchise. In Vermont this is alternative with a tax on gross receipts. Ohio levies a tax on cash valuation of line, which is virtually a capitalization of earning capacity (earnings are capitalized at 6 per cent).

In 19 States¹ these companies pay a tax on gross receipts. In Louisiana, New Jersey, and Virginia this is called a "license tax." In West Virginia it is applicable only to foreign corporations. In Texas the tax is on the proceeds of separate messages.

In five States, Alabama, Mississippi, Montana, Tennessee, and Virginia, specific privilege or license taxes are levied. In Alabama and Tennessee this is levied at a certain sum per mile of line. This is also the case in Mississippi, except that a fixed sum is levied when the length of the line is in excess of 1,000 miles. In Montana this is a local tax levied on instruments of transmission.

In Arkansas, Kentucky, and Illinois, these companies are taxed on capital stock, and in Indiana on the capitalized value of capital stock and bonded debt, with property deductions. In Massachusetts (so far as concerns domestic corporations), in New York, and in Pennsylvania the provisions of the general corporation tax law are applicable.

In those States where there is no express provision for the taxation of these companies the property tax as applied to individuals is in force.

C. TELEPHONE COMPANIES.

The laws of 24 States provide for a tax based on cash valuation of property or of property and franchise. In California, Connecticut, and Delaware this valuation is determined upon a mileage basis. In Connecticut a valuation set on instruments is included. In Colorado, Kansas, Maine, Michigan, New Hampshire, South Dakota, and Virginia this valuation is a valuation of property generally determined upon a mileage basis. In Iowa, Tennessee, Utah, and Washington the tax is levied on the valuation of property and franchise. In Mississippi the valuation is graded according to the number of subscribers, and in Ohio it is a valuation determined upon the basis of earning capacity, as in the case of telegraph companies.

Thirteen States² levy a tax on gross receipts. In Louisiana and New Jersey this is called a "license tax."

In Florida, Georgia, Montana, Tennessee, Texas, and Virginia license taxes are levied on these companies. In Florida this is a graded tax based on the amount of capital stock. In Montana and Virginia it is levied on instruments. In Texas it takes the form of a specific annual sum to the counties. In Georgia there is a tax on instruments in addition to the annual license tax.

In Indiana these companies are taxed on a capitalized value of stock and bonds, and in Illinois on the basis of capital stock.

In Massachusetts, New York, and Pennsylvania these companies are subject to the provisions of that tax. In those States where the taxation of these companies is not the subject of express provision the general property tax applies.

D. EXPRESS COMPANIES.

In 19 States³ these companies are taxed on their gross receipts. In Louisiana and New Jersey this is called a "license tax." In West Virginia the tax applies only to foreign corporations. In New Mexico it amounts practically to a tax on net receipts. In a number of these States, also, the tax is supplemented by the usual property tax, general corporation tax, or franchise tax.

In eight States—Iowa, Louisiana, Missouri, North Carolina, Ohio, South Carolina, South Dakota, and Virginia—a tax on each cash valuation is provided for. In Missouri the valuation is upon property and franchise; in Ohio upon capitalized earnings; in South Dakota earnings are taken into consideration, and in Virginia the valuation is on property.

Florida, Mississippi, and Virginia levy specific license taxes, and North Dakota a license tax graded according to population. Tennessee levies a privilege tax based on the mileage over which business is done.

¹ Delaware, Georgia, Louisiana, Maryland, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia.

² Alabama, Delaware, Louisiana, Maryland, Minnesota, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, Vermont, and Wisconsin.

³ Connecticut, Delaware, Georgia, Louisiana, Maine, Maryland, Michigan, Minnesota, Missouri, New Jersey, New Mexico, New York, North Carolina, Ohio, Rhode Island, Texas, Vermont, Virginia, and West Virginia.

Arkansas, Illinois, Nebraska, and Wisconsin tax these companies on capital stock, and Indiana and Iowa on the capitalized value of stock and bonds. In those States where there are general corporation tax laws these companies are taxed under the provisions of those laws.

In the other States and Territories these companies are taxed under the general property tax in the same manner as individuals.

E. SLEEPING, PARLOR, AND DINING CAR COMPANIES.

These companies are taxed in 10 States¹ on gross receipts. In New Jersey the tax is termed a "licensed tax."

Alabama, Arkansas, Georgia, Iowa, Louisiana, Missouri, Nebraska, North Carolina, South Carolina, South Dakota, Tennessee, Utah, and Wyoming levy a tax on cash valuation of cars employed within their boundaries. In South Dakota earnings are taken into consideration in determining the valuation.

Arkansas, Illinois, Kentucky, Ohio, Texas, Virginia, and Wisconsin tax these companies on their capital stock; Indiana at the capitalized value of stock and bonds, and New York, Pennsylvania, and Massachusetts (so far as concerns domestic corporations) under the general corporation tax laws of those States.

Delaware levies a license tax on the Pullman Company; Mississippi, a specific privilege tax in addition to a privilege tax on a mileage basis; and Tennessee, a specific privilege tax.

In the other States and Territories these companies, when taxed at all, are taxed on their property in the same manner as individuals.

F. FREIGHT LINE AND EQUIPMENT COMPANIES.

In Maryland, Michigan, New York, Pennsylvania, and Vermont these companies are taxed on gross receipts. In Vermont the tax is alternative with a tax on property and franchise.

Minnesota, Ohio, and Wisconsin tax these companies on capital stock. In Massachusetts (so far as concerns domestic corporations), New York, and Pennsylvania the general corporation tax laws have application.

In New Jersey these companies are taxed on a cash valuation of their property, including rolling stock, and in Vermont a tax on property and franchise is alternative with the tax on gross receipts.

In the other States and Territories these companies, when taxed at all, are taxed on their property in the same manner as individuals.

G. NAVIGATION COMPANIES.

These companies are in general taxed on the value of their water craft and other property. In certain States, however, specific provision is made for their taxation, either complementary to or as a substitute for the tax on property.

In Virginia these companies are taxed on their net earnings. In Delaware canal companies are taxed on their net earnings, and all navigation companies are subject to the provisions of the passenger tax law. In Rhode Island vessels engaged in foreign trade are subject to a net earnings tax, as are vessels in general in Connecticut. In Kentucky navigation companies are subject to the usual corporate franchise tax. In Georgia a license tax is levied on steamboat companies, and in Florida a license tax on tonnage of vessels. Maine and Minnesota also levy taxes on tonnage. In Illinois navigation companies, and in Virginia and New Jersey canal companies, are taxed in the same manner as railroad companies are taxed in those States. Maryland, New York, Pennsylvania, and Vermont tax navigation companies on gross receipts. In Vermont this tax is alternative with a tax on property and franchise, and in New York and Pennsylvania it is supplementary to the general corporation tax. In Massachusetts domestic companies are taxed under the corporation tax law.

North Carolina levies a tax on capital stock, West Virginia on property and capital stock, and Missouri varied wharfage taxes in the towns and cities of the State.

¹Florida, Maryland, Michigan, Minnesota, New Jersey, New Mexico, New York, Pennsylvania, Texas, and Vermont.

H. TAX ON CORPORATE CHARTERS.

In 27 Commonwealths¹ various taxes, under a variety of names, are levied upon the incorporation, organization, consolidation, and reorganization of corporations and upon the increase or decrease of their capital stock. Properly speaking, these charges are not taxes, but fees paid in return for privileges granted by the State. This fact has been recognized in the legislation of Pennsylvania and Rhode Island upon the subject, where the fee is termed a "bonus on charters," and in several other States, where it is termed "charter fees," "license fees," or "organization fees." In Connecticut, Michigan, and Texas statute terminology confuses it with the tax on franchises, though it is very obviously not a franchise tax.

In several States this levy takes the form of an annual license charge (e. g., Alabama, Vermont, Washington). In Connecticut it applies only to domestic corporations doing their main business outside of the State, and in Texas, New York, and Vermont to foreign corporations as well as to those of domestic origin. In certain States certain specified forms of corporate industry are not subject to the general regulations of this character (e. g., bridge, canal, and railroad companies in Pennsylvania and railroad companies in Rhode Island).

CHAPTER V.

CONSTITUTIONAL AND STATUTORY PROVISIONS, BY STATES.

The constitutional provisions which are summarized in this chapter do not include all which apply to State and local fiscal relations, but only such as appear to have a particular bearing on the making and administration of State laws for the aiding of and taxation of transportation companies. These summarized provisions may or may not apply to other classes of persons and property; but neither alternative may be inferred to hold unless express statement is made to that effect.

In summarizing statute provisions, attention is given chiefly to the taxation of railroad companies, with minor reference to telegraph, telephone, express, parlor, and sleeping car, freight line and navigation companies. Generally, where transportation companies are subject to direct taxes by the State, shares of stock are not assessed to individual holders, so that tax provisions on this subject are not digested.

ALABAMA.

CONSTITUTIONAL PROVISIONS.

State aid and internal improvement.—The State shall not engage in works of internal improvement, nor lend its money or credit in aid of such; nor shall the State be interested in any private or corporate enterprise, nor lend its money or credit to any individual, association, or corporation. (Art. IV, sec. 54.)

Taxes on property.—All taxes on property shall be levied in exact proportion to the value thereof. (Art. XI, sec. 1.)

The property of private corporations, associations, and individuals shall forever be taxed at the same rate. (Art. XI, sec. 6.)

Local aid.—The general assembly shall not have power to authorize any local division to lend its credit, grant money or property, or take stock in aid of any corporation or company. (Art. IV, sec. 55.)

STATUTE PROVISIONS.

Railroad companies.

*Listing, valuation, etc.*²—Railroad companies are required to make annual returns to the State auditor of all property employed in operating their lines. Upon the basis of these schedules, the State board of assessment value the railroad property "upon the consideration of what a clear fee simple title thereto would sell for under the conditions under which that character of property is most usually sold for." This valuation is then apportioned among the counties upon a pro rata mileage basis, for the computation and collection of the tax.

¹Alabama, Colorado, Connecticut, Delaware, Florida, Georgia, Illinois, Kansas, Kentucky, Maine, Maryland, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Tennessee, Texas, Utah, Vermont, Virginia, Washington, and West Virginia.

²Code of 1896, secs. 3964-3973.

License tax.—Railroad companies also pay a license tax on gross earnings to cover the expenses of the railroad commission.¹

*Local taxation.*²—Railroad real estate and personalty not in the right of way are locally assessed and taxed. A local tax also is levied on the basis of the valuations apportioned by the State.

Telegraph companies.³

These companies pay to the State an annual privilege tax of \$1 per mile of line when that line is 150 miles or less in length. Lines of over 150 miles pay at the same rate in addition to a specific tax of \$500. These taxes are in addition to the usual local license and property taxes.

Telephone Companies.

These companies (as well as canal, bridge, and ferry companies) pay a tax on gross income at the usual property rate.⁴

They are, besides, required to make annual reports of property and receipts, upon the basis of which a property valuation is arrived at for purposes of taxation.⁵

A license tax in towns and cities is levied as follows: In places of 20,000 inhabitants or over, \$25; less than 20,000 and more than 10,000, \$10; other places, \$5.⁶

Long-distance telephone companies report their property and receipts to the State auditor. The tax is further administered as in the case of railroads.⁵

Long-distance telephone companies are also required to pay, to the State, 50 cents per mile of line when that line is 150 miles or less in length; and further, all lines of more than 100 miles in length pay the sum of \$350.⁴

Sleeping-car companies.⁷

These companies pay the State a privilege tax of \$1,250, and are taxed in addition on property in the usual way.

Other corporations.⁸

Other corporations pay a license tax, graduated according to the amount of paid up capital stock. The tax begins with a rate of \$10 upon companies whose paid up capital stock is under \$10,000, and rises gradually to a tax of \$500 upon companies whose capital stock amounts to \$1,000,000 or over.

ARIZONA.

STATUTE PROVISIONS.

Railroad companies.⁹

*Exemption.*¹⁰—Railroads hereafter constructed shall be exempt from taxation for a period of 10 years after the passage of this act.

Listing, valuation, etc.—Railroad companies are required to make full annual reports of property used in operation to the Territorial board of equalization, by whom a valuation is set on property and franchises. Rolling stock is valued on a pro rata mileage basis. The total valuation is apportioned among the counties for the computation and collection of the usual tax rates.

Local taxation.—Property other than that of operation is locally assessed and taxed.

Telegraph companies.¹¹

These companies are assessed and taxed in the counties at a certain rate per mile of line.

ARKANSAS.

CONSTITUTIONAL PROVISIONS

The power to tax corporations and corporate property shall not be surrendered nor suspended. (Art. XVI, sec. 7.)

State aid.—The State shall never assume nor pay the indebtedness of any corporation, nor release any corporation from its liabilities to the State. (Art. XII, sec. 12.)

The liability of any railroad or other corporation to the State shall never be exchanged nor remitted. (Art. V, sec. 33.)

¹ Code of 1896, sec. 3489.

² *Ibid.*, secs. 3964-3973.

³ Laws of 1898-99, p. 169.

⁴ *Ibid.*, p. 50.

⁵ *Ibid.*, p. 170.

⁶ *Ibid.*, p. 193.

⁷ *Ibid.*, p. 165.

⁸ *Ibid.*, p. 178.

⁹ Revised Statutes of Arizona (1887), par. 2649.

¹⁰ Laws of 1899, p. 79.

¹¹ *Ibid.*, par. 2647.

Except as herein provided, the State shall never be interested in the stock of any corporation or association. (Art. XII, sec. 7.)

The State shall never loan its credit for any purpose whatever. (Art. XVI, sec. 1.)

Taxes on property.—All property shall be taxed according to its value. (Art. XVI, sec. 5.)

Rolling stock shall be considered and taxed as personalty. (Art. XVII, sec. 11.)

Reports of railroad companies.—Railroads shall make annual reports of their acts and doings to the auditor of public accounts. (Art. XVII, sec. 13.)

Local aid.—No local division shall take stock in, obtain, or grant money for, or loan its credit to any corporation, association, or individual. (Art. XII, sec. 5. See also Art. XVI, sec. 1.)

STATUTE PROVISIONS.

Railroad companies.

*Listing, valuation, etc.*¹—Railroad companies are required to return to the secretary of State sworn schedules of property on the right of way and of rolling stock (both hired and leased), including a statement of the actual aggregate value of the various elements of railroad property. On the basis of these returns, the State board of railroad commissioners fix a valuation, which is apportioned among the local districts for the computation and collection of the usual property taxes. Rolling stock is valued upon a pro rata mileage basis. In case of failure to list, witnesses may be summoned and books, records, etc., examined.

Local taxation.—Real estate and personalty not in the right of way are assessed and taxed locally.² A local tax is levied also on the valuation apportioned by the State.

Telegraph, express, and sleeping-car companies.¹

These companies make annual returns to the State. They are taxed upon their capital stock (i. e., on a pro rata mileage proportion thereof employed within the State). The real and personal property of these companies is taxed where situated, as is the similar property of telephone companies.

CALIFORNIA.

CONSTITUTIONAL PROVISIONS.

State aid.—No grant of money or property shall ever be made by the State for the benefit of any corporation not exclusively under State control. (Art. IV, sec. 22.)

The State shall neither give nor lend, nor authorize the giving or lending of the credit of the State to any person, corporation, or association; nor shall the State subscribe to stock in a corporation. (Art. IV, sec. 31. See also Art. XII, sec. 13.)

Taxes on property and franchises.—All property in the State shall be taxed according to its value—franchises, moneys, credits, bonds, stocks, dues, and all other property included. (Art. 13, sec. 1.)

Lands and improvements thereon shall be separately assessed. (Art. 13, sec. 2.)

The legislature shall have power to provide for the payment of all taxes on real property by installments. (Art. XIII, sec. 7.)

The franchise, roadway, roadbed, rails, and rolling stock of all railroads shall be assessed at their actual value by the State board of equalization (provided for in sec. 9); which valuation shall be apportioned among the local districts on a pro rata mileage basis. (Art. XIII, sec. 10.)

Every obligation by which a debt is secured, *except as to railroads and quasi-public corporations*, shall be taxed at its value, and the collateral property shall be taxed at its value less the value of the obligation. Art. XIII, sec. 4.)

Incomes.—Incomes may be taxed as prescribed by law. (Art. XIII, sec. 11.)

Railway reports and accounts.—The State railroad commissioners shall have power to summon persons and papers, and shall prescribe a uniform system of railway accounting. (Art. XII, sec. 22.)

Local aid.—The State shall not authorize the giving or lending of the credit of any county, city, township, etc., to any person, corporation, or association; nor shall any local district subscribe to stock in a corporation. (Art. IV, sec. 31.)

¹ Sandels and Hill's Digest, (1894), secs. 6466-6476.

² Ibid., sec. 6475.

³ Ibid., secs. 6465-6467.

TAXATION OF TRANSPORTATION COMPANIES

STATUTE PROVISIONS.

Railroad companies.

*Listing, valuation, etc.*¹—Railroad companies are required to furnish full sworn statements of property, stock, and business. On the basis of this information the State board of equalization assesses franchise, roadway, roadbed, rails, and rolling stock in the State on a pro rata mileage basis. Franchises derived from the United States are exempted from taxation. Upon the valuation arrived at by the board of equalization the taxes are levied and collected by the State at the average rate of taxes on property in the State. To aid in arriving at valuations, provision is made for the summoning of witnesses, corporation records, books, etc., by the State board of equalization.

*Local taxation.*¹—Railroad property other than that of operation is locally assessed and taxed. Local districts receive also a share of the tax on the values determined by the State board of equalization.

Telegraph and Telephone companies.²

The property of these companies is locally assessed and taxed as personalty at a certain rate per mile of line, fixed by local assessors.

COLORADO.

CONSTITUTIONAL PROVISIONS.

State aid.—The State shall not pledge its credit or become responsible in any way for the debts of any person, company, or corporation. (Art. XI, sec. 1.)

The State shall not make any donation to nor subscribe to stock in any corporation. (Art. XI, sec. 2.)

No obligation of any person, association, or corporation to the State shall ever be exchanged, released, postponed, or diminished. (Art. V, sec. 38.)

Uniform property tax.—Taxes shall be uniform upon the same class of subjects within the same jurisdiction. All property shall be taxed at its just value. (Art. X, sec. 3.)

Corporation taxes.—The power to tax corporations and corporate property shall never be relinquished nor suspended. (Art. X, sec. 9.)

All corporations shall be subject to taxation for State and local purposes. (Art. X, sec. 10.)

Local aid.—No local division shall pledge its credit or become responsible in any way for the debts of any person, association, or corporation. (Art. XI, sec. 1.)

No local division shall make any donation to or subscribe to stock in any corporation. (Art. XI, sec. 2.)

STATUTE PROVISIONS.

Railroad companies.

*Listing, valuation, etc.*³—These companies are required to make returns to the State board of equalization, upon the basis of which the franchise, roadbed, track, and rolling stock are valued upon a pro rata mileage basis, and said value apportioned among the counties for the computation and collection of the usually general property taxes.

*Local taxation.*⁴—Real estate (including stations and other buildings, but not track) and personalty are locally assessed and taxed. There is also a local tax on the basis of the values apportioned by the State.

Telegraph, telephone, and car companies.⁵

These companies are subject to provisions similar to those which apply to railroads.

CONNECTICUT.

CONSTITUTIONAL PROVISIONS.

Local aid.—No local division shall subscribe to stock in a railroad corporation, nor purchase its bonds, nor aid it in any way. (Amendment of Oct., 1877.)

¹ California Political Code (1897), secs. 3664-3671.

² *Ibid.*, sec. 3663.

³ Mills's Annotated Statutes, secs. 3804-3807.

⁴ Mills's Annotated Statutes, secs. 3804-3807.

⁵ *Ibid.*, secs. 3801-3803.

STATUTE PROVISIONS.

Railroad companies.¹

State taxation.—Railroad companies are required to make annual reports to the State controller, setting forth their capital stock and indebtedness. They then pay the State, as a franchise tax, one per cent on the market value of their capital stock, in addition to one per cent on the par value of their funded and floating debt, or on actual value if below par. In determining the valuation, deduction is made for any part of the indebtedness which is held in trust as part of a sinking fund, as well as for the amount of local taxes on real estate. As the valuation represents only that portion of the capital stock and debt assignable to Connecticut, the valuation is determined on a pro rata mileage basis as compared with the total mileage.

Local taxation.—Railroads are locally taxed on their real estate not directly used for purposes of operation.

Telegraph and telephone companies.²

Telegraph companies pay the State a tax of 25 cents per mile of wire. They also pay local taxes on their real estate.

Telephone companies pay the State a tax of 70 cents per instrument in addition to 25 cents per mile of wire. They also pay local taxes on real estate.

Express companies.³

These companies pay the State a tax of 5 per cent on their gross receipts from business done in the State.

DELAWARE.

CONSTITUTIONAL PROVISIONS.

Nothing specific.

STATUTE PROVISIONS.

Railroad companies.⁴

Tax on net earnings.—Railroad companies, as well as canals, make annual returns of business to the State, as by law required. They then pay to the State a tax of 10 per cent on their net earnings in the State, as determined by the proportion of mileage within the State to total mileage; besides a tax of one-half of one per cent on a pro rata mileage portion of capital stock.

Passenger and locomotive taxes.—Railroad and navigation companies pay the State a tax of 10 cents on each passenger carried by steam power on land or water in the State. The law grants permission to raise the rate of fare to the extent of the tax.

Railroad companies (excepting the P., W. & B. R. R. Co., which is otherwise provided for) may pay in lieu of the passenger tax a sum which bears the same proportion to the gross receipts from passenger business between points in the State as the sum of \$13,000 bears to the like business of the P., W. & B. R. R. Co. In addition, there is a special tax of \$100 on each locomotive, \$25 on each passenger car, and \$10 on each freight car and truck used within the State.

The Philadelphia, Wilmington and Baltimore Railroad Company pays to the State annually the sum of \$27,000 in lieu of all taxes but the passenger tax, and this latter may be commuted by the annual payment of the specific sum of \$13,000.⁵

The Delaware Railroad Company may pay \$3,000 annually in lieu of all other taxes.⁶

Local taxation.—Railroad real estate, including buildings on the right of way, is locally assessed and taxed.

Telegraph and telephone companies.⁷

These companies annually pay to the State a tax of 60 cents per mile on the longest wire in the State; 30 cents per mile on the next longest wire, and 20 cents per mile on all other wires.

Express companies.⁸

These companies pay a tax of five per cent on their gross earnings from business done within the State.

¹ General Statutes of Connecticut (1888), 3919-3927. Also Laws of 1899, pp. 1001, 1087.

² Laws of 1891, p. 68.

³ Laws of 1899, p. 90.

⁴ Revised Code of 1893, pp. 47-51.

⁵ *Ibid.*, p. 52.

⁶ *Ibid.*, p. 54.

⁷ *Ibid.*, p. 72.

⁸ *Ibid.*, p. 73.

Pullman company.¹

This company pays an annual State license tax in lieu of other taxes.

Franchise tax on telegraph, telephone, express, and sleeping-car companies.

These companies pay an annual license tax for the privilege of exercising their corporate franchises on the basis of their gross receipts from business done in the State. The rate of the tax is one per cent, except in the case of sleeping-car companies, with which it is 1½ per cent.²

FLORIDA.

CONSTITUTIONAL PROVISIONS.

State aid.—No tax shall be levied for the benefit of any chartered company. (Art. IX, sec. 7.)

The credit of the State shall not be pledged or loaned to any individual, company, or corporation; nor shall the State become a stockholder in any company. (Art. IX, sec. 10.)

Uniform tax on property.—Taxation shall be at a uniform and equal rate. All property shall be justly valued. (Art. IX, sec. 1.)

Local aid.—The legislature shall not authorize any local district to appropriate money for, loan its credit to, or become a stockholder in any company or corporation. (Art. IX, sec. 10.)

STATUTE PROVISIONS.

Railroad companies.³

Listing, valuation, etc.—Railroad companies are required to make full annual reports to the State comptroller, setting forth the property used in operation, its value, and the amount thereof in each county and municipality. The value of the rolling stock is apportioned pro rata to each mile of track. The comptroller notifies the proper official in each county and municipality through which the road runs of the number of miles of track, its proportionate value, and the proportionate value of other taxable property. The tax is levied and collected in the various local divisions at the usual property rate.

Local taxation.—Railroad lands not in the right of way are locally assessed and taxed. Local taxes are levied in addition on the values apportioned by the State.

Telegraph companies.⁴

The property, rights, and franchises of these companies are taxed like the property of railroads.

Telephone companies.⁵

These companies pay an annual license tax, in addition to the usual local taxes on property, on the following bases:

When the capital stock is \$100,000 or more, \$100.

When the capital stock is over \$50,000, but under \$100,000, \$50.

When the capital stock is over \$25,000, but under \$50,000, \$30.

When the capital stock is over \$10,000, but under \$25,000, \$20.

When the capital stock is less than \$10,000, \$10.

Express companies.⁶

These companies pay an annual license tax of \$2,500 in lieu of all other license taxes, State or local.

Sleeping-car companies.⁷

Sleeping and parlor car companies annually pay into the State treasury a tax of \$1.50 on each \$100 of their gross receipts, as reported to the State.

Steamboats.⁸

All steamboats, passenger or freight, plying on the waters of the State, except those regularly assessed in any county of the State, are subject to a license tax of \$1 per registered ton, not to exceed \$100 nor be less than \$10.

¹ Laws of 1897, chap. 376.

² Laws of 1899, pp. 303 et seq.

³ Laws of 1896, pp. 28-31.

⁴ *Ibid.*, p. 29.

⁵ *Ibid.*, p. 12.

⁶ Laws of 1897, No. 102.

⁷ Laws of 1896, pp. 29-30.

⁸ *Ibid.*, p. 13.

GEORGIA.

CONSTITUTIONAL PROVISIONS.

Release from taxation.—The power to tax corporations and corporate property shall not be surrendered or suspended by the State. (Art 7, sec. 2, par. 5.)

State aid.—The credit of the State shall not be loaned to any individual, company, or corporation, nor shall the State take stock in any company or corporation. (Art. 7, sec. 5, par. 1.)

The State shall not make any donation in favor of any person, corporation, or association. (Art. 7, sec. 16, par. 1.)

Uniform tax on property.—Taxation shall be uniform upon the same class of subjects, and ad valorem on all property subject to taxation. (Art. 7, sec. 2, par. 1.)

Local aid.—The general assembly shall not authorize any local division to become a stockholder in any company, nor appropriate any money nor loan its credit thereto. (Art. 7, sec. 6, par. 1.)

STATUTE PROVISIONS.

Railroad companies.

*Listing, valuation, etc.*¹—Railroad companies are required to make returns of their entire property to the comptroller-general of the State. On the basis of these returns the comptroller-general determines the basis of the State levy. Rolling stock is valued upon a pro rata mileage basis. The tax is paid into the State treasury.

Local taxation.—Counties² and municipalities³ assess and tax all railroad property within their respective limits.

Telegraph and express companies.⁴

All such companies doing business in the State pay to the State a tax of 2½ per cent on the gross receipts from such business.

Telephone companies.⁴

These companies pay a tax of \$1 per instrument in use within the State.

Sleeping-car companies.⁴

These companies pay a tax on valuation of cars, determined on a pro rata mileage basis.

IDAHO.

CONSTITUTIONAL PROVISIONS.

Release from taxation.—The power to tax corporations and corporate property shall never be relinquished nor surrendered. They shall be taxed for State and local purposes on their property. (Art. VII, sec. 8.)

State aid.—The credit of the State shall not be given in aid of any individual, association, or corporation, nor shall the State become a stockholder in any corporation. (Art. VIII, sec. 2.)

Property and license taxes.—Taxes shall be uniform upon the same class of subjects within the same jurisdiction. A just valuation shall be secured for the taxation of all property. (Art. VIII, sec. 5.)

Every person and corporation shall pay a tax on property. A license tax may also be imposed. (Art. VII, sec. 2.)

Local aid.—No local division shall lend its credit in aid of any individual, association, or corporation, or become responsible for the liability of any individual, association, or corporation. (Art. VIII, sec. 4.)

STATUTE PROVISIONS.

Railroad companies.¹

Listing, valuation, etc.—Railroad companies are required to return to the State annual lists of their entire property of operation, including rolling stock, hired, leased, or used. The State board of equalization sets a valuation upon each railway line, and apportion the same among the local districts for the computation and collection of the tax.

Local taxation.—Property not in the right of way is locally assessed and taxed. A tax is levied also on the values apportioned by the State.

Telegraph and telephone companies.²

Taxed like railroad companies.

¹ Code of 1895, secs. 779-783.

² *Ibid.*, sec. 780.

³ *Ibid.*, secs. 784-789.

⁴ Laws of 1898, p. 31.

⁵ Laws of 1898, pp. 114-118.

ILLINOIS.

CONSTITUTIONAL PROVISIONS.

State aid.—The State shall never assume the debts of nor extend its credit in aid of any corporation, association, or individual. (Art. IV, sec. 20.)

The general assembly shall never loan the credit of the State or make appropriations in aid of railroads or canals; provided that the surplus earnings of any canal may be appropriated for its enlargement or extension. (Separate section after Art. XI.)

Franchise taxes.—Taxation shall be in proportion to value of property; but telegraph and express interests, owners and users of franchises and privileges shall be taxed as directed by law, the tax to be uniform as to the class upon which it operates. (Art. IX, sec. 1.)

Reports of railroad companies.—Annual reports of all acts and doings, as by law required, shall be furnished the State by railroad companies. (Art. XI, sec. 9.)

Further objects and subjects may be taxed by authorization of the general assembly in any manner not inconsistent with the constitution. (Art. XI, sec. 2.)

Illinois Central Railroad Company, the charter arrangement of, with regard to payments to the State, shall ever remain the same. All money from this source shall be used only for the ordinary expenses of the State government. (Separate section after Art. XI.)

Illinois and Michigan Canal shall never be sold or leased except by vote of the people of the State. (Separate section after Art. XI.)

Local aid.—No local division shall ever subscribe to the capital stock of any private corporation, or make donation to or loan its credit in aid of any such corporation. (Separate section after Art. XI.)

STATUTE PROVISIONS.

Railroad companies.

*Listing, valuation, etc.*¹—Railroad companies are required annually to return to the county clerks schedules of taxable property, with reference to its amount, kind, and value. These schedules must contain a list of the property held for right of way, length of main and side tracks, and a description of the realty, including a statement of the value of improvements and stations located on the right of way. The above property is denominated "railroad track." A list of rolling stock used on the line must be included in the schedule.

In addition to the local schedules, annual sworn statements must be filed with the auditor of public accounts, setting forth the entire property of operation, the actual value of the capital stock, the bonded indebtedness, and the total listed valuation of all tangible property in the State. On the basis of this schedule, the State board of equalization assesses the property and equalizes the valuations of the counties. These valuations as assessed and equalized are then entered by the county clerks in the railroad tax book, and the taxes are extended and collected. The rule for valuation by the State board requires that the total valuation as determined by that body shall include the value of capital stock over and above the value of tangible property, and that the value of real and personal property locally assessed where situated shall be deducted. Franchises granted by the State must be listed as personalty at their full value.

*Local taxation.*¹—"Railroad track" is listed and taxed in the several towns, villages, districts, cities, and counties upon a mileage basis, excepting the side tracks, turn-outs, station houses, depots, machine shops, and other like fixed property, which are assessed and taxed where located. Rolling stock is taxed in the various local districts upon a mileage basis.

Personalty and real estate, other than "railroad track" and rolling stock, are listed where situated, and are treated in all respects like the similar property of individuals.

*Illinois Central Railroad Company.*²—This company is required to pay semi-annually into the State treasury a tax of five per cent on the gross income of the road for the half year. It must pay also a tax on its stock, property, and assets to an amount sufficient to bring the total tax paid by the company to seven per cent of its gross receipts, with provision for a deduction when the State tax rate exceeds three-fourths of one per cent.

¹ Starr and Curtis's Annotated Statutes of Illinois, pp. 3442-3444.

² *Ibid.*, p. 3525.

Telegraph companies¹

These companies are required to pay an annual tax on the value of their capital stock above the value of property locally taxed. The tax is collected in the same manner as the railroad tax.

Telephone, express, steamboat, and other transportation companies.²

All such companies incorporated under the laws of the State return annual lists to the local assessors, and are then assessed by the State board of equalization on the value of their capital stock in excess of the value of tangible property already locally taxed.

INDIANA.

CONSTITUTIONAL PROVISIONS.

State aid.—The State shall not assume the debts of any corporation whatever. (Art. X, sec. 6.)

Uniform tax on property.—There shall be a uniform and equal rate of assessment and taxation. All property shall be justly valued. (Art. X, sec. 1.)

Wabash and Erie Canal.—The State shall not be liable for any certificate of stock issued "for the completion of the Wabash and Erie Canal to Evansville," under acts of January 19, 1846, and January 29, 1847. (Art. X, sec. 7.)

Local aid.—No county shall subscribe to stock in any corporation, unless payment be made for the same at the time of subscription; nor shall any county loan its credit to any corporation, nor borrow money to take stock in the same. (Art. X, sec. 6.)

STATUTE PROVISIONS.

Railroad companies.

*Listing, valuation, etc.*³—Railroad companies are required to list their property annually with the auditors of the various counties. Returns must be made at the same time to the auditor of the State. These returns must be very full and must contain a detailed statement concerning the entire railroad property, capital stock, and bonded debt. On the basis of these returns, the State board of tax commissioners fixes upon the property a valuation, which is apportioned among the various local tax districts, where the tax is computed and collected at the usual property rate. Rolling stock is assessed on a pro rata mileage basis; and such as is hired, leased, or used (but not owned) by any railroad company, is assessed against that company according to the proportion of the year it uses the same. All tax-assessing officers in the State are empowered to examine the books and records of transportation companies.

*Local taxation.*⁴—Real estate and personalty not used for operating purposes are assessed and taxed directly by local authorities, in addition to the local taxes on the valuations apportioned by the State authorities.

Telegraph, telephone, express, parlor, etc., car, and fast freight companies.⁴

These companies are required to make annual statements concerning property, franchise, capital stock, and mortgage indebtedness to the auditor of the State. On the basis of these returns the State board of tax commissioners determines the actual value of the capital stock of each company, add to this the value of the bonded debt, and from this gross sum deduct the value of all property outside of the State owned by such companies, but not specifically used in the conduct of their business. A mileage proportion of the resulting sum is accreted to the State for purposes of taxation. After further deduction has been made for property locally taxed in the State, the remaining sum is apportioned among the counties for the computation and collection of the tax.

Wabash and Erie Canal Company.⁵

Locally assessed and taxed on its general property.

IOWA.

CONSTITUTIONAL PROVISIONS.

State aid.—The credit of the State shall not be loaned to any individual, association, or corporation, nor shall the State ever assume the liabilities of any individual, association, or corporation. (Art. 7, sec. 1.)

¹ Starr and Curtis's Annotated Statutes of Illinois, p. 3424.

² *Ibid.*, p. 3415.

³ Horner's Annotated Indiana Statutes, 1895, secs. 6340-6354.

⁴ *Ibid.*, secs. 6521k-6521v.

Ibid., sec. 6306.

The State shall not become a stockholder in any corporation. (Art. 8, sec. 3.)
Corporate property.—Corporate property shall be taxed the same as individual property. (Art. 8, sec. 2.)

STATUTE PROVISIONS.

Railroad companies.¹

Listing, valuation, etc.—Railroad companies are required to make annual statements to the executive council of all property of operation, as well as the earnings and expenses of operation within the State. Upon the basis of these returns the executive council assess railroad property at its actual cash value, taking into consideration the earning capacity of the road. Rolling stock is valued on a pro rata mileage basis. Sleeping and dining cars are assessed to the railroads using the same in the same manner as the ordinary rolling stock of those roads. The valuation reached by the executive council is apportioned among the counties for the computation and collection of the tax.

Local taxation.—Railroad real estate not used for purposes of operation, grain elevators, and railroad bridges over the Mississippi and Missouri rivers are locally taxed where situated. There is also a local tax on the values apportioned by the State.

Telegraph and telephone companies.²

The State executive council determine the value of the property and franchise of telegraph and telephone companies in the State. This valuation is apportioned among the local districts and further administered like the taxes on railroads.

Express companies.³

The State executive council determine the value of the property of express companies in the State, except property not exclusively used in the conduct of business; the valuation is based on aggregate value of shares plus mortgage indebtedness. County auditors add property not used exclusively in conduct of business and the whole is taxable for both State and local purposes at the usual property rate.

KANSAS.

CONSTITUTIONAL PROVISIONS.

State aid.—The State shall never be a party in carrying on works of internal improvement. (Art. 11, sec. 8.)

Uniform taxation.—The legislature shall provide for a uniform and equal rate of assessment and taxation. (Art. 11, sec. 1.)

Local aid.—Cities, towns, and villages, in their powers of taxation, assessment, borrowing money, contracting debt, and loaning their credit shall be so restricted as to prevent abuse of such power. (Art. 12, sec. 5.)

STATUTE PROVISIONS.

Railroad companies.

*Listing, valuation, etc.*⁴—Upon the basis of reports made by the railroad companies the State board of railroad assessors values railroad track, roadbed, right of way, water and fuel stations, buildings, machinery, and rolling stock upon a pro rata mileage basis (including the cars of other companies used on the railroads of the State), moneys, credits, and franchises. The board is empowered to examine the books and papers of railroad companies. Through the State auditor an apportionment of the valuation thus determined is made among the counties, where further apportionment is made among the smaller districts, in which the tax is computed and collected at the usual property rate.

*Local taxation.*⁴—Railroad real estate and personal property not in the right of way is locally assessed and taxed. A local tax also is levied on the basis of the valuations as apportioned by the State.

Telegraph and telephone companies.⁵

The companies file an annual statement with the State auditor, setting forth the value of their capital stock, real estate (as locally assessed), the whole length of line, the value of all personalty, and the total gross receipts for the year. A

¹Code of 1897, secs. 1334-1342. Also laws of 1900, chap. 44.

²Laws of 1900, chap. 42.

³Laws of 1900, chap. 45.

⁴General Statutes of Kansas, pp. 896-899.

⁵*Ibid.*, pp. 899-902.

property valuation is then determined by the State board of appraisers. In arriving at this valuation the value of real and personal property locally assessed and taxed is deducted. The resulting sum is then apportioned among the local districts for the collection of the tax.

KENTUCKY.

CONSTITUTIONAL PROVISIONS.

State aid.—The credit of the State shall not be pledged to any individual or company, nor shall the Commonwealth take stock in any company nor make donations to any company, nor shall the State construct a railroad. (Sec. 177.)

The assembly shall have no power to release any individual or corporation from indebtedness to the State, nor to any county or municipality thereof. (Sec. 52.)

Uniform tax on property.—All taxes shall be levied and collected according to general law, and shall be uniform upon all property subject to taxation within the limits of the taxing jurisdiction. (Sec. 171.)

Property shall be assessed at its fair cash value. (Sec. 172.)

Corporation taxes.—Corporate property shall pay the same rate of taxation as individual property; but the assembly may provide for taxes on income, license, or franchises. (Sec. 174.)

Railroad taxes.—The assembly may provide by law how railroads and railroad property shall be assessed and taxed. (Sec. 182.)

Local aid.—The assembly shall not authorize any local division to loan its credit to, make donations to, or take stock in any company or corporation. (Sec. 179.)

STATUTE PROVISIONS.

Railroad companies.¹

Listing, valuation, etc.—Railroad companies are required to make annual returns² of total property in the State to the State auditor of public accounts. Only a pro rata mileage proportion of rolling stock is included. On the basis of these and local returns a valuation of railroad property is determined by the railroad commission, which is also empowered by law to examine corporation books, records, etc. Upon this valuation the State tax is levied at the usual State rate on real estate.

Local taxation.—Each county superintendent of common schools furnishes every railroad company operating within his school district with a statement of the boundaries of that district. County clerks make similar statements concerning the other taxing districts through which railroad lines run. Railroad companies are then subject to taxation in each local district, as bounded by the above officers, at the usual property rate.

Telegraph, telephone, express, and passenger-car companies.

All such companies pay an annual State and local franchise tax, in addition to other taxes, on a pro rata mileage valuation of capital stock (less the value of tangible property already taxed), determined by the State board of valuation and assessment.³

The franchises of all incorporated companies are taxed by cities of the first and second classes. The value of the franchise is represented by a pro rata mileage proportion of capital stock.¹

LOUISIANA.

CONSTITUTIONAL PROVISIONS.

Release from taxation.—The power to tax corporations and corporate property shall never be surrendered nor suspended. (Art. 228.)

Exemption.—Any new lines of railroad constructed and completed prior to 1904 shall be exempt from taxation for ten years from the date of their completion. Exemption shall not hold with any railroad receiving local aid, unless it waive that aid or submit the question of waiving the aid to a vote of the taxpayers on petition of one-third of those taxpayers. (Art. 230.)

State aid and State industry.—The funds, credit, or property of the State shall not be loaned or granted to any individual, association, or corporation, nor shall the State assume the liability of any individual, association, or corporation nor

¹ Harbours and Carroll's Kentucky Statutes, secs. 4096-4104.

² *Ibid.*, secs. 4077-4091.

³ Laws of 1898, chap. 38.

subscribe to stock in any corporation. Nor shall the State carry on the business of any such corporation, except that it may grant the right of way through its lands to any railroad or canal. (Art. 58.)

The general assembly shall not release the liability of any individual or corporation to the State or to any local political division thereof. (Art. 59.)

Uniform taxation.—Taxation shall be uniform on the same class of subjects in the same jurisdiction. (Art. 225.)

Railroad, telegraph, telephone, sleeping-car, and express companies.

A State board of appraisers shall assess the property of such companies. (Art. 226.)

License tax.—The general assembly may levy a graduated license tax on individuals and corporations. (Art. 229.)

Foreign corporations.—Companies, corporations, and associations domiciled out of the State, but doing business therein, may be licensed and taxed in a different mode from domestic corporations; but said different mode of license shall be uniform, upon a graduated system, and it shall be equal and uniform as to all companies doing the same line of business. (Art. 242.)

Reports.—The railroad, express, telegraph, telephone, steamboat, and sleeping car commission shall have power to compel the production of books and papers of transportation companies, to summon witnesses, etc. (Art. 284.)

Local aid.—The funds, credit, or property of any political corporation shall not be loaned or granted to any individual, association, or corporation, nor shall any political corporation assume the liabilities of any individual, association, or corporation nor subscribe to stock in any corporation. (Art. 58.)

Local taxation.—Valuations of property for State taxation shall be taken as the basis for local taxation. (Art. 225.)

STATUTE PROVISIONS.

Railroad companies.

*Listing, valuation, etc.*¹—The State board of appraisers values all railroad property. For this purpose it may require all necessary information from the various companies. Due returns are made to the local civil divisions of the property assessed and its valuation in their separate jurisdictions.

*Local taxation.*²—All railroad property is assessed and taxed in the local districts.

Telegraph, telephone, express, and sleeping-car companies.¹

These companies are taxed like railroads.

Telegraph, telephone, and express companies pay in addition a local tax graduated in amount according to their gross receipts and ranging from \$20 to \$6,250.³

MAINE.

CONSTITUTIONAL PROVISIONS.

State aid.—The credit of the State shall not be directly or indirectly loaned in any case. (Art. IX, sec. 16.)

Uniform tax on property.—All taxes on property shall be assessed equally according to the value thereof. (Art. IX, sec. 8.)

STATUTE PROVISIONS.

Railroad companies.⁴

State taxation.—Railroads pay an annual excise tax to the State for the privilege of exercising their franchises. Aside from the special tax for the support of the board of railroad commissioners, this tax is in lieu of other State taxes. The tax is graduated according to gross receipts per mile of line, as follows:

One-fourth of 1 per cent on gross receipts of \$1,500 or less per mile.

One-half of 1 per cent on gross receipts between \$1,500 and \$2,250 per mile.

One-fourth of 1 per cent on gross receipts for each additional \$750 per mile, the rate never to exceed $3\frac{1}{4}$ per cent.

Interstate receipts are prorated on a mileage basis.

¹ Laws of 1900, pp. 189, 190.

² Laws of 1898, pp. 363, 364.

³ *Ibid.*, pp. 408-410.

⁴ Freeman's Supplement to the Maine Statutes (1885-1896), pp. 70, 71, 347.

Local taxation.—Railroad real estate not employed for purposes of operation is locally assessed and taxed. Cities and towns receive from the State 1 per cent on shares of railroad stock held therein.

Telephone companies.¹

These companies pay the State a tax of 2½ per cent on the value of their property of operation.

Express companies.²

These companies pay a State tax of 1½ per cent on gross receipts from business done in the State, including a pro rata mileage portion of interstate business.

MARYLAND.

CONSTITUTIONAL PROVISIONS.

State aid.—The credit of the State shall not be loaned to any individual, association, or corporation, nor shall the State engage in any work of internal improvement nor grant any aid thereto. (Art. 3, sec. 34.)

Chesapeake and Ohio Canal Company, Chesapeake and Delaware Canal Company, Susquehanna and Tidewater Canal Company, and Baltimore and Ohio Railroad Company.—The State's interest in these companies regulated. (Art. 12.)

Local aid.—No county shall contract any debt in the construction of any railroad, canal, or other work of internal improvement, nor loan its credit in aid of any association or corporation, unless authorized by act of general assembly. (Art. 3, sec. 54.)

STATUTE PROVISIONS.

Railroad companies.³

State taxation.—A State tax as a franchise tax is annually levied upon the gross receipts of railroad companies, as follows: Eight-tenths of 1 per cent on the first \$1,000 per mile of gross earnings, or on the total earnings if they are less than \$1,000 per mile; 1½ per cent on all gross earnings above \$1,000 per mile but not exceeding \$2,000 per mile; and 2 per cent on all gross earnings over \$2,000 per mile. Earnings from interstate business are prorated on a mileage basis. Annual reports are required of the railroad companies, and railroad officials may be summoned as witnesses by the State tax commissioners, who determine the amount of the tax to be paid.

Local taxation.—All railroad property is locally assessed and taxed, rolling stock upon a mileage basis as apportioned among the counties by State officials. Railroad property is assessed and taxed for county and municipal purposes like the property of individuals.⁴

Telegraph, telephone, express, parlor-car, and other transportation companies.⁵

All such companies pay a State tax as a franchise tax of 2 per cent on their gross earnings (interstate earnings on a pro rata mileage basis).⁶

MASSACHUSETTS.

CONSTITUTIONAL PROVISIONS.

Nothing specific.

STATUTE PROVISIONS.

All transportation and transmission companies.⁶

State tax.—All domestic companies are taxed under the general corporation tax law of the State. Annual returns of capital stock, property, etc., are made by the various companies to the tax commissioner of the State, who assesses their capital stock at its true market value, as representing the true value of the corporate franchise. Deductions are then made for real estate and fixed machinery locally assessed and taxed. The remaining valuation is subject to a State tax at the average rate of the local assessors throughout the State. Railroad, telegraph,

¹ Freeman's Supplement to the Maine Statutes (1885-1895), pp. 71, 72.

² Ibid., p. 72.

³ Fox's Supplement to the Public General Laws (1890-1898), pp. 541-551.

⁴ Ibid., p. 525.

⁵ Ibid., pp. 542-551.

⁶ Public Statutes of Massachusetts, chap. 13, secs. 38-41.

and telephone companies¹ doing an interstate business are taxed only on a pro rata mileage proportion of their capital stock. Provision is made by law for the inspection of corporation books, records, etc., and for the examination of the officers of corporations.

Local taxation.—Local taxes are levied on real estate and machinery. Foreign transportation companies, which are not taxable under the general corporation tax law, are assessed by the local assessors upon such property as may be found, and Massachusetts shareholders are locally taxable on their shares.

There are no local taxes on the shares of corporations which pay the State franchise tax, but there is a distribution of "corporate excess" among the local districts, according to the number of shares held in the respective districts.

Construction companies.²

All companies formed in the State to construct railroads or railroads and telegraphs are required to pay a tax of one-twentieth of 1 per cent on the par value of their capital stock.

MICHIGAN.

CONSTITUTIONAL PROVISIONS.

Internal improvement.—The State shall not be a party to, or be interested in, any work of internal improvement, except as concerns the expenditure of grants to the State of land or other property. (Art. XIV, sec. 9.)

State aid.—The credit of the State shall not be granted in aid of any individual, association, or corporation. (Art. XIV, sec. 6.)

The State shall not subscribe to, or be interested in, the stock of any company or corporation. (Art. XIV, sec. 8.)

Property taxes and specific taxes.—The legislature shall provide for a uniform rule of taxes levied on property, except on property paying specific taxes. (Art. XIV, sec. 11.)

All assessments hereafter authorized shall be on property at its cash value. (Art. XIV, sec. 12.)

The State shall continue to collect the specific taxes provided for by existing law, and may provide for the collection of specific taxes from railroads and other corporations hereafter created. (Art. XIV, sec. 10.)

All specific taxes (the existing railroad taxes are such) shall be applied for educational purposes. (Art. XIV, sec. 1.)

STATUTE PROVISIONS.

Railroad companies.³

State taxation.—Railroad and depot companies pay a "specific tax upon property and business." This tax is levied upon the basis of gross earnings, as follows:

2½ per cent on gross income when earnings per mile of road in State are \$2,000 or less.

3½ per cent on gross income when earnings per mile of road in State are from \$2,000 to \$4,000.

4 per cent on gross income when earnings per mile of road in State are from \$4,000 to \$6,000.

4½ per cent on gross income when earnings per mile of road in State are from \$6,000 to \$8,000.

5 per cent on gross income when earnings per mile of road in State exceed \$8,000.

10 per cent on gross income of depot companies in excess of \$20,000 per mile.

Interstate lines pay the tax on a pro rata mileage proportion of their gross income. The proceeds of the railroad tax are devoted to the primary school fund.

*Local taxation.*⁴—The above State tax is in lieu of all other railroad taxes except the tax locally assessed on such railroad property as is not employed for purposes of operation.

Telegraph, telephone,⁵ and express companies.⁶

These companies are taxed 3 per cent on their gross receipts from business done in the State.

¹In the case of telephone companies the prorating is done on the basis of the number of telephones in use in the State. Supplement to the Public Statutes of Massachusetts (1882-1888), pp. 308, 433.

²Supplement to the Public Statutes of Massachusetts (1889-1895), pp. 1338, 1339.

³Compiled Laws of Michigan (1897), pp. 1974-1976, 2000.

⁴Ibid., pp. 1257-1258.

⁵Public Acts of 1899, No. 179.

⁶Public Acts, Extra Session of 1898, p. 11.

Freight line, sleeping, and parlor-car companies.¹

These companies pay a State tax of 2½ per cent on their gross receipts from business done in the State.

Navigation companies.²

These companies are taxed upon the aggregate value of their capital stock, personality, realty, franchise, ships, and docks, with deduction for all bona fide indebtedness. All ships, boats, and vessels are taxed as personality.

MINNESOTA.

CONSTITUTIONAL PROVISIONS.

Internal improvement.—All lands donated to the State for purposes of internal improvement shall be sold, the proceeds thereof to be turned into the internal-improvement fund. Moneys belonging to this fund shall not be appropriated until the act providing for such appropriation shall have been approved by popular vote. (Art. IV, sec. 32 (b).)

The State shall never contract debt for works of internal improvement, or be a party to such work except in the case of grants to the State for that purpose. (Art. IX, sec. 5.)

State aid.—The credit of the State shall never be given or loaned in aid of any individual, association, or corporation. (Art. IX, sec. 10.)

Uniform tax on property.—All taxes in the State shall be as nearly equal as may be, and taxes on property shall be equalized and uniform throughout the State. (Art. IX, sec. 1.)

Railroads.—Any law providing for the amendment or repeal of the existing system of levy on the gross earnings of railways shall be submitted to the vote of the people. (Art. IV, sec. 32 (a).)

Telegraph, telephone, express, and car companies.

The legislature may impose upon the owners or operators of such companies taxes on property or earnings, or both, which may be graded or progressive, and which shall be on a pro rata mileage basis. This shall not preclude the taxation of land or ordinary property according to the ordinary methods. (Art. IX, sec. 17.)

STATUTE PROVISIONS.

Railroad companies.³

Railroad companies are required annually to report to the State railroad and warehouse commission their gross earnings for the year, separating interstate from intrastate earnings. They are then taxed on a pro rata mileage proportion of their gross earnings. During the first three years of operation the rate is 1 per cent, during the next seven years 2 per cent, and thereafter 3 per cent. This tax is paid to the State treasurer, and is in lieu of all other taxes, either State or local, excepting local taxes on lands the subject of grant either by the State or the United States.

Telephone companies.⁴

These companies pay a tax of 3 per cent on their gross earnings to the State.

Express companies.⁵

These companies pay the State a tax of 5 per cent on their gross receipts from business done in the State, with deductions for the amount paid to railroad companies for the transportation of freight within the State.

Freight line and equipment companies.⁶

These companies pay to the State auditor a tax of 2 per cent on the actual value of their capital stock, determined on a pro rata mileage basis after making deductions for real estate locally taxed.

Sleeping and parlor car companies.⁷

These companies annually pay to the State treasurer a tax of 3 per cent on their gross receipts from business done in the State, in lieu of other taxation.

¹ Compiled Laws of Michigan (1897), pp. 1268-1269.

² *I. id.*, p. 1196.

³ Statutes of Minnesota (1894), secs. 1669-1681, and Laws of 1897, p. 32.

⁴ Laws of 1897, p. 561.

⁵ *Ibid.*, p. 572; also Laws of 1899, p. 404.

⁶ Laws of 1897, p. 308; also Laws of 1899, p. 134.

⁷ Laws of 1897, p. 307.

Water craft.¹

Owners of water craft pay into the State treasury an annual tax of 3 cents per net ton (registered tonnage) of such craft, in lieu of all other taxes. One-half of the proceeds of this tax is paid by the State to the counties in which the ports of hail of such craft are situated.

MISSISSIPPI.

CONSTITUTIONAL PROVISIONS.

Release from taxation.—The power to tax corporations and corporate property shall never be surrendered nor abridged, except that exemption from taxation for a period of five years may be granted to new enterprises of public utility. (Sec. 182.)

State aid.—No law granting a donation in favor of any object shall be enacted except by two-thirds vote of each house. (Sec. 66.)

Lands under the control of the State shall never be donated to industrial corporations or railroad companies. The legislature may, however, grant the right of way to railways across State lands as a mere easement. (Sec. 95.)

The credit of the State shall not be pledged nor loaned in aid of any association or corporation, nor shall the State assume the indebtedness of any individual, association, or corporation, nor become a stockholder in any corporation. (Sec. 258.)

No obligation of any person, association, or corporation to the State or to any local division shall be released, postponed, or diminished. (Sec. 100.)

Uniform tax on property—Railroads and other corporations.—Taxation shall be uniform on all property. But the legislature may provide for a special mode of assessment for railroads and for other corporate property not situated wholly in one county. (Sec. 112.)

The property of corporations shall be taxed in the same way and to the same extent as the property of individuals. (Sec. 181.)

Local aid.—No local division shall loan its credit to or subscribe to stock in any railroad or other association or corporation. (Sec. 183.)

STATUTE PROVISIONS.

Railroad companies.²

Listing, valuation, etc.—Railroad companies are required to make annual reports to the State railroad commission, setting forth their property, taxable and nontaxable, their capital stock, and receipts for the year, and the values of their respective franchises. The railroad commission then assesses the property of these companies, taking into consideration the value of the franchise and of the capital stock engaged in business in the State. This valuation is apportioned among the counties for the computation and collection of the tax.

*Privilege tax.*³—Railroads also pay the State an annual privilege tax. For this purpose they are divided into four classes, according to their gross earnings per mile for the year. The taxes levied on each class are as follows:

First class, \$20 per mile; second class, \$15 per mile; third class, \$10 per mile; narrow-gauge class, \$2 per mile.

Local taxation.—Railroad real estate not directly employed for traffic operations is locally assessed and taxed. There is also a local tax on the values apportioned by the State.

Telegraph, express, and sleeping-car companies.²

These companies are assessed and taxed like railroads.

Telegraph companies also pay a privilege tax of \$350 if their lines are 1,000 miles or more in length. Otherwise they pay \$25 per mile.⁴

Sleeping-car companies pay the State the annual specific sum of \$200, besides the sum of 25 cents per mile for each mile of railroad track in the State over which cars were run.⁵

Telephone companies.⁴

These companies pay a tax graded according to the number of their subscribers, varying in amount from \$5 to \$100.

¹ Laws of 1895, p. 507.

² Annotated Code of Mississippi, secs. 3875-3886.

³ Laws of 1896, p. 44.

⁴ *Ibid.*, p. 47.

⁵ *Ibid.*, p. 46.

MISSOURI.

CONSTITUTIONAL PROVISIONS.

Release from taxation.—The power to tax corporations and corporate property shall not be surrendered or suspended. (Art. X, sec. 2.)

State aid.—The State shall not lend nor pledge its credit in aid of any individual, association, or corporation. (Art. IV, sec. 45.)

The State shall not grant money or property in aid of any individual, association, or corporation. (Art. IV, sec. 46.)

The State shall not subscribe to stock in any corporation, except to secure loans previously extended to certain railroads. (Art. IV, sec. 49.)

The State shall not release its lien on any railroad. (Art. IV, sec. 50.)

The State shall not release any obligation to itself on the part of any corporation or individual. (Art. IV, sec. 51.)

Uniform tax on property.—Taxes shall be uniform upon the same class of subjects within the same taxing jurisdiction. (Art. X, sec. 3.)

Property subject to taxation shall be taxed in proportion to its value. (Art. X, sec. 4.)

Railroads.—Railroads shall be subject to taxation for State and local purposes on their property, gross earnings, net earnings, franchises, and capital stock. (Art. X, sec. 5.)

Local aid.—No local division shall subscribe to stock in any railroad or other corporation, nor loan its credit nor make donation in aid of any such corporation.

STATUTE PROVISIONS.

Railroad companies.¹

Listing, valuation, etc.—Railroad companies are required to return to the State auditor detailed annual statements of their property of operation and its actual value. Duplicate statements are made to the county clerks of the respective counties of property therein situated. These are certified by the county courts and forwarded to the State auditor, by whom they are laid before the State board of equalization. This board then assesses the railroad property (rolling stock on a pro rata mileage basis), and apportions the valuation among the counties for the computation and collection of the tax. In the making of assessments the board has access to railroad books, records, etc.

Local taxation.—All railroad property not assessed by the State (i. e., lands, machine and work shops, roundhouses, warehouses and other buildings, goods, chattels, and office furniture) is assessed and taxed locally. There is also a local tax on the values apportioned by the State.

Telegraph and express companies.²

These companies are taxed on their franchises and property in the same manner as railroads.

Express companies pay the State, in addition, a tax of $1\frac{1}{4}$ per cent on their gross receipts from business done in the State.³

Car companies.⁴

These companies pay the State a tax of 2 per cent on the cash valuation of their cars.

MONTANA.

CONSTITUTIONAL PROVISIONS.

Release from taxation.—The power to tax corporations and corporate property shall never be surrendered or suspended. All corporations shall be taxed for State and local purposes. (Art. XII, sec. 7.)

Exemption of stocks.—Stocks in any company shall not be taxed when the property represented by such stocks is taxed. (Art. XII, sec. 17.)

State aid.—The State shall never loan its credit to, grant subsidy to, or subscribe to stock in any company or corporation. (Art. XIII, sec. 1.)

No appropriation shall be made to any person or corporation not under the absolute control of the State. (Art. V, sec. 35.)

The legislature shall not authorize the contracting of debt in the construction of any railroad, nor loan the credit of the State in aid of the same. (Art. V, sec. 38.)

¹ Revised Statutes of Missouri (1899), pp. 2169-2181.

² *Ibid.*, pp. 2181-2182.

³ *Ibid.*, pp. 2184-3185.

⁴ *Ibid.*, pp. 2171-2172.

No obligation of any individual, association, or corporation to the State or any local division shall ever be released, postponed, or diminished. (Art. V, sec. 39.)

Uniform tax on property—License taxes.—Taxes shall be uniform upon the same class of subjects in the same jurisdiction. (Art. XII, sec. 11.)

The legislature shall levy a uniform rate of assessment. All property shall be taxed at its just value. The legislature may also impose a license tax on persons and corporations. (Art. XII, sec. 1.)

Railroads.—The franchise, roadway, roadbed, rails, and rolling stock of all railroads operating in more than one county shall be assessed by the State board of equalization, and the valuation apportioned among the local districts on a pro rata mileage basis. (Art. XII, sec. 16.)

Local aid.—No local division shall ever loan its credit to, grant subsidies to, or subscribe to stock in any company or corporation. (Art. XIII, sec. 1.)

The legislature shall not authorize any county to contract debt in the construction of any railroad, nor loan its credit in aid of the same. (Art. V, sec. 38.)

STATUTE PROVISIONS.

Railroad companies.

Listing, valuation, etc.—Railroad companies are required to make to the State full annual statements of their property of operation, capital stock, earnings, and indebtedness. On the basis of these returns, the State board of equalization assesses franchise, roadbed, rails, and rolling stock (whether owned, hired, or leased). The valuation thus determined is apportioned among the counties on a mileage basis for the computation and collection of the tax.

Local taxation.—Railroad real estate not on the right of way, including stations and depots, is locally assessed. There is also a local tax on the values apportioned by the State.

Railroads operating in a single county are locally assessed and taxed on their property and franchises.²

Telegraph, telephone, express, canal, stage, and navigation companies.

Telegraph, telephone, and canal companies are locally assessed on their property and franchises.³

Telegraph companies pay a local license tax of \$5 per quarter on each instrument in use, and telephone companies 75 cents per year on each instrument.⁴

Express, stage, and navigation companies are locally assessed and taxed on their property.⁴

Common carriers.⁵

The law provides for a license tax on common carriers, graduated in amount according to the amount of business done per quarter.

NEBRASKA.

CONSTITUTIONAL PROVISIONS.

Release from taxation.—The legislature shall have no power to release or discharge from State taxes, nor to authorize commutation for such taxes in any form. (Art. IX, sec. 4.)

State aid.—Lands under the control of the State shall never be donated to railroad companies, private corporations, or individuals. (Art. III, sec. 18.)

The credit of the State shall never be given or loaned in aid of any individual, association, or corporation. (Art. XII, sec. 3.)

Property and franchise taxes.—Property and franchises shall be taxed according to their value in such manner as the legislature shall direct. (Art. IX, sec. 1.)

Reports of railroad companies.—Annual reports shall be made by railroad companies to the State auditor. (Art. XI, sec. 1.)

Local aid.—No local district shall make donations to any work of internal improvement except by vote of the people; aggregate donations of this character shall not exceed 10 per cent of the assessed value of property in any county unless by a two-thirds vote of the people, when a 5 per cent increase over the 10 per cent limit shall be valid. (Art. XII, sec. 4.)

¹ Booth's Montana Code, secs. 3696, 3737-3743.

² Ibid., sec. 3719.

³ Laws of 1897, p. 202.

⁴ Booth's Montana Code, sec. 3715.

⁵ Ibid., sec. 4074.

STATUTE PROVISIONS.

Railroad companies.¹

Listing, valuation, etc.—Railroad companies are required to make annual reports of their property and its value to the State. On the basis of these reports the State board of equalization assesses all property of operation and apportions the valuation thus determined among the counties, where the tax is computed and collected.

Local taxation.—Real and personal property of railroads, not in the right of way, is locally assessed and taxed. There is also a local tax on the values apportioned by the State.

Telegraph companies.¹

These companies are taxed like railroads.

Sleeping car companies.²

These companies are taxed on a pro rata mileage valuation of their cars.

Express, steamboat, and other transportation companies.³

All such companies incorporated in the State pay a franchise tax upon their capital stock, less the value of real and personal property otherwise taxed. Deduction is also made for indebtedness, except for current expenses and improvements.

NEVADA.

CONSTITUTIONAL PROVISIONS.

State aid.—The State shall not donate or loan its money or credit or subscribe to stock in any company or corporation. (Art. VIII, sec. 9.)

The State shall never assume the debts of any corporation. (Art. IX, sec. 4.)

Uniform tax on property.—There shall be a uniform and equal rate of assessment and taxation on all property. (Art. X, sec. 1.)

Corporations.—All corporate property shall be subject to taxation the same as the property of individuals. (Art. VIII, sec. 2.)

Local aid.—No local division shall become a stockholder in or lend its credit in aid of any company or corporation except railroad companies. (Art. VIII, sec. 10.)

STATUTE PROVISIONS.

Railroad companies.⁴

Listing, valuation, etc.—Railroad companies make annual returns of property, which is assessed by the State board of assessment and equalization. The valuation determined by that board is apportioned among the counties for the computation and collection of the tax. In fixing values, statute provision requires that the railroad property shall not be treated as so much "land covered by right of way" nor "as so much iron," but as a complete operated line of road. Rolling stock is valued and apportioned on a pro rata mileage basis.

Local taxation.—All railroad property is locally taxed.

Common carriers.⁵

Common carriers (carriers of gold dust) pay an annual tax of \$150 in the counties where they operate.

NEW HAMPSHIRE.

CONSTITUTIONAL PROVISIONS.

Uniform taxes.—The general court shall have power to levy proportional and reasonable assessments, rates, and taxes upon all persons and estates within its limits. (Part 2, art. 6.)

Local aid.—The general court shall not authorize any town to loan or give its money or credit in aid of any corporation. (Ibid.)

¹Compiled Statutes of Nebraska (1897), pp. 912-913.

²Ibid., pp. 913-914.

³Ibid., p. 911.

⁴Cutting's compiled laws of Nevada (1861-1900), secs. 1236-1239.

⁵Ibid., sec. 1190.

STATUTE PROVISIONS.

Railroad companies.¹

Exemption.—Railroads are exempted from taxation for a period of ten years after their construction.

State taxation.—The State board of equalization assesses all railroad property. The various companies are required to submit all evidence required of them by the board. The tax is levied on the value of road, rolling stock, and equipment, and is in lieu of all taxes on stocks.

Local taxation and local distribution.—Real estate not in the right of way is locally assessed and taxed. The proceeds of the State tax on railroads is disposed of as follows:

(1) One-fourth of the tax is paid to the towns through which roads run according to the share of the capital invested in each town for buildings and right of way.

(2) To each town in the State in which any railroad stock is owned, such proportion of the residue of the tax as the number of shares owned in such town bears to the total number of shares of capital stock.

(3) The remainder is retained by the State.

In order to carry out this distribution the selectmen annually make invoice of the shares of railroad stock owned by the inhabitants of their respective towns to the State treasurer. The various railroad companies also give a list of the same to the selectmen.

Telephone and telegraph companies.¹

These companies are, like railroads, taxed on their lines and equipments.

NEW JERSEY.

CONSTITUTIONAL PROVISIONS.

State aid.—The credit of the State shall not be directly or indirectly loaned in any case. (Sec. VI, 3.)

STATUTE PROVISIONS.

Railroad companies.²

Listing, valuation, etc.—Railroad companies make annual returns of property, stock, and indebtedness, upon the basis of which, in addition to corporation books, etc., the State board of assessors set a valuation upon all railroad property and franchises. A tax of one-half of 1 per cent is levied on this valuation for State purposes.

Local taxation.—In addition to the State tax, the State collects a tax at the local rate upon railroad real estate in each tax district, the proceeds of which are apportioned among the tax districts in which such property is situated. Other local railroad property not used for purposes of operation is locally assessed and taxed.³

Telegraph, telephone, express, palace, parlor, and sleeping car companies.⁴

All such companies incorporated in the State pay to the State an annual license tax for their corporate franchises of 2 per cent upon their gross receipts from business done in the State.

Foreign equipment companies.⁵

These companies are assessed on their rolling stock according to the proportion of the year their cars are kept in the State.

NEW MEXICO.

STATUTE PROVISIONS.

Railroad companies.

*Exemption.*⁶—Railroads are exempted from taxation for a period of six years after their completion.

¹ Public Statutes and Session Laws in force January 11, 1901, pp. 224-226.

² General Statutes of New Jersey (1896), pp. 3322-3335.

³ Laws of 1897, p. 147.

⁴ General Statutes of New Jersey (1896), pp. 3336, 3339.

⁵ *Ibid.*, p. 3326.

⁶ Compiled Laws of New Mexico (1897), secs. 3880, 3881.

*Taxation.*¹—Railroad property is assessed and taxed like the property of individuals.

Express companies.²

These companies are taxed by the Territory at the rate of 2 per cent on their surplus of gross receipts over sums actually paid out to other companies for transportation within the Territory. One-half of the sum thus paid the Territory is distributed among the counties in proportion to the business done in each county. The tangible property of express companies is locally assessed and taxed.

Palace and sleeping car companies.³

These companies pay the Territory a tax of 2½ per cent on their gross earnings from business done in the Territory. One-half of the proceeds of the tax is distributed among the counties in the same manner as the tax on express companies. The tangible property of the companies is locally assessed and taxed.

NEW YORK.

CONSTITUTIONAL PROVISIONS.

State transportation interests.—The legislature shall not sell, lease, or otherwise dispose of the Erie Canal, the Oswego Canal, the Champlain Canal, the Cayuga and Seneca Canal, or the Black River Canal; they shall remain the property of the State forever. This shall not apply to the Main and Hamburg Street Canal in Buffalo. (Art. VII, sec. 8.)

The canals may be improved as the legislature shall provide by law. The cost of such improvement may be met by loan, appropriation from the State treasury, or an equitable annual tax. (Art. VII, sec. 10.)

Local aid.—No local division shall loan its money or credit to, become the owner of stock or bonds in, or incur indebtedness for any individual, association, or corporation. (Art. VIII, sec. 10.)

STATUTE PROVISIONS.

Transportation and transmission companies.

*State taxation.*⁴—All transportation and transmission companies, in common with other corporations and joint-stock companies, are required to make annual returns to the State controller. Upon the basis of these returns the various companies are taxed upon their franchises, on the basis of their capital stock employed in the State, at the rate of one-fourth mill on the \$1 for each 1 per cent of dividend declared, provided the dividend is at least 6 per cent on the par value of the stock. If the dividend is under 6 per cent, or if none has been declared, the tax rate is 1½ mills on each \$1 of the actual value of the capital stock.

Every transportation and transmission company, in addition to the above tax, must pay a tax "upon its corporate franchise or business in this State" of one-half of 1 per cent upon its gross earnings from business done in the State.

Provision is made for the examination of corporation books, records, witnesses, etc., by the State controller.

*Local taxation.*⁴—All companies are locally assessed and taxed on their property.

NORTH CAROLINA.

CONSTITUTIONAL PROVISIONS.

State aid.—The State shall not lend its credit in aid of any person, association, or corporation but by vote of the people, except to aid in completing such railroads as may be unfinished at the time of the adoption of this constitution, (Art. V, sec. 4.)

Uniform tax on property—Franchise and income taxes.—Taxation shall be by uniform rule on all property. The general assembly may also lay taxes on franchises and income, provided the property from which income is derived is not taxed. (Art. V, sec. 3.)

¹ Compiled Laws of New Mexico (1897), sec. 4025.

² Ibid., secs. 3926-3927.

³ Ibid., secs. 4118-4121.

⁴ General Laws, Chap. XXIV, secs. 182, 184, 189.

⁵ Ibid., secs. 11, 39.

STATUTE PROVISIONS.

Railroad companies.¹

Listing, valuation, etc.—Railroad companies annually report their property of operation to the State corporation commission. The commission determines the value of this property as if it were the property of individuals. Rolling stock is valued on a pro rata mileage basis. The final valuation is apportioned among the counties for the computation of the tax. The tax for State purposes is paid directly into the State treasury. The commission is empowered to examine books, papers, etc., in determining valuations.

Local taxation.—Railroad property other than that of operation is locally assessed and taxed. There is also a local tax on the values apportioned by the State.

Telegraph, telephone, express, sleeping-car, freight-car, canal, and steamboat companies.¹

These companies are assessed and taxed like railroads.

Telegraph, telephone, and express companies pay also a tax of 2 per cent on their gross receipts from business done in the State.²

NORTH DAKOTA.

CONSTITUTIONAL PROVISIONS.

State aid.—The State shall not loan its credit, make donation, or take stock in aid of any individual, association, or corporation. (Sec. 185.)

Uniform tax on property.—All property shall be taxed by a uniform rule according to its true money value. (Sec. 176.)

Railroads.—The franchises, roadway, roadbed, rails, and rolling stock of railroads shall be assessed by the State board of equalization at its actual value, and such assessed valuations shall be apportioned among the local taxing districts on a pro-rata mileage basis. (Sec. 179.)

The legislature may provide for the payment of a percentage of railway gross earnings in lieu of the above taxes on property, except the local taxes on property not in the right of way. (Sec. 176.)

Reports by railroad companies.—Railroads shall make annual reports to the State as prescribed by law. (Sec. 140.)

Local aid.—No local division shall loan its credit, make donation, or take stock in aid of any individual, association, or corporation. (Sec. 185.)

STATUTE PROVISIONS.

Railroad companies.³

Listing, valuation, etc.—Railroad companies make annual returns of their property to the State board of equalization. On the basis of these returns franchise, roadbed, roadway, rails, and rolling stock used in the State are assessed at their actual value. Corporation books and papers, as well as witnesses, may be summoned to assist in determining valuations. The valuations are apportioned among the counties for the computation and collection of the tax.

Local taxation.—Property other than that of operation is locally assessed and taxed. There is also a tax on the values apportioned by the State.

Telegraph and telephone companies.⁴

These companies are locally taxed on their property.

Express companies.⁵

These companies pay an annual license tax, as follows:

\$5 per station in places of 200 inhabitants or less.

\$10 per station in places of from 200 to 1,000 inhabitants.

\$25 per station in places of from 1,000 to 3,000 inhabitants.

\$50 per station in places of more than 3,000 inhabitants.

These companies are also locally assessed and taxed on their personal property.

¹ Laws of 1899, chap. 15, and Laws of 1900, p. 64.

² Laws of 1899, p. 52.

³ Revised Code of North Dakota (1895), secs. 1331–1333.

⁴ Laws of 1899, p. 259.

⁵ Revised Code of North Dakota (1895) secs. 1745–1748; also laws of 1899, p. 259.

1070 INDUSTRIAL COMMISSION:—TRANSPORTATION.

Sleeping car companies.¹

These companies pay an annual license tax of \$100 per car, the aggregate sum paid by any one company not to exceed \$5,000.

OHIO.

CONSTITUTIONAL PROVISIONS.

State aid.—The State shall never contract any debt for purposes of internal improvement. (Art. XII, sec. 6.)

The State shall never lend its credit to nor subscribe to stock in any association or corporation. (Art. VIII, sec. 4.)

The State shall not assume the debts of any corporation. (Art. VIII, sec. 5.)

Uniform tax on property.—All property shall be taxed according to a uniform rule at its true cash value. (Art. XII, sec. 2.)

Corporations.—Corporate property shall forever be taxed like the property of individuals. (Art. XIII, sec. 4.)

Local aid.—The general assembly shall never authorize any local division to raise money or loan its credit in aid of any association or corporation, or become a stockholder therein. (Art. VIII, sec. 6.)

STATUTE PROVISIONS.

Railroad companies.²

Listing, valuation, etc.—The auditors of the various counties are constituted a board of appraisers for railroads. The various companies make annual returns of property and upon request are required to submit books, records, etc.

Upon the basis of this information all property of operation, moneys, and credits are assessed upon a pro-rata mileage basis. The valuation thus determined is apportioned among the counties for the computation and collection of the tax.

Excise tax.—Railroads are required to pay the State an annual excise tax of one-half of 1 per cent on gross earnings from business done in the State, including a mileage proportion of interstate receipts.

Local taxation.—Real estate not in the right of way is locally assessed and taxed.

There is also a local tax on the values apportioned by the State.

Telegraph, telephone, and express companies.³

The property of these companies is valued by the State board of appraisers and assessors. In determining this valuation capital stock and earning capacity are duly considered. The value of real estate locally assessed and taxed is deducted, and the remaining valuation is prorated on a mileage basis among the counties for the computation and collection of the tax.

Telegraph and telephone companies are required to pay the same "excise tax" as railroad companies.⁴

Express companies are required to pay an excise tax of 2 per cent on gross receipts from business done in the State.

Freight line and equipment, and sleeping car companies.⁵

These companies are required to pay an annual tax to the State upon the actual value of their capital stock, representing capital and property owned and used in the State. This value is determined on a pro-rata mileage basis and deduction is made for real estate locally assessed and taxed.

OKLAHOMA.

STATUTE PROVISIONS.

Railroad companies.⁶

Listing, valuation, etc.—Railroad companies are required to make annual reports to the Territory. All property of operation, moneys, and credits are assessed at their actual cash value by the board of railroad assessors, who are empowered also to examine corporation books and records, and to summon wit-

¹ Revised Code of North Dakota (1895), secs. 1751-1755.

² Bates's Annotated Ohio Statutes (1897), secs. 2770-2777 et seq.

³ *Ibid.*, secs. 2780-2781 et seq.

⁴ *Ibid.*, secs. 2777 et seq.

⁵ *Ibid.*, secs. 2780-2787 et seq.

⁶ Laws of 1895, pp. 224-229; see also Laws of 1899, p. 219.

nesses, etc. The valuation determined upon its apportioned among the counties for the computation and collection of the tax. Cars used by a railroad but not owned by it are listed against the company to which they belong.

Local taxation.—Real estate not in the right of way is locally assessed and taxed. There is also a local tax on the values apportioned by the State.

Telegraph and telephone companies.¹

These companies are locally assessed on their property, returns of which they are required to make to both the auditor of the Territory and to the county clerks.

OREGON.

CONSTITUTIONAL PROVISIONS.

State aid.—The State shall not subscribe to stock in any company or corporation. (Art. IX, sec. 6.)

Uniform tax on property.—There shall be a uniform rate of assessment and taxation. All property shall be taxed at its just value. (Art. IX, sec. 7.)

Local aid.—No local district shall become a stockholder in any corporation or company, or raise money for or loan its credit in aid of any individual, association, or corporation. (Art. XI, sec. 9.)

STATUTE PROVISIONS.

Transportation companies.²

Transportation companies generally are assessed and taxed on their property in the same manner as individuals.

Railroad rolling stock, including all cars hired or leased, is annually reported by the managing officers of railroads at their places of business, and is apportioned among the counties on a pro-rata mileage basis. Rolling stock engaged in interstate business is assessed on a pro-rata mileage portion.

PENNSYLVANIA.

CONSTITUTIONAL PROVISIONS.

Release from taxation.—The power of the State to tax corporations and corporate property shall not be surrendered or suspended. (Art. IX, sec. 3.)

State aid.—The credit of the Commonwealth shall not be pledged or loaned to any individual or company, nor shall the Commonwealth become a stockholder in any company. (Art. IX, sec. 6.)

No obligation of any railroad or other corporation, held by the Commonwealth, shall be postponed or diminished in any way. (Art. III, sec. 24.)

Uniform taxation.—All taxes shall be uniform on the same class of subjects and shall be levied and collected under general laws. (Art. IX, sec. 1.)

Reports, etc., of transportation companies.—In addition to the annual reports required of transportation companies, the secretary of internal affairs may require special reports. (Art. XVII, sec. 11.)

Local aid.—No local district shall become a stockholder in any company nor loan its credit to, nor appropriate money for, any company or individual. (Art. IX, sec. 7.)

STATUTE PROVISIONS.

All transportation and transmission companies.

State taxation.—All corporations in the State are required to make annual reports to the State. They are taxed at the rate of one-half of 1 per cent on the actual value of their capital stock. This, according to judicial interpretation, is a tax on property, franchise, assets, and earning capacity. Companies doing an interstate business are taxed only on a mileage proportion of their capital stock.³

These companies also pay a tax of two-fifths of 1 per cent on the value of bonds issued by them and held by residents of the State. The tax is paid out of the interest on the bonds, so that when no interest is paid no tax is paid.⁴

¹ Statutes of Oklahoma (1893), p. 1043.

² Hill's Annotated Laws of Oregon (1892), pp. 1281-1284.

³ Pamphlet laws of 1891, p. 229, and of 1893, p. 353.

⁴ Pamphlet laws of 1895, p. 193.

1072 INDUSTRIAL COMMISSION:—TRANSPORTATION.

These companies also pay a tax of four-fifths of 1 per cent on gross receipts from business done wholly in the State.¹

Express companies are subject in addition to an annual excise tax on gross earnings from business done in the State, including a mileage proportion of interstate receipts. The rate is 1 per cent when receipts are \$100 per mile or under, 2 per cent when receipts are between \$100 and \$150 per mile, then 1 per cent additional for each \$50 additional receipts per mile until the rate reaches the maximum of 5 per cent.²

Local taxation.—Transportation property not necessary for operating purposes is locally assessed and taxed.

The New York, Lake Erie and Western Railroad Company, in addition to the regular taxes, annually pays the State \$10,000 for the privilege of maintaining a portion of its road through Pike and Susquehanna counties.³

RHODE ISLAND.

CONSTITUTIONAL PROVISIONS.

State aid.—The credit of the State shall not be pledged in aid of any individual, association, or corporation. (Art. IV, sec. 13.)

A two-thirds vote of both houses shall be necessary to every bill appropriating public money or property for private purposes. (Art. IV, sec. 14.)

Taxation.—The general assembly shall provide for the assessment of taxes as it may think best.

STATUTE PROVISIONS.

Railroad companies.

Railroad companies are taxed on their property in the same manner as individuals. No express provision is made for railroad taxation in the law of the State.

Telegraph, telephone, and express companies.⁴

These companies are required to make annual returns of their gross receipts from business done in the State. A tax of 1 per cent is levied on these receipts, to be paid into the State treasury in lieu of all other taxes on property of operation.

SOUTH CAROLINA.

CONSTITUTIONAL PROVISIONS.

Uniform tax on property.—There shall be a uniform and equal rate of assessment and taxation. All property shall be taxed at its just value. (Art. IX, sec. 1.)

Corporations.—The property of corporations shall be subject to taxation. (Art. XII, sec. 1.)

STATUTE PROVISIONS.

Railroad companies.⁵

Listing, valuation, etc.—Railroad companies are required annually to list with the controller-general of the State their entire property of operation, moneys, credits, etc. Annual reports are made also to the county auditors of property within the various counties. The controller-general is empowered to examine corporation books, papers, etc. A valuation is set upon the property as listed by the State board of assessors, and the valuation thus determined is apportioned among the counties for the computation and collection of the tax.

Local taxation.—Railroad real estate not in the right of way is locally assessed and taxed. There is also a local tax on the values apportioned by the State.

Telegraph, telephone, palace-car, express, and fast-freight companies.⁶

These companies are taxed on a property valuation determined by the State board of assessors in much the same manner as railroads.

SOUTH DAKOTA.

CONSTITUTIONAL PROVISIONS.

Release from taxation.—The power to tax corporations and corporate property shall never be surrendered or suspended. (Art. XI, sec. 3.)

¹ Pamphlet laws of 1869, p. 420.

² Pamphlet laws of 1897, p. 234.

³ Pamphlet laws of 1846, p. 179.

⁴ General Laws of Rhode Island (1896), pp. 133-134.

⁵ Revised Statutes of South Carolina (1893), pp. 96-97.

⁶ Laws of 1898, No. 441.

State aid.—The State shall not make donation to, loan its credit to, or assume the liability of any individual, association, or corporation, or subscribe to stock in any association or corporation. (Art. XIII, sec. 1.)

Uniform tax on property—Corporations.—All taxes shall be uniform on all property. Corporate property shall be assessed and taxed as near as may be like individual property. (Art. XI, sec. 2.)

Railroad reports.—Railroad companies shall make annual reports to the State as by law prescribed. (Art. XVII, sec. 12.)

Local aid.—No local division shall make any donation to, loan its credit to, or assume the liability of any individual, association, or corporation, nor subscribe to stock in any association or corporation. (Art. XIII, sec. 1.)

STATUTE PROVISIONS.

Railroad companies.

Listing, valuation, etc.—Railroad companies make annual reports to the State board of assessment and equalization of their earnings and property of operation. On the basis of these returns a valuation is reached, taking into consideration gross and net earnings, and is apportioned among the counties for the computation and collection of the tax.

Local taxation.—All railroad property other than that of operation is locally assessed and taxed. There is also a local tax on the values apportioned by the State.

Telegraph and telephone company

These companies make annual returns to the State board of assessment and equalization, and are taxed on their property as valued by that board. The tax is paid directly into the State treasury. Each county is subsequently allotted its share of the proceeds of the tax.

Express and sleeping-car companies

These companies make annual returns to the State auditor. They are assessed on their property by the State board of equalization and assessment. The gross earnings for the year are taken into account in determining the valuation. The tax is paid into the State treasury. Each county is subsequently allotted its share of the proceeds of the tax.

TENNESSEE.

CONSTITUTIONAL PROVISIONS.

Internal improvement.—A well-regulated system of internal improvement ought to be encouraged by the General Assembly. (Art. XI, sec. 10.)

State aid.—The credit of the State shall not be loaned in aid of any individual, association, or corporation, nor shall the State become a stockholder in any association or corporation. (Art. II, sec. 31.)

No State bonds shall be issued to any railroad company which, at the time of its application for such, shall be in default of interest on past issues to it, or which has disposed of any past issues to it for less than par. (Art. II, sec. 33.)

Uniform tax on property.—All property shall be taxed uniformly according to its value, as the legislature shall direct. (Art. II, sec. 28.)

Local aid.—No local division shall loan its credit to any individual, association, or corporation, nor take stock in any association or corporation, except by three-fourths vote of the people. (Art. II, sec. 29.)

STATUTE PROVISIONS.

Railroad companies.¹

Listing, valuation, etc.—Railroad companies file annual schedules of property, stock, indebtedness, and earnings with the State railroad commission, by whom a valuation is set upon railroad property, with due regard for franchises, stock, bonds, and earnings. The valuation thus determined is examined by the State board of equalization and certified to the State controller. The taxes are paid into the State treasury.

In reaching a valuation the railroad commission has power to examine corporation books and papers. Railroad property having actual situs is known as localized property, and that having no actual situs is known as distributable property and is valued on a pro rata mileage basis.

¹ Annotated South Dakota statutes (1899) secs. 2189-2203.

² *Ibid.*, secs. 2194-2196.

³ *Ibid.*, secs. 2198-2203.

⁴ Laws of 1897, chap. 6.

Railroad companies not paying the State ad valorem tax pay an annual tax as follows: Companies controlling or operating 400 miles or more of road pay \$10,000 for business done in the State; from 100 to 400 miles, \$5,000; from 25 to 100 miles, \$1,000; less than 25 miles, \$100.¹

Local taxation.—Railroad real estate and personalty (having actual situs) are locally assessed and taxed.

Each county through which a railroad runs its lines may levy a tax of \$500 against such company, and each incorporated town a tax of \$25.²

Railroad terminal companies, in counties of 90,000 inhabitants or over, pay a tax of \$500; in counties of 70,000 to 90,000 inhabitants, \$400, and in counties of 50,000 to 70,000, \$300.¹

Telegraph and telephone companies.²

These companies are assessed and taxed on their property like railroads.

Telegraph companies pay also an annual privilege tax to the State, in lieu of all other State taxes but the ad valorem tax, as follows: Companies sending messages between points in the State, and operating 1,000 miles or more of line within the State, pay a tax of \$5,000; from 300 to 1,000 miles, \$1,000; from 100 to 300 miles, \$300; from 25 to 100 miles, \$35.¹

Telephone companies annually pay to the State a privilege tax for business done wholly in the State, in lieu of all other State taxes but the ad valorem tax, varying according to the population of the city or town in which it does business from 50 to 75 cents per instrument in use.¹

Express and sleeping-car companies.¹

Express companies pay an annual privilege tax to the State, in lieu of all other State taxes but the ad valorem tax, as follows: Companies operating over lines 100 miles or under in length, \$300 for business done wholly within the State; over 100 miles, \$2,000.

Sleeping-car companies are required to pay the State an annual privilege tax of \$2,500 in lieu of all State taxes but the ad valorem tax.

TEXAS.

CONSTITUTIONAL PROVISIONS.

Release from taxation.—The power to tax corporations and corporate property shall never be surrendered or suspended. (Art. VIII, sec. 4.)

State aid.—The credit of the State shall never be loaned in aid of any individual, association, or corporation. (Art. III, sec. 50.)

The State shall make no grant of money to any individual, association, or corporation. (Art. III, sec. 51.)

The legislature shall not release the liability of any railroad to the State. (Art. III, sec. 54.)

The legislature shall not release, postpone, or diminish any liability to the State. (Art. III, sec. 55.)

Uniform taxation.—Property, license, income, and occupation taxes.—Taxation shall be equal and uniform. All property in the State shall be taxed. The legislature may also impose license and income taxes. (Art. VIII, sec. 1.)

All occupation taxes shall be uniform upon the same class of subjects within the same jurisdiction. (Art. VIII, sec. 2.)

Railroads.—All railroad property shall be assessed in the several counties. Rolling stock may be assessed in gross in the county where a company's principal office is located, the resulting tax to be apportioned by the controller among the counties on a pro rata mileage basis. (Art. VIII, sec. 8.)

Local aid.—The legislature shall not authorize any local division to lend its credit or grant money to any individual, association, or corporation, nor to become a stockholder in any association or corporation. (Art. III, sec. 52.)

Municipal taxes.—All railroad property shall bear its proportional share of municipal taxation. (Art. VIII, sec. 5.)

STATUTE PROVISIONS.

Railroad companies.

*Ad valorem tax.*³—Railroad companies pay ad valorem taxes on their franchises and on all property owned by them in the State, each county through which a road runs assessing and collecting the State and county taxes on the number of

¹ Laws of 1897, pp. 74-77.

² *Ibid.*, chap. 8.

³ Revised Statutes of Texas (1896), pp. 1034-1036.

miles of line and superstructure within its limits. The total value of rolling stock owned and used in the State by each company is listed with the assessor of the county in which its principal office is located. The total rendition is forwarded to the State controller, who apportions the value among the counties on a pro rata mileage basis. This valuation is then added to the valuation of the other property of the road and is the basis for State and local taxes.

*Occupation tax.*¹—Railroad companies also pay to the State an occupation tax of 1 per cent on gross receipts from passenger travel. This tax is paid quarterly to the controller on a sworn statement by authorized officers of the various companies. Steamboat and stage companies pay the same tax.

Telegraph and telephone companies.

Telegraph companies pay a tax of 1 cent on every full-rate message sent between points in the State and a tax of one-half cent on other than full-rate messages, in addition to the usual local property taxes.²

Telephone companies annually pay the State a tax of 23 cents per telephone in use in the State.³

Sleeping-car and express companies.

Sleeping-car companies pay a State tax of one-fourth of 1 per cent on the value of their capital stock in use in the State. The valuation is determined on a pro rata mileage basis, and the value of all property other than rolling stock is deducted.⁴ There is also a State tax of 2½ per cent on gross receipts from passenger traffic in the State.⁵

Express companies pay a State tax of 1½ per cent on gross receipts from traffic in the State.⁶

All sleeping-car and express companies are subject to the usual local property taxes.

UTAH.

CONSTITUTIONAL PROVISIONS.

State aid.—The State shall neither loan its credit to nor subscribe to stock or bonds in any railroad, telegraph, or other private enterprise. (Art. VI, sec. 31.)

The legislature shall not release any individual or corporation from its liability to the State or to any local division thereof. (Art. VI, sec. 37.)

Uniform tax on property.—There shall be a uniform and equal rate of assessment and taxation on all property in the State. Every person and corporation shall be taxed in proportion to value of property. (Art. XIII, sec. 3.)

All persons and corporations doing business in the State shall be subject to taxation for State and local purposes on all their property. (Art. XIV, sec. 10.)

Rolling stock shall be considered and taxed as personalty. (Art. XII, sec. 14.)

Income, license, and franchise taxes.—The legislature may levy a stamp tax, and taxes based on income, occupation, licenses, franchises, or mortgages. (Art. XIV, sec. 12.)

Local aid.—The legislature shall not authorize any local division to loan its credit or subscribe to stock or bonds in any railroad, telegraph, or other private enterprise. (Art. VI, sec. 31.)

STATUTE PROVISIONS.

Railroad companies.⁷

Listing, valuation, etc.—The officials of railroads operating in more than one county are required to make annual reports to the State, setting forth all their property and its value. On the basis of these reports the various companies are assessed by the State board of equalization on their property and franchises. Rolling stock is valued on a pro rata mileage basis. The total valuation is apportioned among the counties for the computation and collection of the tax.

Local taxation.—Railroad lands not employed for operating purposes are locally assessed and taxed. There is also a local tax on the values apportioned by the State.

Telegraph, telephone, car, and depot companies.⁸

These companies are taxed like railroads.

¹ Revised Statutes of Texas (1895), p. 1019.

² *Ibid.*, pp. 1019, 1031.

³ *Ibid.*, p. 1075.

⁴ *Ibid.*, p. 1076.

⁵ Laws of 1897, p. 170.

⁶ Laws of 1895, chap. 82.

⁷ Laws of 1899, pp. 102-103.

⁸ *Ibid.*, pp. 102-103.

VERMONT.

CONSTITUTIONAL PROVISIONS.)

Nothing specific.

STATUTE PROVISIONS.

Railroad companies.¹

Listing, valuation, etc.—Railroad companies are required to make full returns, not more frequently than biennially, to the commissioner of State taxes, who appraises the value of the railroad property, including the corporate franchise. In the case of interstate roads, the valuation is determined on a pro rata mileage basis. The rate of the tax is seven-tenths of 1 per cent.

Alternative gross earnings tax.—Railroad companies may pay in lieu of the tax on property and franchise a tax of 2½ per cent on gross earnings from business done in the State, including a pro rata mileage portion of interstate earnings.

Telegraph and telephone companies.²

Telegraph companies are taxed on the value of property and franchise as follows: 60 cents per mile of poles and the first line of wire; 40 cents per mile on each additional wire.

In lieu of this tax, telegraph companies may pay a tax of 3 per cent on their gross earnings from business done in the State.

Telephone companies pay a tax of 3 per cent on their gross earnings from business done in the State.

Express and sleeping-car companies.³

Express companies pay a tax of 4 per cent on their gross earnings from business done in the State.

Sleeping-car companies pay a tax of 5 per cent on their gross earnings from business done in the State.

Steamboat, car, and transportation companies.⁴

All such companies incorporated under the laws of the State pay a tax of seven-tenths of 1 per cent on an appraised valuation of their property and corporate franchises, or in lieu thereof a tax of 2 per cent on their entire gross earnings.

License tax.⁵

All corporations doing business in the State and all incorporated in the State pay an annual State license tax of \$10 if their respective capitals are \$50,000 or less, and of \$5 for each additional \$50,000 of capital, the total tax not to exceed \$50.

Local taxation.⁶

The real and personal estate of all transportation companies not used for operating purposes is appraised by the listers of the towns like the property of individuals.

Powers of commissioner of State taxes.⁷

This officer is empowered by law to summon witnesses, and to examine corporation books, papers, etc., to assist in reaching correct valuations for purposes of taxation.

VIRGINIA.

CONSTITUTIONAL PROVISIONS.

Internal improvement.—The State shall not engage in nor be a party to works of internal improvement otherwise than in the expenditure of grants to the State of land and other property. (Art. X, sec. 15.)

State aid.—The credit of the State shall not be granted in aid of any person, association, or corporation. (Art. X, sec. 12.)

The State shall not be interested in the stock of any corporation. (Art. X, sec. 13.)

The liability of any corporation to the State shall not be released nor diminished. (Art. X, sec. 21.)

Uniform tax on property.—Taxation shall be uniform. All property shall be taxed according to its value. (Art. X, sec. 1.)

¹ Vermont Statutes, Title 10, secs. 557-564.

² *Ibid.*, secs. 565-568.

³ *Ibid.*, secs. 569-571.

⁴ *Ibid.*, secs. 572-574.

⁵ *Ibid.*, sec. 575.

⁶ *Ibid.*, secs. 590-592.

⁷ *Ibid.*, secs. 868-878, 888.

Business capital.—The capital invested in all business operations shall be assessed and taxed as other property. Assessments upon stock shall be according to the market value thereof. (Art. X, sec. 4.)

STATUTE PROVISIONS.

Railroad companies.¹

Listing, valuation, etc.—Railroad companies are required to make annual returns to the auditor of public accounts, setting forth their entire property and their gross receipts and net earnings from operation. The auditor is empowered to examine corporation books and papers. The board of public works appraises all railroad property. The taxes on this appraisalment are paid into the State treasury.

Gross receipts tax.—Railroad companies also pay a tax on gross receipts to pay the expenses of the railroad commission.

Local taxation.—Railroad real estate not in the right of way, including depots and other buildings, is locally assessed and taxed.

Telegraph and telephone companies.²

These companies are taxed on their property for State and public school purposes.

Telegraph companies pay in addition a license tax of \$2 per mile of poles, and 2 per cent on gross earnings from business done in the State.

Telephone companies pay in addition a license tax, as follows:

Those using 600 instruments or less, 50 cents on each instrument.

Those using between 600 and 1,000 instruments, 75 cents on each instrument.

Those using between 1,000 and 2,000 instruments, \$1 on each instrument.

Those using more than 2,000 instruments, \$1.50 on each instrument.

Express and navigation companies.³

These companies are assessed on their property by the State, and pay the usual property taxes. Express companies in addition pay an annual State license tax, as follows: Those operating over 1,000 miles or more in the State, \$500; less than 1,000 miles, \$300.

Sleeping-car companies.³

These companies are taxed by the State for State and public school purposes. The tax is based on a pro rata mileage proportion of their capital stock. They also pay the usual local property taxes.

Canal companies.⁴

These companies are assessed and taxed on their property like railroads.

WASHINGTON.

CONSTITUTIONAL PROVISIONS.

Release from taxation.—The power to tax corporations and corporate property shall not be surrendered or suspended by the State. (Art. VII, sec. 4.)

State aid.—The credit of the State shall not be extended in aid of any person, association, or corporation. (Art. VIII, sec. 5.)

Uniform tax on property.—There shall be a uniform and equal rate of assessment and taxation on all property in the State. (Art. VII, sec. 2.)

Corporations.—Corporate property shall be taxed as nearly as may be by the same methods as are followed in taxing individual property. (Art. VII, sec. 3.)

Rolling stock shall be considered and taxed as personal property. (Art. XII, sec. 17.)

Local aid.—No local division shall give any money or property, loan its money or credit, or become the owner of stock or bonds in aid of any company or corporation. (Art. VIII, sec. 7.)

STATUTE PROVISIONS.

Railroad companies.⁵

Listing, valuation, etc.—Railroad companies are required to return to the State auditor schedules of their entire property of operation, capital stock, earnings, expenses, and indebtedness. The property is then assessed for State taxes by the State board of equalization.

¹ Laws of 1897-98, pp. 78-80; also Code of 1887, sec. 1812.

² Laws of 1899-1900, pp. 535-536.

³ General Laws of Virginia, 1897-96 (Pollard), pp. 222 et seq.

⁴ Laws of 1897-98, pp. 78-80, also Code of 1887, sec. 1812.

⁵ Laws of 1897, pp. 149-153.

Local taxation.—Railroads are locally assessed and taxed on all their property, on the basis of annual lists which they are required to make in each county. Rolling stock is valued on a pro rata mileage basis.

Telegraph and telephone companies.¹

The property of these companies is taxed like the property of individuals. They are required to return annual schedules to the county assessors. These schedules are transmitted to the State auditor.

Express, transportation, and stage companies.²

These companies are taxed on their personalty in the counties where it is kept.

WEST VIRGINIA.

CONSTITUTIONAL PROVISIONS.

State aid.—The credit of the State shall not be granted in aid of any individual or corporation, nor shall the State ever assume the debts of any individual or corporation, nor shall the State become a stockholder in any company or association. (Art. X, sec. 6.)

Uniform tax on property.—Taxation shall be equal and uniform on all property throughout the State. (Art. X, sec. 1.)

STATUTE PROVISIONS.

Railroad companies.³

Listing, valuation, etc.—Railroad companies are required to make detailed annual reports to the State auditor, setting forth property of operation, capital stock, bonded debt, earnings, and expenditures. On the basis of these returns, after approval by the board of public works, who have access to corporation books and papers and may examine corporation witnesses, the State auditor sets a valuation upon railroad property and apportions the same among the local tax districts, where the tax is computed at the usual rate and certified to the State auditor. The total taxes are then paid into the State treasury.

Local taxation.—Railroad real estate not employed for purposes of operation is locally assessed and taxed. Each local district also receives its share of the taxes paid into the State treasury.

Telegraph and express companies.⁴

The property of domestic telegraph and express companies is assessed and taxed like other property in the State. Foreign telegraph and express companies pay a State tax of 2 per cent on their gross receipts from business done in the State.

Other transportation and transmission companies.⁵

Incorporated transportation and transmission companies, other than railroad, telegraph, and express companies, are locally taxed as follows: Real estate is taxed as in other cases. The value of the capital is determined and taxed by the following method: The aggregate value of personal property (not exempt from taxation) wherever situated, and including moneys, credits, and investments, is determined, and after deductions have been made for all amounts owed by such company as principal debtor, the remaining sum is taxed at the usual rate.

WISCONSIN.

CONSTITUTIONAL PROVISIONS.

Internal improvement.—The State shall never contract any debt for works of internal improvement, nor be a party to carrying on such works, except where grants of land or property have been made to the State for that purpose. (Art. VIII, sec. 10.)

State aid.—The credit of the State shall never be given or loaned in aid of any individual, association, or corporation. (Art. VIII, sec. 2.)

Uniform tax on property.—Taxes shall be uniform, and upon such property as the legislature shall prescribe. (Art. VIII, sec. 1.)

¹ Laws of 1897, p. 154.

² *Ibid.*, p. 142.

³ Code of West Virginia, Chap. XXIX, sec. 67.

⁴ *Ibid.*, Chap. XXXIV.

⁵ *Ibid.*, Chap. XXIX, sec. 64.

- STATUTE PROVISIONS.

Railroad companies.¹

State taxation.—Railroad companies are required to make annual returns to the State treasurer, showing their gross earnings for the year, and specifying the earnings per mile of line. "License fees" are then levied on gross earnings as follows:

4 per cent on total gross earnings of \$3,000 or more per mile.

3½ per cent on total gross earnings between \$2,500 and \$3,000 per mile.

3 per cent on total gross earnings between \$2,000 and \$2,500 per mile.

2½ per cent on the excess above \$1,500 per mile, plus \$5 per mile when gross earnings are between \$1,500 and \$2,000 per mile; \$5 per mile when gross earnings are less than \$1,500 per mile.

Railroads built on pile and pontoon bridges pay at the special rate of 2 per cent on their gross earnings.

Local taxation.—There is no local tax on railroads, except that lands owned by railroad companies, but not used for railroad purposes, are assessed and taxed like similar property of individuals.

Telegraph and telephone companies.

Telegraph companies pay a State tax as follows: On a single wire, \$1 per mile; on a second wire, 50 cents per mile; on a third wire, 25 cents per mile, and on each additional wire 20 cents per mile.²

Telephone companies pay a State tax of 3 per cent on gross earnings of \$100,000 or over and 2½ per cent on gross earnings under \$100,000.¹

Express, sleeping car, equipment, and freight line companies.⁴

These companies are required to make annual returns to the State treasurer, who puts such returns before the State board of assessment. The tax is assessed on a pro rata mileage portion of capital stock, with certain deductions. In the case of express companies, deduction is made for real estate situated and taxed outside of the State and for personally not used in the express business; in the case of sleeping car and equipment companies, for real estate situated and taxed outside of the State; and in the case of freight-line companies, for real estate situated in the State.

WYOMING.

CONSTITUTIONAL PROVISIONS.

Internal improvement.—The State shall not engage in works of internal improvement unless authorized by a two-thirds vote of the people. (Art. XVI, sec. 6.)

State aid.—The legislature shall not authorize the State to contract any debt in constructing any railroad or to loan its credit in aid of the same. (Art. III, sec. 39.)

The State shall not loan its credit or make donation to any railroad or telegraph line. (Art. X, sec. 5.)

The State shall not loan its credit, make donations, or subscribe to stock in aid of any individual, association, or corporation. (Art. XVI, sec. 6.)

Uniform taxation—Listing, etc.—All taxation shall be equal and uniform. (Art. I, sec. 28.)

All lands and improvements thereon shall be listed and assessed separately. (Art. XV, sec. 1.)

Railroads.—There shall be a State board, consisting of the auditor, treasurer, and secretary of state, which shall assess at their actual value the franchisees, roadway, roadbed, rails, and rolling stock of all railroads and other common carriers. This valuation shall be apportioned among the counties as the basis of taxation. (Art. XV, sec. 10.)

Reports of railroad companies.—All railroads operating in the State must make annual reports of their business, as the legislature may prescribe. (Art. X, sec. 3.)

Local aid.—The legislature shall not authorize any county to contract any debt in constructing any railroad, or to loan its credit in aid of the same. (Art. III, sec. 39.)

No local division shall loan its credit or make donation to any railroad or telegraph line. (Art. X, sec. 5.)

No local division shall loan its credit, make donations, or subscribe to stock in aid of any individual, association, or corporation. (Art. XVI, sec. 6.)

¹ Revised Statutes of Wisconsin, secs. 1211–1213.

² *Ibid.*, sec. 1216.

³ *Ibid.*, sec. 1222a.

⁴ Laws of 1899, chaps. 111–114.

STATUTE PROVISIONS.

Railroad companies.¹

Listing, valuation, etc.—Railroad companies are required to make annual reports to the State board of equalization, setting forth all property of operation. On the basis of these reports a valuation is determined covering property and franchises, and is apportioned among the local districts for the computation and collection of the tax.

Local taxation.—Railroad real estate not employed for purposes of operation is locally assessed and taxed. There is also a local tax on the values apportioned by the State.

Telegraph and sleeping car companies.¹

These companies are taxed like railroads.

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TABLE 1.—METHODS OF TAXING TRANSPORTATION COMPANIES FOR STATE AND TERRITORIAL PURPOSES.

State.	Property tax.		Capitalization tax.		Gross receipts tax.	Net earnings tax.	Specific taxes. ¹
	State valuation.	Local valuation.	On capital stock.	On capital stock plus bonded debt.			
Alabama	Railroad cos.				Railroad cos.		
	Long-distance tele- graph cos.	Telephone cos.			Telephone cos.		Telegraph cos. Long-distance telephone cos.
	Sleeping car cos.						
Arizona	Railroad cos.	Telephone cos.					
Arkansas	Railroad cos.	Telephone cos.	Telephone cos.				
	Express cos.	Express cos.	Express cos.				
	Sleeping car cos.	Sleeping car cos.	Sleeping car cos.				
California	Railroad cos.	Telephone cos.					
Colorado	Railroad cos.						
	Telephone cos.						
Connecticut				Railroad cos. ²			Telegraph cos. Telephone cos.
					Express cos.		
Delaware						Railroad cos.	Railroad cos.
					Telephone cos.		Telephone cos.
					Express cos.		Express cos.
					Sleeping car cos.		Sleeping car cos.
Florida	Railroad cos.						
	Telephone cos.	Telephone cos.					Do. Express cos.
					Sleeping car cos.		

Georgia	Railroad cos.....		Telephone cos.
	Sleeping car cos.....	Telegraph cos.....	Express cos.....
Idaho	Railroad cos.....		
	Telegraph cos.....		
Illinois	Railroad cos.....		
	Telephone cos. ¹		
	Express cos. ²		
	Other transporta- tion cos. ³		
Indiana	Railroad cos.....	Telegraph cos.....	Telephone cos.....
		Express cos.....	Express cos.....
Iowa	Railroad cos.....		
	Telegraph cos.....		
	Express cos.....		
	Sleeping car cos.....	Express cos.....	
Kansas	Railroad cos.....		
	Telegraph cos.....		
Kentucky	Railroad cos.....		
	Telegraph cos.....		
	Passenger car cos.....		
Louisiana	Railroad cos.....		
	Telegraph cos.....		
	Express cos.....		
Maine	Telephone cos.....	Railroad cos.....	Express cos.....

¹ I. e. taxes of specific gross amounts, or of specific sums per mile of line, per instrument in use, etc.

² On capital stock plus funded and floating d.b.

³ Domestic corporations.

TABLE I.—METHODS OF TAXING TRANSPORTATION COMPANIES FOR STATE AND TERRITORIAL PURPOSES—Cont'd.

State.	Property tax.		Capitalization tax.		Gross receipts tax.	Net earnings tax.	Specific taxes.
	State valuation.	Local valuation.	On capital stock.	On capital stock plus bonded debt.			
Maryland					Railroad cos. Telegraph cos. Telephone cos. Express cos. Sleeping car cos. Other transportation cos.		
Massachusetts			Railroad cos. ¹ Telegraph cos. ¹ Telephone cos. ¹ Express cos. ¹ Sleeping car cos. ¹ Other transportation cos. ¹				
Michigan	Telegraph cos. Telephone cos.				Railroad cos. Express cos. Sleeping car cos. Freight line cos.		
Minnesota					Railroad cos. Telegraph cos. Telephone cos. Express cos. Sleeping car cos.		Railroad cos. Telegraph cos. Telephone cos. Express cos. Sleeping car cos.
Mississippi	Railroad cos.		Freight line and equipment cos.				
Missouri	Railroad cos. Telegraph cos. Telephone cos. Express cos. Car cos.				Express cos.		

Common carriers	
Montana	Railroad cos. Telegraph cos. Telephone cos. Express cos.
Nebraska	Railroad cos. Telegraph cos. Express cos. Sleeping car cos. Other transportation cos.
Nevada	Railroad cos.
New Hampshire	Railroad cos. Freight car cos. Telephone cos.
New Jersey	Railroad cos. Equipment cos.
New Mexico	Railroad cos.
New York	Railroad cos. Telegraph cos. Telephone cos. Express cos. Sleeping car cos. Other transportation cos.
North Carolina	Railroad cos. Telegraph cos. Telephone cos. Express cos. Sleeping car cos. Freight car cos.
North Dakota	Railroad cos. Telegraph cos. Telephone cos.
	Express cos. Sleeping car cos.

1 Domestic corporations.

TABLE I.—METHODS OF TAXING TRANSPORTATION COMPANIES FOR STATE AND TERRITORIAL PURPOSES—Cont'd.

State.	Property tax.			Capitalization tax.		Gross receipts tax.	Net earnings tax.	Specific taxes.
	State valuation.	Local valuation.		On capital stock.	On capital stock plus bonded debt.			
Ohio	Railroad cos.					Railroad cos.		
	Telephone cos.					Telephone cos.		
	Express cos.					Express cos.		
Oklahoma	Railroad cos.							
Oregon	Railroad cos.	Telephone cos.						
		Railroad cos.						
		other transportation cos.						
Pennsylvania								
Rhode Island								
South Carolina	Railroad cos.							
	Telephone cos.							
	Express cos.							
South Dakota	Railroad cos.							
	Telephone cos.							
	Express cos.							

Tennessee.	Railroad cos.	Railroad cos. ¹
	Telegraph cos.	Telegraph cos.
	Telephone cos.	Telephone cos.
	Express cos.	Express cos.
Texas	Sleeping car cos.	Sleeping car cos.
	Railroad cos.	Railroad cos.
	Express cos.	Express cos.
	Sleeping car cos.	Sleeping car cos.
Utah.	Railroad cos.	Railroad cos.
	Telegraph cos.	Telegraph cos.
	Telephone cos.	Telephone cos.
	Car cos.	
Vermont.	Railroad cos. ²	Railroad cos. ²
	Telegraph cos.	Telegraph cos.
	Telephone cos.	Telephone cos.
	Express cos.	Express cos.
Virginia	Other transportation cos. ²	Sleeping car cos.
	Railroad cos.	Railroad cos.
	Telegraph cos.	Telegraph cos.
	Telephone cos.	Telephone cos.
Washington.	Express cos.	Express cos.
	Sleeping car cos.	Sleeping car cos.
	Railroad cos.	Railroad cos.
	Telegraph cos.	Telegraph cos.
West Virginia	Telephone cos.	Telephone cos.
	Express cos.	Express cos.
	Other transportation cos.	Other transportation cos.
	Railroad cos.	Railroad cos.
	Telegraph cos.	Telegraph cos. ⁴
	Telephone cos.	Telephone cos.
	Express cos.	Express cos.
	Other transportation cos.	Other transportation cos.

¹ Foreign corporations.² Domestic corporations.³ Those not paying the ad valorem taxes.⁴ The tax on property and franchise is alternative with the gross receipts tax.

TABLE I.—METHODS OF TAXING TRANSPORTATION COMPANIES FOR STATE AND TERRITORIAL PURPOSES—Cont'd.

State.	Property tax.		Capitalization tax.		Gross receipts tax.	Net earnings tax.	Specific taxes.
	State valuation.	Local valuation.	On capital stock.	On capital stock plus bonded debt.			
Wisconsin.....					Railroad cos.		Telegraph cos
			Express cos.		Telephone cos.		
			Sleeping car cos.				
			Freight cars and equipment cos.				
Wyoming.....	Railroad cos.						
	Telegraph cos.						
	Sleeping car cos.						

TABLE II.—METHODS OF SECURING LOCAL REVENUES FROM RAIL-ROAD TAXATION.

From local tax on—		No local tax.	From distribution of State tax.
General property.	Property not in right of way.		
Alabama.	California.	Minnesota. ¹	California.
Arizona.	Connecticut.	Wisconsin. ²	Maine.
Arkansas.	Delaware.		Massachusetts.
Colorado.	Maine.		New Hampshire.
Florida.	Massachusetts.		New Jersey.
Georgia.	Michigan.		West Virginia.
Idaho.	New Hampshire.		
Illinois.	New Jersey.		
Indiana.	Pennsylvania.		
Iowa.	Vermont.		
Kansas.	Virginia.		
Kentucky.	West Virginia.		
Louisiana.			
Maryland.			
Mississippi.			
Missouri.			
Montana.			
Nebraska.			
Nevada.			
New Mexico.			
New York.			
North Carolina.			
North Dakota.			
Ohio.			
Oklahoma.			
Oregon.			
Rhode Island.			
South Carolina.			
South Dakota.			
Tennessee. ³			
Texas.			
Utah.			
Washington.			
Wyoming.			

¹ There is a local tax on lands owned by railroads, such as have been subject to grant either by the state or by the United States.

² Lands used by railroad companies but not used in any way for railroad purposes are assessed and taxed like the similar property of individuals.

³ Not including "distributable property." There are, however, local license taxes on railroads.

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